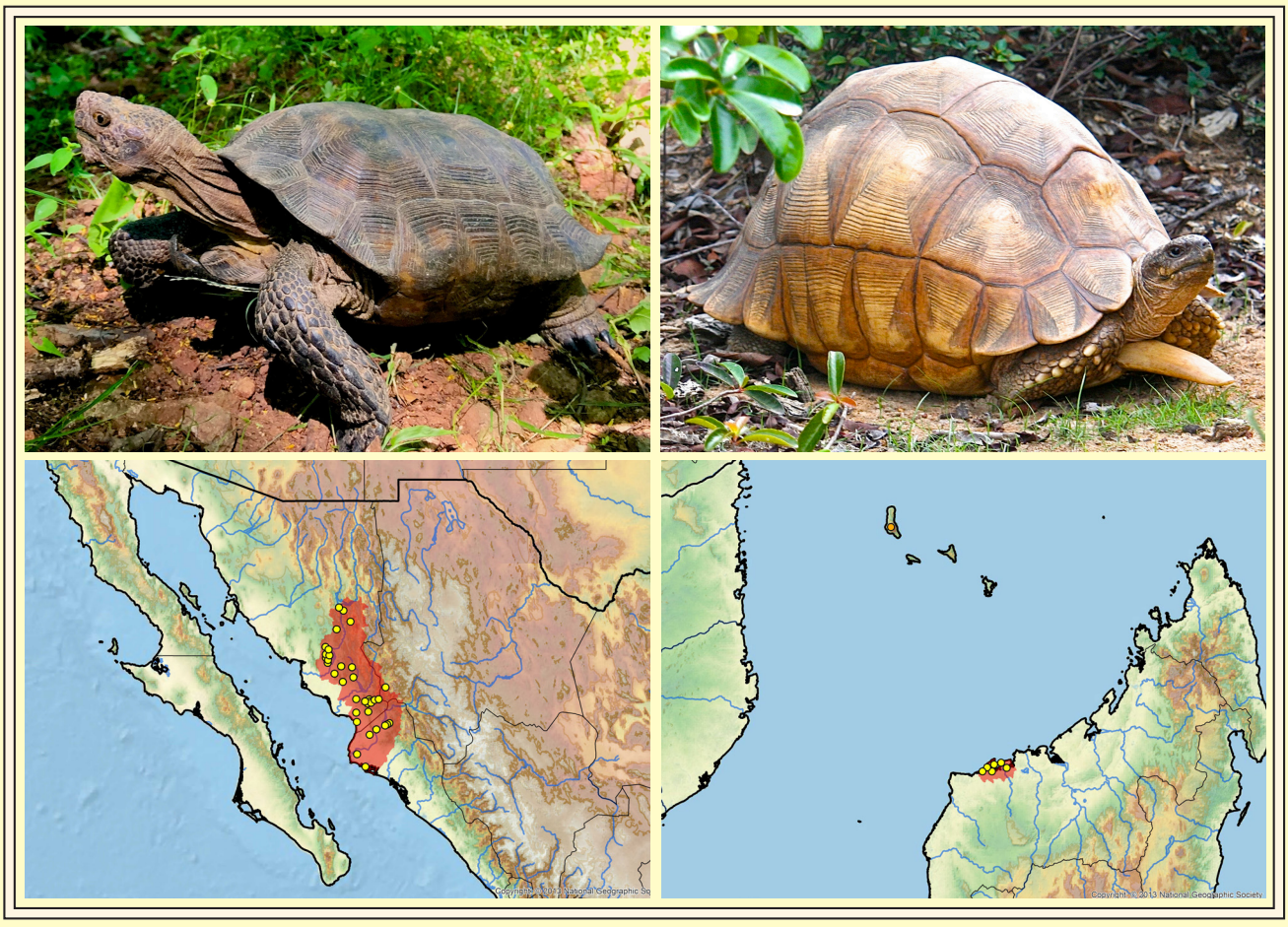
TURTLES OF THE WORLD

Annotated Checklist and Atlas of Taxonomy, Synonymy, Distribution, and Conservation Status (8th Ed.)

Turtle Taxonomy Working Group

Anders G.J. Rhodin, John B. Iverson, Roger Bour, Uwe Fritz, Arthur Georges, H. Bradley Shaffer, and Peter Paul van Dijk



Chelonian Research Monographs, Number 7

Published by
Chelonian Research Foundation and Turtle Conservancy

in association with
IUCN/SSC Tortoise and Freshwater Turtle Specialist Group, Turtle Conservation Fund, Global Wildlife Conservation, Conservation International, and International Union for Conservation of Nature / Species Survival Commission

CHELONIAN RESEARCH MONOGRAPHS
Contributions in Turtle and Tortoise Research

Series Editor

ANDERS G.J. RHODIN

Chelonian Research Foundation, 168 Goodrich Street, Lunenburg, Massachusetts 01462 USA, and
Turtle Conservancy, 49 Bleecker Street, New York, New York 10012 USA [RhodinCRF@aol.com]

CHELONIAN RESEARCH MONOGRAPHS (ISSN 1088-7105) is an international peer-reviewed scientific publication series for monograph-length manuscripts, collected proceedings of symposia, edited compilations, and other longer turtle-related research documents. The series accepts contributions dealing with any aspects of chelonian research, with a preference for conservation or biology. Manuscripts or edited compilations dealing with conservation biology, systematic relationships, chelonian diversity, geographic distribution, natural history, ecology, reproduction, morphology and natural variation, population status, husbandry, and human exploitation or conservation management issues are of special interest. Bibliographic and other reference materials are also of interest. Submit proposals for publications directly to A.G.J. Rhodin at the e-mail address above. Instructions for manuscript submission and detailed guidelines for authors are available at the same address.The series is published on an occasional basis, from 1996 to 2016 by Chelonian Research Foundation, and from 2017 on by Chelonian Research Foundation and Turtle Conservancy.

Published Issues in Series

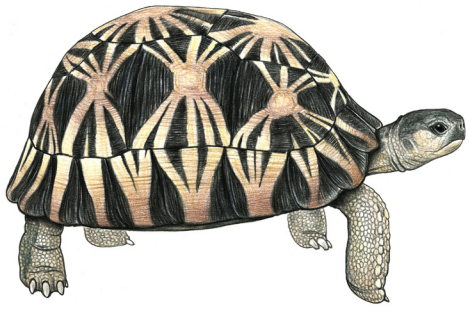
1. The Galápagos Tortoises: Nomenclatural and Survival Status. 1996. By PETER C.H. PRITCHARD. 85 pp. ISBN: 0-9653540-0-8 (hard cover); 0-9653540-1-6 (soft cover).
2. Asian Turtle Trade: Proceedings of a Workshop on Conservation and Trade of Freshwater Turtles and Tortoises in Asia. 2000. Edited by PETER PAUL VAN DIJK, BRYAN L. STUART, AND ANDERS G.J. RHODIN. 164 pp. ISBN: 0-9653540-2-4 (hard cover); 0-9653540-3-2 (soft cover).
3. Biology and Conservation of Florida Turtles. 2006. Edited by PETER A. MEYLAN. 376 pp. ISBN: 0-9653540-4-0 (hard cover); 0-9653540-5-9 (soft cover).
4. Defining Turtle Diversity: Proceedings of a Workshop on Genetics, Ethics, and Taxonomy of Freshwater Turtles and Tortoises. 2007. Edited by H. BRADLEY SHAFFER, NANCY N. FITZSIMMONS, ARTHUR GEORGES, AND ANDERS G.J. RHODIN. 200 pp. ISBN 0-9653540-7-5 (hard cover); 0-9653540-8-3 (soft cover).
5. Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group. 2008–2016. Edited by ANDERS G.J. RHODIN, PETER C.H. PRITCHARD, PETER PAUL VAN DIJK, RAYMOND A. SAUMURE, KURT A. BUHLMANN, JOHN B. IVERSON, AND RUSSELL A. MITTERMEIER. Installments 1–7, 1138 pp. to date. ISBN 0-9653540-9-1 (looseleaf).
6. Turtles on the Brink in Madagascar: Proceedings of Two Workshops on the Status, Conservation, and Biology of Malagasy Tortoises and Freshwater Turtles. 2013. Edited by CHRISTINA M. CASTELLANO, ANDERS G.J. RHODIN, MICHAEL OGLE, RUSSELL A. MITTERMEIER, HERILALA RANDRIAMAHAZO, RICK HUDSON, AND RICHARD E. LEWIS. 184 pp. ISBN: 978-0-9910368-0-6 (hardback), 978-0-9910368-1-3 (paperback).
7. Turtles of the World: Annotated Checklist and Atlas of Taxonomy, Synonymy, Distribution, and Conservation Status (8th Ed.). 2017. TURTLE TAXONOMY WORKING GROUP [ANDERS G.J. RHODIN, JOHN B. IVERSON, ROGER BOUR, UWE FRITZ, ARTHUR GEORGES, H. BRADLEY SHAFFER, AND PETER PAUL VAN DIJK]. 292 pp. ISBN: 978-1-5323-5026-9 (online).

CHELONIAN RESEARCH MONOGRAPHS are available for purchase from Chelonian Research Foundation and Turtle Conservancy. No overall series subscription rate is available, as individual monograph issues are priced separately. Contact either Turtle Conservancy (49 Bleecker St., New York, NY 10012 USA, 212-353-5060, 212-353-5014 [fax], www.turtleconservancy.org) or Chelonian Research Foundation (168 Goodrich Street, Lunenburg, MA 01462 USA, 978-807-2902, RhodinCRF@aol.com, www.chelonian.org/crm) for prices, titles, and to place orders. Chelonian Research Foundation (founded in 1992) and Turtle Conservancy (founded in 2009) are nonprofit tax-exempt organizations under section 501(c)(3) of the Internal Revenue Code.

Copyright © 2017 by Chelonian Research Foundation and Turtle Conservancy

TURTLES OF THE WORLD

Annotated Checklist and Atlas of Taxonomy, Synonymy, Distribution, and Conservation Status (8th Ed.)



COVER AND PREFACE ILLUSTRATIONS

***Front Cover*:** *Left*: Goode's Thornscrub Tortoise, *Gopherus evgoodei* (Testudinidae), from Monte Mojino Reserve, Alamos, Sonora, Mexico; photo by Eric V. Goode. *Right*: Ploughshare Tortoise, *Astrochelys yniphora* (Testudinidae), from Baly Bay National Park, Madagascar; photo by Anders G.J. Rhodin.

***Title Page*:** Radiated Tortoise, *Astrochelys radiata* (Testudinidae), from Madagascar; drawing by Stephen D. Nash.

***Table of Contents*:** *Left*: Red-headed Amazon River Turtle, *Podocnemis erythrocephala* (Podocnemididae), from Rio Jufari, Amazonas, Brazil; photo by Richard C. Vogt. *Right*: Euphrates Softshell Turtle, *Rafetus euphraticus* (Trionychidae), from Balarood R., Khuzestan Prov., Iran; photo by Hanyeh Ghaffari.

***Frontispiece*:** *Left*: Wood Turtle, *Glyptemys insculpta* (Emydidae), from Lunenburg, Worcester Co., Massachusetts, USA; photo by Anders G.J. Rhodin. *Right*: Black-breasted Leaf Turtle, *Geoemyda spengleri* (Geoemydidae), from Tam Dao National Park, Vietnam; photo by Flora Ihlow.

***Back Cover*:** *Top Left*: Northern Snake-necked Turtle, *Chelodina (Macrochelodina) rugosa* (Chelidae), from Morehead R., Western Prov., Papua New Guinea; photo by Arthur Georges. *Top Right*: Burmese Big-headed Turtle, *Platysternon megacephalum peguense* (Platysternidae), from Phu Luang Wildlife Sanctuary, Loei Prov., Thailand; photo by Peter Paul van Dijk. *Bottom Left*: Flatback Sea Turtle, *Natator depressus* (Cheloniidae), from Shoalwater Bay, Queensland, Australia; photo by Carmen Pilcher. *Bottom Right*: Northern Giant Musk Turtle, *Staurotypus triporcatus* (Kinosternidae), from Central Farms, Cayo Dist., Belize; photo by John B. Iverson.

RECOMMENDED CITATION

Turtle Taxonomy Working Group [Rhodin, A.G.J., Iverson, J.B., Bour, R. Fritz, U., Georges, A., Shaffer, H.B., and van Dijk, P.P.]. 2017. Turtles of the World: Annotated Checklist and Atlas of Taxonomy, Synonymy, Distribution, and Conservation Status (8th Ed.). In: Rhodin, A.G.J., Iverson, J.B., van Dijk, P.P., Saumure, R.A., Buhlmann, K.A., Pritchard, P.C.H., and Mittermeier, R.A. (Eds.). Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group. Chelonian Research Monographs 7:1–292. doi: 10.3854/crm.7.checklist.atlas.v8.2017.

Chelonian Research Monographs. Series Edited by Anders G.J. Rhodin.

Volume Number 7. Turtles of the World: Annotated Checklist and Atlas of Taxonomy, Synonymy, Distribution, and Conservation Status (8th Ed.). In: Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group.

Published online 3 August 2017.

ISSN (monograph series): 1088-7105
ISBN (this volume): 978-1-5323-5026-9 (online)

Co-Published by Chelonian Research Foundation and Turtle Conservancy.
Copyright © 2017 by Chelonian Research Foundation, Lunenburg, Massachusetts, USA and Turtle Conservancy, New York, New York, USA.

TURTLES OF THE WORLD

Annotated Checklist and Atlas of Taxonomy, Synonymy, Distribution, and Conservation Status (8th Ed.)

Turtle Taxonomy Working Group

Anders G.J. Rhodin, John B. Iverson, Roger Bour, Uwe Fritz, Arthur Georges, H. Bradley Shaffer, and Peter Paul van Dijk

Supplement No. 1 of Chelonian Research Monographs No. 5:

Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group

Edited by

Anders G.J. Rhodin[1,2], John B. Iverson[3], Peter Paul van Dijk[2,4], Raymond A. Saumure[5], Kurt A. Buhlmann[6], Peter C.H. Pritchard[7], and Russell A. Mittermeier[8]

[1]Chelonian Research Foundation, Lunenburg, Massachusetts, USA; [2]Turtle Conservancy, New York, New York, USA; [3]Earlham College, Richmond, Indiana, USA; [4]Global Wildlife Conservation, Austin, Texas, USA; [5]Southern Nevada Water Authority, Las Vegas, Nevada, USA; [6]University of Georgia, Aiken, South Carolina, USA; [7]Chelonian Research Institute, Oviedo, Florida, USA; [8]Conservation International, Arlington, Virginia, USA

Chelonian Research Monographs

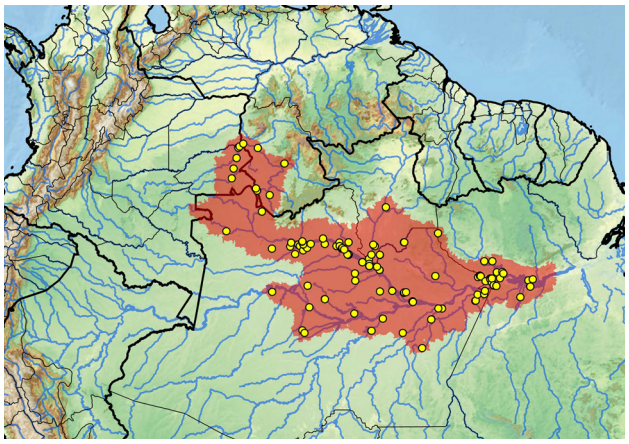
Number 7

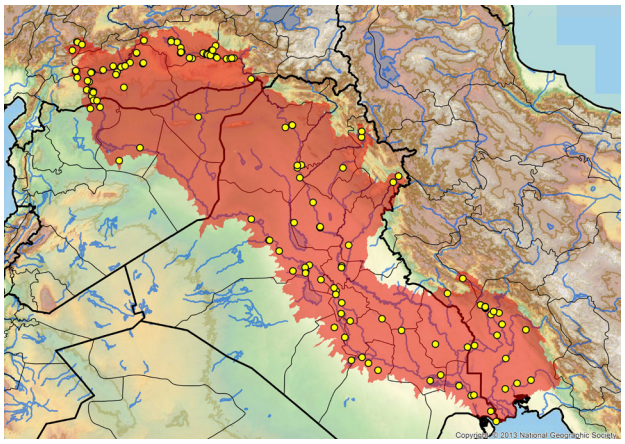
2017

Chelonian Research Foundation and Turtle Conservancy








Copyright © 2013 National Geographic Society

TURTLES OF THE WORLD

Annotated Checklist and Atlas of Taxonomy, Synonymy, Distribution, and Conservation Status (8th Ed.)

Table of Contents

Abstract 9

Introduction 9
- Methodology 10
  - TTWG Guidelines for Taxonomic Changes 13
  - Taxonomic Changes 14
  - Distributions 15
  - GIS Maps 16
  - Conservation Status 18
- Results and Discussion 19
  - Conservation Status 19
  - Genetic Pollution 19
- Request for Updates 19
- Acknowledgments 20
- Photos and Photographers 21

Checklist 23
- Linnaean Classification Content 23
- Alternative Phylocode Classification 23

Testudines 24
- Cryptodira 24
  - Chelydridae 24
    - *Chelydra* 24
    - *Macrochelys* 26
  - Chelonioidea 27
    - Cheloniidae 27
      - Carettinae 27
        - *Caretta* 27
        - *Eretmochelys* 28
        - *Lepidochelys* 29
      - Cheloniinae 30
        - *Chelonia* 30
        - *Natator* 32
    - Dermochelyidae 32
      - *Dermochelys* 32
- Kinosternoidea 34
  - Dermatemydidae 34
    - *Dermatemys* 34
  - Kinosternidae 34
    - Kinosterninae 34
      - *Kinosternon* 34
      - *Kinosternon* or *Cryptochelys* 35
      - *Sternotherus* 45
    - Staurotypinae or Staurotypidae 47
      - *Claudius* 47
      - *Staurotypus* 48
- Testudinoidea 49
  - Emydidae 49
    - Deirochelyinae 49
      - *Chrysemys* 49
      - *Deirochelys* 51
      - *Graptemys* 51
      - *Malaclemys* 57
      - *Pseudemys* 59
      - *Trachemys* 62
    - Emydinae 71
      - *Clemmys* 71

Emys 72
Emys or *Actinemys* 75
Emys or *Emydoidea* 76
Glyptemys 77
Terrapene 77
Platysternidae 82
Platysternon 82
Geoemydidae 83
Geoemydinae 83
Batagur 83
Cuora 86
Cyclemys 93
Geoclemys 96
Geoemyda 96
Hardella 97
Heosemys 98
Leucocephalon 99
Malayemys 100
Mauremys 101
Melanochelys 107
Morenia 109
Notochelys 109
Orlitia 110
Pangshura 111
Sacalia 113
Siebenrockiella 114
Vijayachelys 115
Rhinoclemmydinae 115
Rhinoclemmys 115
Testudinidae 120
Aldabrachelys 120
Astrochelys 122
Centrochelys 123
Chelonoidis 123
Chersina 132
Chersobius 133
Cylindraspis 134
Geochelone 136
Gopherus 137
Homopus 140
Indotestudo 140
Kinixys 141
Malacochersus 145
Manouria 145
Psammobates 146
Pyxis 149
Stigmochelys 150
Testudo 151
(*Testudo*) 151
(*Agrionemys*) 155
(*Chersine*) 157
Trionychoidea 158
Carettochelyidae 158
Carettochelys 158
Trionychidae 158
Cyclanorbinae 158
Cyclanorbis 158
Cycloderma 159
Lissemys 160
Trionychinae 162
Amyda 162
Apalone 164
Chitra 168
Dogania 169
Nilssonia 169
Palea 172
Pelochelys 172
Pelodiscus 173
Rafetus 175
Trionyx 176

Pleurodira 177
Chelidae 177
Chelinae 177
Acanthochelys 178
Chelus 179
Mesoclemmys 180
Phrynops 183
Platemys 185
Rhinemys 186
Hydromedusinae 186
Hydromedusa 186
Chelodininae 187
Chelodina 187
(*Chelodina*) 187
(*Macrochelodina*) 191
(*Macrodiremys*) 193
Elseya 193
(*Elseya*) 193
(*Hanwarachelys*) 194
(*Pelocomastes*) 195
Elusor 196
Emydura 197
Myuchelys 200
Rheodytes 201
Pseudemydurinae 202
Pseudemydura 202
Pelomedusidae 202
Pelomedusa 202
Pelusios 206
Podocnemididae 214
Erymnochelys 214
Peltocephalus 214
Podocnemis 215

Regional Species Richness Maps 218

Annotations 221
Current 2017 Checklist 221
Previous Checklist Annotations 234
2007 Annotations 234
2008 Annotations 238
2009 Annotations 239
2010 Annotations 242
2011 Annotations 246
2012 Annotations 247
2014 Annotations 251

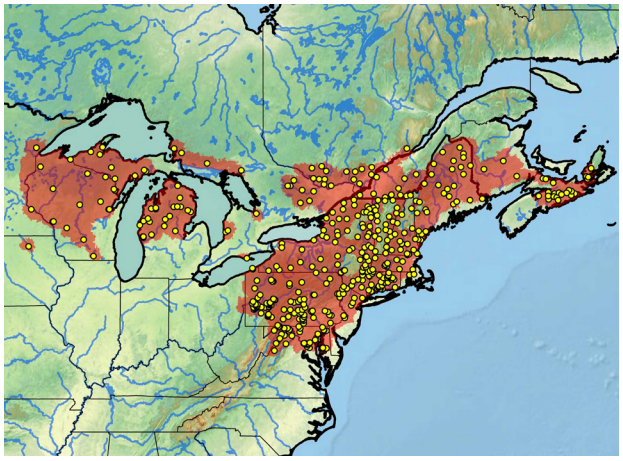
Appendix – Distributional Data 256
Distribution Updates 2011 256
Distribution Updates 2012 256
Distribution Updates 2014 257

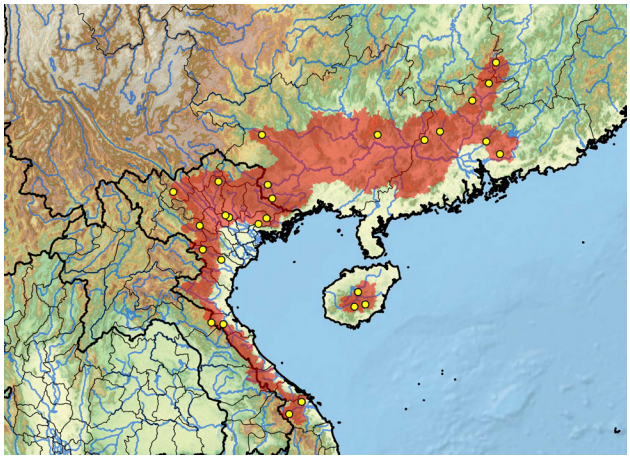
Literature Cited 257

CRM 5 and CRM 7 Citations 290
TTWG, CBFTT, and TEWG Checklists 290
CBFTT Species Accounts 290









Conservation Biology of Freshwater Turtles and Tortoises:
A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group
A.G.J. Rhodin, J.B. Iverson, P.P. van Dijk, R.A. Saumure, K.A. Buhlmann, P.C.H. Pritchard, and R.A. Mittermeier, Eds.
Chelonian Research Monographs (ISSN 1088-7105) No. 7, doi:10.3854/crm.7.checklist.atlas.v8.2017
© 2017 by Chelonian Research Foundation and Turtle Conservancy • Published 3 August 2017

Turtles of the World: Annotated Checklist and Atlas of Taxonomy, Synonymy, Distribution, and Conservation Status (8th Ed.)

Turtle Taxonomy Working Group*

Anders G.J. Rhodin[1,2], John B. Iverson[3], Roger Bour[4], Uwe Fritz[5], Arthur Georges[6], H. Bradley Shaffer[7], and Peter Paul van Dijk[2,8]

[1]Chairman Emeritus, IUCN SSC Tortoise and Freshwater Turtle Specialist Group, Chelonian Research Foundation, 168 Goodrich St., Lunenburg, Massachusetts 01462 USA [rhodincrf@aol.com];
[2]Turtle Conservancy, 49 Bleecker St., New York, New York 10012 USA;
[3]Department of Biology, Earlham College, Richmond, Indiana 47374 USA [johni@earlham.edu];
[4]Laboratoire des Reptiles et Amphibiens, Muséum National d'Histoire Naturelle, 75005 Paris, France [bour.roger@gmail.com];
[5]Museum für Tierkunde, Senckenberg Dresden, A.B. Meyer Building, 01109 Dresden, Germany [uwe.fritz@senckenberg.de];
[6]Institute for Applied Ecology, University of Canberra, ACT 2601, Australia [georges@aerg.canberra.edu.au];
[7]Department of Ecology and Evolutionary Biology and La Kretz Center for California Conservation Science, Institute of the Environment and Sustainability, University of California, Los Angeles, California 90095 USA [brad.shaffer@ucla.edu];
[8]Deputy Chair, IUCN SSC Tortoise and Freshwater Turtle Specialist Group, Global Wildlife Conservation, PO Box 129, Austin, Texas 78767 USA [ppvandijk@globalwildlife.org]

**Authorship of this article is by this working group of the IUCN SSC Tortoise and Freshwater Turtle Specialist Group, which for the purposes of this document consisted of the following contributors:*

Abstract. – This is our 8th edition of an annotated checklist of all recognized and named taxa of the world's modern chelonian fauna, documenting recent changes and controversies in nomenclature through early 2017, and including all primary synonyms, updated from 7 previous checklists (Turtle Taxonomy Working Group 2007b, 2009, 2010, 2011, 2012, 2014; Rhodin et al. 2008). We provide an updated comprehensive listing of taxonomy, names, and conservation status of all turtles and tortoises of the world, including detailed distribution maps. We strive to record the most recent justified taxonomic assignment of taxa in a hierarchical framework, providing annotations, including alternative possible arrangements, for some proposed changes. We provide common English names and detailed distributional data for all taxa, listing occurrence by countries and many smaller political or geographic subunits (states or regions), including indications of native, extirpated, and introduced (modern or prehistoric) populations. We include current published and draft IUCN Red List status assessments for all turtles, as well as CITES listings. The diversity of turtles and tortoises in the world that has existed in modern times (since 1500 AD) and currently generally recognized as distinct and included in this checklist, now consists of 356 species. Of these, 60 are polytypic, representing 122 additional recognized subspecies, or 478 total taxa of modern turtles and tortoises. Of these, 7 species and 3 subspecies, or 10 taxa (2.1%), have gone extinct. As of the current IUCN 2017 Red List, 148 turtle species (60.4% of 245 species listed, 41.6% of all 356 recognized modern species) are officially regarded as globally Threatened (Critically Endangered [CR], Endangered [EN], or Vulnerable [VU]). We record additional draft Red List assessments by the IUCN Tortoise and Freshwater Turtle Specialist Group (TFTSG) of previously "unevaluated" species, and updated draft re-assessments of previously listed species, allowing us to evaluate the overall current threat levels for all turtles and tortoises. Of the 356 total species of turtles and tortoises, 114 (32.0%) are CR or EN, 179 (50.3%) are Threatened (CR, EN, or VU), and 186 (52.2%) are Threatened or Extinct. If we provisionally adjust for predicted threat rates of Data Deficient and Not Evaluated species, then ca. 59% of all extant turtles are Threatened. These numbers and percentages of Threatened species have increased since our last checklist. Turtles are among the most threatened of the major groups of vertebrates, in general more than birds, mammals, cartilaginous or bony fishes, or amphibians.

Key Words. – Reptilia, Testudines, turtle, tortoise, chelonian, taxonomy, nomenclature, genera, species, subspecies, primary synonyms, suprageneric hierarchy, systematics, common names, distribution, maps, introduced species, conservation status, IUCN Red List, CITES, threatened species, extinction

The diversity of all turtles and tortoises (chelonians) in the world that has existed in modern times (since 1500 AD), and currently generally recognized as distinct by specialists in turtle taxonomy and systematics, consists of approximately 356 species, of which 60 are polytypic, with 122 additional recognized subspecies, or 478 total taxa of modern chelonians. Of these, 8 species plus 3 subspecies, or 11 total taxa, of tortoises and freshwater turtles have become extinct since 1500 AD (see Table 1), leaving us currently with 348 species and 119 additional subspecies, or 467 total taxa of living turtles and tortoises. Of all living turtle taxa, 7 species are marine turtles, leaving 341 species and 460 total taxa of modern living freshwater and terrestrial turtles and tortoises.

In this checklist we present a full taxonomic listing of all recognized modern turtle and tortoise taxa, including synonymized names and type localities, detailed distribution maps, and annotations concerning recently described new taxa, nomenclatural and taxonomic updates, and significant taxon-related controversies or developments.

The 478 modern turtle and tortoise taxa we recognize here are based on a synonymy of 1473 separate named turtle and tortoise species and subspecies, including all primary description names, secondary *nomen novum* replacement names, undescribed *nomen nudum* names, and other nomenclaturally unavailable names. These names also include those fossil taxa that have been synonymized with modern taxa.

We also recognize 1 order, 2 suborders, 4 superfamilies, 14 families, 13 subfamilies, 94 genera (plus 5 potentially separate genera), and 6 subgenera of modern turtles, for a potential total of 139 supraspecific groupings. These groups are based on 457 valid and synonymized names, for a total listing here of 1930 taxonomic names applied to all modern turtle taxa and groups.

As there is always some disagreement among experts as to which taxa are distinct and valid, and at what systematic level or rank (species or subspecies), these numbers are variable depending on the authorities presenting their data or interpretations. For prior discussions and listings of all recognized modern turtle taxa, with extensive annotations regarding areas of recent taxonomic change, instability, or controversy, see the previous publications by the Turtle Taxonomy Working Group (TTWG 2007a,b, 2009, 2010, 2011, 2012, 2014), Rhodin et al. (2008), and the turtle checklist produced for CITES by Fritz and Havaš (2007). For a listing of all extinct Pleistocene and Holocene turtle and tortoise taxa, see our companion checklist by the Turtle Extinctions Working Group (TEWG 2015).

METHODOLOGY

The Turtle Taxonomy Working Group (TTWG) functions under the auspices of the IUCN SSC Tortoise and Freshwater Turtle Specialist Group (TFTSG), which operates under the umbrella of the IUCN (International Union for Conservation of Nature) and its Species Survival Commission (SSC). We first compiled our checklist of modern turtle taxa in 2007 (TTWG 2007b), and have previously updated it annually to reflect more recent changes, as required by subsequent publications with taxonomic novelties or proposed changes, as well as adding primary synonyms for all recognized taxa, type species and type locality designations, as well as distribution maps (Rhodin et al. 2008; TTWG 2009, 2010, 2011, 2012, 2014). This present checklist has taken three years to update and produce because of extensive further expansion in content, and is now the 8th installment in this series. It is current through approximately July 2017.

We list all primary and synonymized description names, as well as all *nomina nova* and *nomina nuda* names of which we are aware. We added *nomen nudum* names in the previous checklist. We continue to exclude most obvious *ex errore* names, especially the profusion of recent egregious misspellings in modern literature (especially in the popular literature and other non-systematic biological sciences). In addition, we do not list variations in spelling of the two alternate patronymic endings (*-ii* vs. *-i*), always using the original valid orthography.

Our listing of *nomen novum* names takes a broadly encompassing approach and lists both justified and unjustified subsequent emendations, including substantial name changes caused by early writers' occasional tendencies to create new or "better" names that they felt were more appropriate or more correct. Many early names were also unjustifiably emended in order to try to comply with perceived rules about word constructions and the use of non-Greek vs. Greek letters, (e.g., *c* vs. *k*, as in *Cinosternon* vs. *Kinosternon*, *Cinixys* vs. *Kinixys*). Occasionally, early authors did not appear to remember what the previously used names were, and simply came up with new spelling variations, with these new names sometimes becoming established in the literature for a while. This was especially true for the many names and spelling emendations created and recorded by John Edward Gray between 1825 and 1874. Prior to the establishment of the International Commission on Zoological Nomenclature in 1895, and the publication of the first edition of the Code of Zoological Nomenclature in 1905, these kinds of new names and changes were fairly common and we do not consider them to be simple *ex errore* typographical errors, and therefore, we have instead recorded many of them as *nomina nova*.

We include listings of subsequent new combination names to reflect how taxa have been rearranged into new genera or different specific or subspecific levels. The new combination names are listed in *lighter gray text* following each associated primary name, arranged more or less chronologically from oldest to most recently created combinations, but without attributing authorship or date of first use of the new combination. We have attempted to list all known subsequent combination names, but these listings may be incomplete. A few older *ex errore* misspelled names are included in these listings.

Table 1. Modern named freshwater turtles and tortoises that have gone extinct since 1500 AD (7 species, 3 subspecies, 10 taxa), with approximate or known extinction dates. For species that went extinct during Holocene and Pleistocene times prior to 1500 AD, see separate supplementary checklist and review (TEWG 2015) and Fig. 1.

Kinosternidae
- ***Kinosternon hirtipes megacephalum***
  - Viesca Mud Turtle
  - Mexico (Coahuila); ca. 1970

Testudinidae
- ***Aldabrachelys gigantea daudinii***
  - Daudin's Giant Tortoise
  - Seychelles (Mahé?); ca. 1850
- ***Chelonoidis abingdonii***
  - Pinta Giant Tortoise, Abingdon Island Giant Tortoise
  - Ecuador (Galápagos: Pinta [Abingdon]); 24 June 2012
- ***Chelonoidis niger***
  - Floreana Giant Tortoise, Charles Island Giant Tortoise
  - Ecuador (Galápagos: Floreana [Charles]); ca. 1850
- ***Cylindraspis indica***
  - Reunion Giant Tortoise
  - Réunion; ca. 1840
- ***Cylindraspis inepta***
  - Mauritius Giant Domed Tortoise
  - Mauritius (Mauritius); ca. 1735
- ***Cylindraspis peltastes***
  - Rodrigues Domed Tortoise
  - Mauritius (Rodrigues); ca. 1800
- ***Cylindraspis triserrata***
  - Mauritius Giant Flat-shelled Tortoise
  - Mauritius (Mauritius); ca. 1735
- ***Cylindraspis vosmaeri***
  - Rodrigues Giant Saddleback Tortoise
  - Mauritius (Rodrigues); ca. 1800

Pelomedusidae
- ***Pelusios castaneus seychellensis***
  - Seychelles Mud Turtle
  - Seychelles (Mahé); ca. 1950



Figure 1. While beyond the time-frame of extinctions for modern turtles, it is worth noting the findings of White et al. (2010), who documented the continued existence nearly into modern times of an extraordinary giant tortoise, apparently of the extinct terrestrial horned family Meiolaniidae, on Efate Island, Vanuatu, in the southwestern Pacific Ocean. The species persisted until as recently as only 3100–2800 ybp (1150–850 BC) with a further calibrated age of 2890–2760 ybp (940–810 BC) [see TEWG 2015]. White et al. named it ?*Meiolania damelipi* and provided clear evidence of human butchering and consumption of the species, further corroborated and expanded by Hawkins et al. (2016). This exploitation represented the final anthropogenic extinction event for this spectacularly unique and evolutionarily distinct deep lineage of giant terrestrial chelonians. For a more complete analysis of turtle extinctions caused by humans and/or climate change during the Pleistocene and Holocene, see our companion publication by the Turtle Extinctions Working Group (2015). No complete skeletons of ?*M. damelipi* are known, but the related *Meiolania platyceps* from Lord Howe Island, Australia, which went extinct in the Late Pleistocene, has been beautifully reconstructed (photo above) by the American Museum of Natural History (Burke et al. 1983).

Original and synonymized taxon names (including higher-category names) are listed using their original spelling and genus-species combination as used by the author at the time of first publication of the name. Our synonymies for genus- and species-level taxa follow, to our best efforts, the strict and established nomenclatural rules established by the fourth edition of the International Code of Zoological Nomenclature (ICZN 1999).

However, for the higher-level suprageneric categories used in this checklist, we have also provided some synonyms and previously-used names for the same or included groupings whose usage may not necessarily correspond to nomenclatural guidelines under the ICZN. Since the ICZN does not regulate names above the superfamily rank, our listings of these names are intended to document historical use to aid understanding and resolving the difficult questions of what names are most appropriately used for these suprageneric categories and to what author they should be attributed.

For example, the names we list under the Order-level name for turtles (Testudines) are not all strict synonyms, as some were proposed at different levels of groupings, from "Family" to Order to various supra-ordinal categories. Many were utilized primarily for including various fossil turtle-like ancestors in an expanded concept of turtles, including some rank-free Phylocode names. The names we list in other infra-ordinal suprageneric categories are not always strict synonyms either, as based on nomenclatural acceptability or availability of the utilized group name, but instead provide a partial historical record for names previously used for the same or similar grouping.

Our checklist includes all currently recognized named taxa (species and subspecies) of modern turtles (extant after 1500 AD). By "currently recognized" we mean those taxa that have not been demonstrably refuted or justifiably synonymized in published literature, or whose description or recommended resurrection has yet to receive wide community acceptance. We have attempted to describe all recent published taxonomic recommendations in our annotations, even though we have not included all proposed changes in the checklist.

Since there are sometimes also different interpretations for some genera and polytypic species as to which

Table 2. The top turtle-rich countries for all turtle species and taxa (species and subspecies) per country, including tortoises, freshwater and terrestrial turtles, and nesting sea turtles.

Species	Taxa (sp. & ssp.)
1. USA, 62	1. USA, 89
2. Mexico, 49	2. Mexico, 65
3. Brazil, 36	3. India, 41
4. China, 35	4. Indonesia, 38
Ecuador, 35	5. China, 37
6. Indonesia, 34	6. Australia, 36
7. Colombia, 33	Brazil, 36
India, 33	Vietnam, 36
9. Australia, 32	9. Ecuador, 35
Vietnam, 32	10. Colombia, 34
11. Bangladesh, 30	11. Thailand, 33
Myanmar, 30	12. Myanmar, 31
Thailand, 30	13. Bangladesh, 30
14. Malaysia, 24	14. Malaysia, 25
15. Venezuela, 23	Venezuela, 25
16. South Africa, 21	16. South Africa, 23
17. Congo (DRC), 19	17. Laos, 19
18. Laos, 18	18. Congo (DRC), 18
19. Guatemala, 16	Nepal, 18
Honduras, 16	20. Honduras, 17
Mozambique, 16	Tanzania, 17
Nepal, 16	22. Guatemala, 16
Papua New Guinea, 16	Mozambique, 16
Tanzania, 16	Panama, 16
25. Angola, 15	Papua New Guinea, 16
Cameroon, 15	Peru, 16
Kenya, 15	27. Angola, 15
Panama, 15	Cameroon, 15
Peru, 15	Costa Rica, 15
	Nicaragua, 15

names are valid and whether to lump or split the contained taxa, we occasionally list recent alternative name usages as '*Xxxx* **or** *Yyyy*'. Our most important criterion for accepting proposed changes is that they be accompanied by adequate data and sound arguments justifying the taxonomic revision. Consequently, some proposed taxonomic changes from lists or publications with unsupported or untested revisions have not been incorporated. We also list and annotate recent systematic papers that do not necessarily commit nomenclatural or taxonomic acts, but that present data on phylogenetic or phylogeographic relationships that either serve to further support currently understood relationships, or are indicators of distinct lineages or potential taxonomic changes to come. Occasionally we also include annotations concerning dates of publication or other bibliographic considerations.

Currently recognized modern turtles and tortoises (genera and terminal taxa, including species and subspecies) are listed in bold italics. Original description names and synonymized names are in non-bold italicized text. Higher suprageneric group-level names are listed in bold non-italic text and are presented in an indented phylogenetic hierarchy. For competing alternative generic names, we list them in phylogenetic order from most to least inclusive. All original names include authorship, year, and page number.

As of this edition of the checklist, all described genera include type species designations (original and subsequent), and all described species include verbatim original and subsequently restricted type localities. This has been undertaken through a comprehensive re-examination of all original literature rather than relying on secondary sources. As a result, many of these type designations and localities are somewhat different from those previously cited in Fritz and Havaš (2007).

Comments on names that have undergone recent taxonomic change or phylogenetic analysis or are associated with instability or uncertainty or other changes are indicated by superscript numbers that refer to annotations at the end of this and earlier checklists. See the section on **Annotations** at the end of the checklist for all detailed explanations. A summary of all major taxonomic changes in this checklist as compared to our previous one is provided in Table 3; all minor changes are only included in the annotations.

Turtle taxa that have gone extinct within modern times (since 1500 AD) are labeled in bold as Extinct, and are also listed in Table 1. As of this checklist, this includes 7 species and 3 subspecies, or 10 taxa (2.1% of all modern turtle taxa) that are extinct.

Turtle taxa that were originally described based on Pleistocene or Holocene fossil, subfossil, or archeological material, but subsequently recognized as representing extant taxa or synonymized with modern turtle taxa, are included in the checklist and marked with a cross (†), and include stratigraphic horizon and location data. Fossil taxa synonymized with extant polytypic species are listed under the geographically most appropriate subspecies; however, such synonymizations may not be accurate for some Early Pleistocene or older fossils which could conceivably represent distinct chronospecies or extinct subspecies. For further details on extinct fossil turtle and tortoise taxa from the Pleistocene and Holocene, see TEWG (2015).

Those modern species and subspecies for which in-depth informational accounts have been published in this TFTSG monograph series on *Conservation Biology of Freshwater Turtles and Tortoises* (CBFTT), are indicated by a **CBFTT Account** heading, with interactive hyperlinks provided to the online published accounts in dark blue typeface. We will gradually publish CBFTT accounts for all non-marine turtle and tortoise species—accounts also include recognized subspecies within the account, but some subspecies have separate accounts and are so indicated. As of December 2016 we have published 100 CBFTT accounts covering 130 turtle and tortoise taxa; these are all available online as downloadable open-access doi-designated pdf's on the TFTSG website at **www.iucn-tftsg.org/cbftt/**.

The checklist includes English common names for all taxa. We have tried to provide the most commonly used names, although occasionally we have provided two or more names. We do not support the practice of

TTWG Guidelines for Taxonomic Changes

Taxonomy is both a summary of scientific knowledge and a language for biological communication. As such, it is critical that taxonomic changes be carefully considered and based on strong, comprehensive underlying data to ensure that changes are stable and long-lasting. We fully recognize that taxonomy and the systematics research on which it is based, is a dynamic field and that change is a sign of healthy science. However, we also recognize that taxonomic and nomenclatural stability are of immense value to the wider community of biologists, conservationists, legislative authorities, and the public at large. Pauly et al. (2009) argued that taxonomy should aim for stability and monophyly; in cases where these two objectives are in conflict, well-supported monophyly prevails over stability. Given the dynamic nature of turtle taxonomy, we believe that a series of best practices can and should be followed that should lead to changes that are stable, informative, and long-lasting. We summarize these best practices both to identify many of the key points in our group discussions on newly-proposed name changes, and as a set of considerations for authors who are considering new name changes. We hope the community finds them useful. For additional discussion, see TTWG (2007a), Pauly et al. (2009), and Kaiser et al. (2013).

1. A proposed taxonomic change must meet the ICZN criteria for nomenclatural validity. Published names gain much greater credibility by being published in a peer-reviewed scientific journal or equivalent publication standard. These standards include the 2012 emendations of the Code (ICZN 2012) regarding accepted methods of electronic publication of new names.

2. Taxonomic changes above the species level should preferably be suggested and adopted only when a currently recognized higher taxon is demonstrably non-monophyletic. We share the view of the global systematics community that phylogeny should be reflected in higher taxonomic categories, and that changes should be proposed to "fix" a non-monophyletic grouping. As discussed in 5) below, non-monophyly should be based on multiple lines of statistically well-supported evidence. As pointed out by Pauly et al. (2009), the use of novel levels within a taxonomic hierarchy (subgenera, supergenera, etc.) allows for the recognition of new/previously known clades while still maintaining taxonomic stability within a group.

3. Taxonomic changes should incur the fewest possible name changes while resulting in a final set of monophyletic taxa. We share the view that taxonomic stability, and therefore the fewest possible nomenclatural changes, is always a desirable outcome.

4. Avoid naming monotypic higher groups when possible. As has been repeatedly stated in the literature, monotypic genera, families, etc. provide only very limited information on group membership, and therefore are less informative than alternative schemes where higher groups have multiple species within them. This may imply merging / lumping, rather than splitting, to resolve issues of non-monophyly. On the other hand, monotypic higher taxa emphasize the unique position of its contained (surviving) taxon. Monotypic higher taxa have been recognized among turtles for over two centuries, and many (though not all) contain additional extinct taxa as well as a single surviving species. We do not advocate eliminating traditionally recognized monotypic, and usually reciprocally monophyletic,higher taxa (since that would lead to taxonomic destabilization), but caution against proliferation of monotypic higher taxa.

5. Taxonomic arrangements that are supported by several independent character sets, provide strong statistical support for each, and report reasonable concordance between different datasets are more compelling than results from a single character set. Independence in evolutionary studies is a complex concept. In systematics, independence means that characters are not constrained to covary. For example, when multiple genetically independent nuclear genes, or nuclear genes and morphological characters, imply the same phylogenetic relationships or species boundaries, they presumably do so because both reflect the evolutionary history of the contained lineages. However, two mitochondrial genes are far less independent, since they are physically linked in the same non-recombining piece of mtDNA, and natural selection, drift, or any other process act simultaneously on that linked set of nucleotides. Single character (e.g., only mtDNA, or only geographic distribution patterns) may reflect the history of the species, or they may reflect the history of that one character. We strongly recommend that individual characters (each nuclear gene, composite set of mtDNA data, morphological, behavioral, and other characters) be analyzed separately to test for concordance among multiple independent data sets.

6. Independent datasets may or may not provide convincing evidence for monophyly, and thus for taxonomic changes. When one dataset conflicts strongly with several other independent ones, there may still be strong support for the hypothesis supported by multiple independent data sets. However, character conflict may often suggest that additional analyses or data are needed before taxonomic changes should be endorsed and accepted.

7. Sampling should be comprehensive at the appropriate level. Broad taxon sampling for species trees, with multiple specimens from across the geographic range of each taxon, can help avoid spuriously high statistical support values for apparent clades (see Spinks et al. 2013 for a recent chelonian example).

8. Species delimitation studies should include broad geographic sampling of all relevant taxa. Comprehensive geographic sampling for each character from individuals across the ranges of all species being considered is often critically important to correctly diagnose new species. We recognize that comprehensive geographic sampling may be difficult for rare species, but every effort should be made to be as comprehensive as possible.

9. Studies that only evaluate a taxonomic or geographic subset of the relevant group, or only make changes to some taxa without evaluating the relevance of these changes to related taxa, are less likely to be convincing and stand the test of time, and therefore are less likely to be widely adopted. For example, a study that elevates a particular subspecies to species rank, without examining variation among the remainder of the species is unlikely to be adopted until further supporting and clarifying information is published.

10. The TTWG primarily reacts to taxonomic changes proposed in the published literature, although we also will take under consideration publications that are under review but not yet published if they add additional information to a proposed change. Any information that the TTWG members have access to can be used to argue for or against adoption of a new taxonomic arrangement proposed in a validly published publication, although in almost all cases we rely on information that is either published or under review in a peer-reviewed journal. The TTWG will not use information from an as-yet unpublished study or manuscript to initiate a taxonomic change. In very rare cases, the TTWG may decide to make a new nomenclatural act, such as creating new nomenclatural combinations.

designating "official" or "standard" common names for species, as that is the domain for scientific names. Instead, common names tend to evolve and vary from area to area and over time, as well as with language and cultural context. However, in the field of conservation, the use of reasonably widely recognized and appropriately descriptive common names is critically important for communication purposes, and so we include English common names here. Though also important for the global conservation community, and officially included in IUCN Red List and CITES documentation, we do not at this time include Spanish or French common names in this checklist. Indigenous vernacular names for certain species are often extensive and imprecise, and in general we do not list such names here, although a few commonly-used ones are listed.

We are introducing representative photos of nearly all species in this checklist, with the intention of adding images of all recognized taxa. We have started with many photos previously published in our CBFTT species accounts, as well as photos from our various Chelonian Research Foundation publications: *Chelonian Research Monographs* (CRM 1–6), our peer-reviewed journal *Chelonian Conservation and Biology* (CCB), our informal *Turtle and Tortoise Newsletter* (TTN) and *TurtleLog* (TL), the Turtle Conservation Fund (2002) (TCF) prospectus we co-published with Conservation International, and the Top 25+ Endangered Turtles publication we co-produced with the Turtle Conservation Coalition (2011) (TCC), all acknowledged as to sources. In addition, we have included many photos from the authorship team as well as many other contributing individuals. Photos are preferentially of wild animals from known recorded localities, but a few are from captivity, and most extinct species are from preserved museum specimens. We invite and urge our colleagues in the international turtle community to consider submitting additional identified quality portrait-style photos of missing taxa from known localities to us for consideration of inclusion in the next edition of this checklist.

Taxonomic Changes

A prime purpose of this checklist is to record taxonomic changes published in the literature, to evaluate the strength of the data supporting those proposed changes, and to recommend whether the community should adopt or reject the proposed changes. It is important to note that the recommendations we make here as the TTWG regarding the validity or non-validity of any included or excluded taxonomic names or systematic relationships are not prescriptive, nor are they official recommendations by the TFTSG or the IUCN, as such matters are generally best left to specialists working in these areas. However, we have tried to be consistent in our listing of what appear to be valid taxa and relationships, based on criteria of published scientific descriptions and proposed taxonomic changes accompanied by data and sound argumentation (TTWG 2007a).

Our hope is that through this process, the TTWG and the TFTSG may help stabilize and guide the fluid state of chelonian systematics and nomenclature, and provide a standard reference source for updated taxonomy, systematic relationships, distributions, and conservation status of all turtles and tortoises. The list should also provide an impetus for ongoing and future work aimed at clarifying and resolving areas of taxonomic disagreement and/or uncertainty, as well as documented distribution patterns.

The very first checklist (TTWG 2007b) was compiled on the 'last published revision' principle, though reflecting some alternative arrangements through our use of the '*Xxxx* **or** *Yyyy*' arrangement. As the checklist has developed over the years and is increasingly adopted as the taxonomic standard by other groups and entities (IUCN Red List, Reptile Database, and others), and informs nomenclatural deliberations in CITES, ITIS, and other institutions, the TTWG author team has increasingly felt a need to evaluate both the scientific merit and the wider implications of adopting proposed taxonomic novelties. Evaluations have always been on a case-by-case basis, bringing the diverse perspectives of the authorship team to bear on the merits of each proposed change. We have considered drafting criteria for adoption or rejection, but concluded that every case is unique, making it unrealistic and undesirable to rely on a single set of "rules". Instead, we have formulated guidelines and considerations of what increases (or decreases) the scientific credibility of a proposed taxonomic novelty, and therefore the likelihood of its adoption into (or rejection from) the TTWG turtle checklist (see inset on p. 13).

We have previously (TTWG 2007a) presented proactive guidelines for researchers proposing taxonomic novelties; these remain valuable guidance also when we evaluate new published names or arrangements. But updating the checklist has required additional considerations, which we describe here. None of these are all-or-nothing decisions; instead, almost every proposed taxonomic novelty, and the underlying supporting data as presented in the publication, falls somewhere on a continuum between 'adopt unreservedly' and 'reject outright'.

The collective weight of evidence supporting any proposed change (availability of the name; strength and nature of the supporting evidence; phylogenetic context; agreement with other studies; effect on taxonomic stability) is deliberated by the TTWG team (often very extensively and often with different philosophical views of the value of the underlying evidence). In order to provide a more comprehensive and international approach to TTWG deliberations and decisions, especially as regards issues of phylogenetic analysis, we have recently expanded our previous TTWG authorship team (Rhodin, Iverson, van Dijk, Shaffer, and Bour) to now also include Arthur Georges and Uwe Fritz, and we welcome them aboard. Our deliberations lead to conclusions on whether to:

1) adopt fully, reject, or recommend modification of a proposed taxonomic change,

2) include it as an '*Xxxx* **or** *Yyyy*' arrangement, or

3) suspend adoption until additional, independent supporting or alternative data are published.

It is important to note that decisions and recommendations within the TTWG are not always unanimous, and our checklist is not necessarily reflective of the individual taxonomic views or conclusions of all team members. In the accompanying text box (see p. 13), we summarize our guidelines and recommendations for making taxonomic changes.

Nomenclatural and taxonomic changes often have disruptive effects for legislation and other 'users' of checklists. A degree of disruption is inevitable as phylogenetic knowledge accumulates; but we are more likely to adopt proposed changes that have significant 'disruptive' effects on widely-used names if such changes are strongly supported by robust data; in contrast, we are inclined to suspend adoption of novel names and arrangements if they are based on weaker data sets or do not greatly improve our overall phylogenetic understanding. As an example, we would be reluctant to adopt a proposal to transfer a single species out of an established genus to form a new, monotypic genus, a move that would involve new names and combinations without significant improvement of our understanding of the overall relationships of the group of species. We repeat our recommendation (TTWG 2007a) that taxonomy should not be driven by politics or opportunism, and that the wider implications of taxonomic and nomenclatural decisions be understood and carefully considered.

We have noted for many years that the ICZN (2012) has emended its Code regarding accepted methods of electronic publication of new names. The revision permits electronic publication after 2011 only after the work (not the new name) is first registered in ZooBank (http://zoobank.org/; The Official Registry of Zoological

Table 3. Summary of new or resurrected taxa (*) included in this 2017 checklist and major taxonomic changes from TTWG 2014. See the annotations for a full discussion of all these changes; minor changes associated only with overlooked or previously synonymized names or dates of authorship or other primarily nomenclatural changes are not listed here, but only in the annotations. This table does not include added synonymized fossil taxa, nomina nuda, or names not considered valid in the 2014 checklist (i.e., newly added synonyms).

TTWG 2014 (335 species, 453 taxa)	**TTWG 2017** (356 species, 478 taxa)	Change
Macrochelys temminckii	*Macrochelys temminckii* + *Macrochelys suwanniensis* * (*M. apalachicolae* * = *M. temminckii*)	taxon split, 1 new species described, 1 new species synonymized
Kinosternon arizonense	*Kinosternon stejnegeri* * (+ *Kinosternon arizonense* †)	taxon split, *arizonense* only fossil, 1 modern species resurrected
Kinosternon subrubrum steindachneri	*Kinosternon steindachneri*	subspecies elevated to species
Trachemys emolli	*Trachemys grayi emolli*	species changed to subspecies
Trachemys ornata callirostris	*Trachemys venusta callirostris*	subspecies reassigned
Trachemys venusta panamensis	*Trachemys grayi panamensis*	subspecies reassigned
Emys **or** *Actinemys marmorata*	*E.* **or** *A. marmorata* + *E.* **or** *A. pallida* *	taxon split, 1 species resurrected
Emys orbicularis fritzjuergenobsti	*Emys orbicularis occidentalis*	taxon synonymized under *occidentalis*
Cuora aurocapitata	*Cuora aurocapitata aurocapitata* + *C. a. dabieshani* *	taxon split, 1 new subspecies described
Cuora trifasciata	*Cuora trifasciata trifasciata* + *C. t. luteocephala* * + *Cuora cyclornata cyclornata* * + *C. c. meieri* * + *C. c. annamitica* *	taxon split, 1 new species recognized, and 5 subspecies (2 new, 2 resurrected) recognized
Malayemys subtrijuga	*Malayemys subtrijuga* + *Malayemys khoratensis* * (*M. isan* * = *M. khoratensis* *)	taxon split, 1 new species described, 1 new species synonymized
Chelonoidis porteri	*Chelonoidis porteri* + *Chelonoidis donfaustoi* *	taxon split, 1 new species described
Chelonoidis vicina	*Chelonoidis vicina* + *C. guntheri* * + *C. microphyes* * + *C. vandenburghi* *	taxon split, 3 previously synonymized species resurrected
Gopherus morafkai	*Gopherus morafkai* + *Gopherus evgoodei* *	taxon split, 1 new species described
Homopus	*Homopus* + *Chersobius*	genus split into 2 genera
Testudo	*Testudo (Testudo)* + *Testudo (Agrionemys)* + *Testudo (Chersine)*	genus divided into 3 subgenera
Amyda cartilaginea	*Amyda cartilaginea* + *A. cartilaginea cartilaginea,* + *A. c. maculosa* * + *Amyda c.* **or** *ornata ornata* * + *A. c.* **or** *o. phayrei* *	taxon split, 1 new subspecies described, 1 species resurrected, 1 subspecies resurrected
Pelochelys cantorii	*[Pelochelys (Ferepelochelys)]* + *[Pelochelys clivepalmeri]* + *[Pelochelys telstraorum]*	unavailable names
Chelodininae	*Chelodininae* + *Pseudemydurinae*	subfamily split, 1 subfamily resurrected
Chelodina (Macrochelodina) expansa	*[Chelodina (Supremechelys) expansa brisbaneensis]* + *[Chelodina (Supremechelys) duboisi]*	unavailable names
Elseya	*Elseya (Elseya)* + *Elseya (Hanwarachelys)* + *Elseya (Pelocomastes)*	genus divided into 3 subgenera
Elseya dentata	*Elseya (Elseya) dentata* + *E. (E.) flaviventralis* *	taxon split, 1 new species described
Elseya novaeguineae	*Elseya (Hanwarachelys) novaeguineae* + *E. (H.) rhodini* *	taxon split, 1 new species described
Flaviemys	*Myuchelys*	monotypic genus synonymized
Flaviemys purvisi	*Myuchelys purvisi*	generic allocation of taxon revised
Pelomedusa subrufa	*Pelomedusa subrufa* + *P. barbata* * + *P. galeata* * + *P. gehafie* * + *P. kobe* * + *P. neumanni* * + *P. olivacea* * + *P. schweinfurthi* * + *P. somalica* * + *P. variabilis* *	taxon split, 6 new species described, 3 species resurrected

Nomenclature). ZooBank must register the precise electronic archive where the work is to be published, as well as the ISSN or ISBN of the work. In addition, amendments to the Code also clarify that preliminary electronic versions of works due for publication on paper are unavailable, and that abstracts of meetings, presentation texts and posters are unavailable for nomenclatural purposes, and preliminary electronic versions do not bring forward the date of publication, unless the electronic version meets the requirements for availability. Authors intending to publish taxonomic papers in electronic archives are cautioned to read the text of International Commission on Zoological Nomenclature (2012) carefully, and to follow the guidelines precisely, at risk of having their work inadmissible.

Distributions

We summarize distributions for all taxa in the checklist, listing all nations and territories in which they occur as native populations (see Table 2 for the top turtle-rich nations). For several larger nations we also list political or geographic subunits (e.g., states, provinces, regions, or larger islands). We attempt to also indicate nations or territories where species have been extirpated or where they occur as non-native introduced or invasive species, or where there are uncertainties as to occurrence.

For introductions, we attempt to distinguish between two forms: (1) modern introductions (since ca. 1500 AD) for those species that appear to have relatively well-established or potentially reproducing populations in extra-limital areas primarily as a result of relatively recent trade for food or pets or planned conservation introductions (labeled "introduced" or "modern"), and (2) earlier historic or prehistoric introductions for those species that appear to have native populations, but where population genetics studies find evidence of founder effects suggestive of possible introduction by humans, or other dispersal events, during the last ca. 2000–3000 years (labeled "prehistoric introduction?").

For freshwater and terrestrial turtles and tortoises, we compiled native and introduced distributions and locality records from a combination of multiple published and database sources. For native distributions we used Iverson (1992) and Fritz and Havaš (2007) as starting points, and then added data from other recent literature by numerous authors, data from our extensive database compiled from Iverson's work by Buhlmann et al. (2009), further data from our published CBFTT species accounts, our TFTSG-organized IUCN Red Listing workshops, and data from Iverson's continuing intensive compilation of distribution records from the literature.

For introduced species, we used Kraus (2009) as a starting point and have added data from other publications and online sources and databases. We have attempted to list introductions that are based on recorded populations rather than just single animals (but not necessarily with evidence of reproduction), but have not been rigorous in this, as it can be difficult to determine what the actual situation may be in each recorded case.

Finally, we also solicited and received input from many members of the TFTSG for corrections and additions to all the native distributions and introductions data. Despite this effort, it is likely that we have committed errors of omission or commission, and we request that any corrections or updates be brought to our attention so that they can be included in future editions of this checklist.

For sea turtles, we compiled distributions from a combination of IUCN Red List data, CMS (Convention on Migratory Species) listings, and the extensive listings of nesting sites and foraging ranges that the IUCN/SSC Marine Turtle Specialist Group (MTSG) includes in its SWOT mapping application (The State of the World's Sea Turtles) (http://seaturtlestatus.org/learn/maps/all), generously supplied to us by the MTSG. Based on these data, we list sea turtle distributions in three distributional categories: 1) nesting: native regularly nesting populations, 2) foraging: native permanently foraging or regularly migrating populations (but no evidence yet of regular nesting), and 3) vagrant: temporarily foraging or migrating animals not necessarily considered native.

GIS Maps

In the previous edition of the checklist, we added simple GIS range distribution maps for all species. All maps in this edition have now been enhanced and updated to also include specific locality points upon which the ranges are based, as well as adding detailed color-coded altitudinal elevations. Nearly all distributional ranges have been revised based on new data and improved geographic analysis, in general restricting the presumed range somewhat tighter around our recorded localities. The locality points have been obtained from a combination of data from Iverson (1992), edited and corrected localities from the EmySystem maps (http://emys.geo.orst.edu/), locality data that Iverson has continued to collect systematically since 1992, CBFTT species accounts, IUCN Red Listing workshops, recent literature (although far from complete) compiled mainly by Iverson and Rhodin, and personal input from members of the TFTSG and other specialists. Maps now also include color-coded ranges for recognized subspecies.

Map production began with point locality datasets from Iverson (1992), based on the many museum-held voucher specimens and published records amassed by John Iverson over the years and updated on the EmySystem (http://emys.geo.orst.edu/). These datasets were then supplemented by newer data and converted into shapefiles and edited and corrected and updated for content by Iverson, Ross Kiester, Tom Akre, Kurt Buhlmann, Peter Paul van Dijk, Arthur Georges, Anders Rhodin, Russ

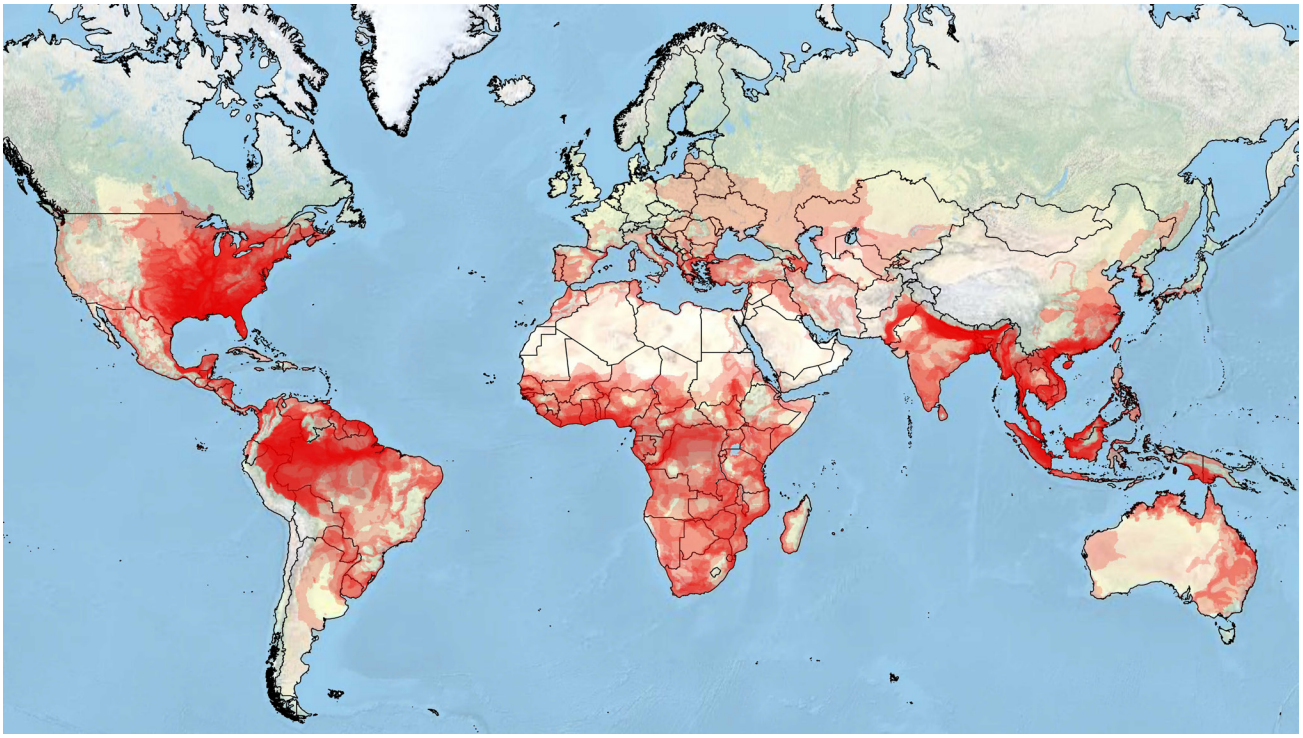


Figure 2. Global species richness map for all tortoises and freshwater turtles. Composite map of all tortoise and freshwater turtle distribution maps (349 species, 471 taxa) as presented in this checklist and atlas. Distribution shapefiles for all taxa in this map are each shown in red at 80% transparency and stacked; lighest red color = one taxon, darkest red color = > 15 taxa. For enlarged and more detailed regional species richness maps, see pp. 218–220 at the end of the taxonomic checklist.

Mittermeier, and Whit Gibbons, and analyzed by Buhlmann et al. (2009).

The original maps created this way were based on constructing projected historical geographic ranges. This was done by selecting GIS-defined hydrologic unit compartments (HUCs, at relatively coarse level 6 hydroshed basins) with verified locality points, and then adding HUCs that connected known point localities in the same watershed or physiographic region and that had similar habitats and elevations as the verified HUCs. As such, these first maps represented assumed geographic ranges, but generally somewhat larger than reality, and required further verification and adjustment.

These distribution shapefiles were then further revised and formatted by Rhodin using ArcGIS Desktop 10.1 (www.esri.com) as part of the IUCN-associated BioFresh initiative (http://atlas.freshwaterbiodiversity.eu/), using finer geographic scales (hydroshed basins at levels 10 or 12). This allowed elimination of many higher-altitude regions from the projected ranges (notably in areas such as the Himalayan and Andean foothills and other mountainous regions), while keeping lower altitude HUC distributions in the same overall drainage basins, and in general tightening up and reducing many of the projected ranges. The maps have also been further revised through input of data provided by authors of published CBFTT accounts and participants in TFTSG-organized IUCN Red Listing workshops, but still represent projected and assumed historical ranges.

For some relatively cryptic, poorly known, or possibly questionable species, the ranges depicted in this checklist are at best general approximations of their potential distributions. Species that fall into this category include *Pelodiscus axenaria*, *P. parviformis, Cuora zhoui, Cyclemys enigmatica, Rafetus swinhoei, Mesoclemmys heliostemma, Chelodina gunaleni, C. kuchlingi,* and *Emydura tanybaraga*.

Other apparently widespread species with significant documented phylogeographic differentiation in the form of recognized subspecies or genetically-defined lineages and evolutionarily significant units (ESUs) may eventually warrant recognition as multiple taxa at the species level. Some species that fall into this category include *Kinosternon hirtipes*, *K. integrum*, *K. scorpioides*, *Terrapene carolina*, *Cuora amboinensis*, *Melanochelys trijuga*, *Chelonoidis carbonarius*, *Testudo graeca*, and *Phrynops geoffroanus*.

Native populations and recorded specimens are marked with yellow locality spots set in partially transparent distribution range polygons (using HUCs), using red polygons at 50% transparency for species and nominate subspecies, and other colors at 30–50% transparency for other subspecies. Populations that represent possible prehistoric introductions (whether genetically verified or hypothesized as such) or possible prehistoric or more recent natural range extensions are also indicated with yellow spots. A composite species richness map for all tortoise and freshwater turtle taxa is depicted in Fig. 2

and enlarged regional detailed maps are included after the checklist on pp. 218–221.

Apparently introduced populations near the native range that are most likely of modern and recent historic origin are generally included, and are indicated by orange spots. Remote introduced populations are not included. Questionable locality records near the native range (possibly misidentified and/or regional trade specimens) are also indicated by orange spots. Extinct taxa (species or subspecies) are designated by red spots.

It is critically important to note that the maps published here depict projected and presumed ***historical*** geographic ranges (defined as historical area of occupancy, or AOO), as they are based on a combination of older historical museum and literature data (Iverson 1992) and more recent locality data, and ***do not*** in general reflect actual ***current*** areas of occupancy of these species. Most turtle and tortoise species have had their historical ranges decrease considerably as a result of extensive habitat loss and degradation and/or overexploitation. For example, the ranges depicted here for *Batagur trivittata* and *Geochelone platynota* from Myanmar, and *Psammobates geometricus* from South Africa, show their *historical* ranges, rather than their *current* ranges, which have all been reduced by >90%. In general, all species assessed as Critically Endangered or Endangered on the IUCN Red List or TFTSG Draft Red List have had their current AOO ranges greatly decreased from historical extents.

Sea turtle maps were generated from GIS data generously supplied to us by the IUCN/SSC Marine Turtle Specialist Group (MTSG) and SWOT (The State of the World's Sea Turtles), and show documented nesting sites as yellow dots and generalized foraging distributions for each species as shaded oceanic distributional ranges delimited as either regional management units (RMUs) or distinctive population segments (DPSs) (see Seminoff et al. 2015).

Conservation Status

We include current IUCN Red List conservation status for all species. The status categorizations listed here are current as of the IUCN Red List of Threatened Species™, version 2017.1 (www.iucnredlist.org). The TFTSG is the official global IUCN Red List Authority responsible for continuously updating IUCN Red List assessments of all tortoises and freshwater turtles, and this process is handled through multiple consensus-building workshops and consultations.

As many species on the Red List need updating, either because their previous evaluations are more than ten years old, or because of recent conservation status or taxonomic changes, we have also included the results of TFTSG Draft Red List assessments (through June 2017) to indicate their current provisional status, which should be released on the official IUCN Red List site in the near future. In addition, many species that were determined by the TFTSG to be Least Concern in 1996 were never formally listed (as per IUCN Red List protocol at the time), but the original determinations as prepared at that time are still available and are indicated here. For a few species from the South African region we have also added draft Red List assessments done in 2010 by the South African Reptile Conservation Assessment (SARCA) committee, subsequently published by Hofmeyr et al. (2014).

Finally, we include regulatory status listings on CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) Appendices I, II, or III, current as of the 4 April 2017 listing (http://cites.org/eng/app/appendices.php). As such, this document brings together most important aspects of taxonomy, names, distribution, and conservation status of all turtles and tortoises of the world.

RESULTS AND DISCUSSION

Conservation Status

To assess and summarize the current conservation status of turtles and tortoises in the broadest strokes, we provide an update and analysis of the most current IUCN Red List (www.iucnredlist.org), as well as provide provisional conservation status of species still under evaluation. The official determinations of conservation status of turtles are provided to the IUCN Red List by the TFTSG, which is continuously producing draft assessments for previously unevaluated taxa as well as previously evaluated taxa needing updates (necessary every 10 years). Knowing the overall conservation status and percentage of threatened species of turtles is important in understanding how seriously they are endangered, and how they compare with other imperiled organisms. Mittermeier et al. (2015) provided an analysis of global Turtle Hotspots as part of such an evaluation.

The current IUCN Red List (version 2017.1) formally lists 251 turtle species, including 7 separate subspecies and 19 regional subpopulations, using a slightly different taxonomy from the one presented in this checklist. Of the 251 species listed, 8 are Extinct (EX) [includes *Pelusios seychellensis*, considered a subspecies in our checklist], 2 Extinct in the Wild (EW), 40 Critically Endangered (CR), 44 Endangered (EN), 65 Vulnerable (VU), 34 Near Threatened (NT), 1 Conservation Dependent (LR/cd; an old category being phased out), 45 Least Concern (LC), 11 Data Deficient (DD), and 1 Not Assessed (NA).

By IUCN Red List protocol, Threatened species are defined as those in the three categories of Critically Endangered, Endangered, and Vulnerable, meaning that 149 species are officially regarded as Threatened (59.4% of the 251 species listed), with 84 species (33.5% of those listed) considered Critically Endangered or Endangered.

Of the 356 species recognized as distinct (or possibly distinct) in our checklist, 105 are not yet officially listed on the IUCN Red List as species (although some are listed as subspecies). Most of these apparently "unassessed" species have in fact already been evaluated by the TFTSG, first in 1996, when Least Concern (LC) species were not formally listed (as some are now), and then more recently through a series of draft assessments. Of these species, the TFTSG evaluated 53 as Least Concern in 1996 (J.L. Behler and C. Hilton-Taylor, in litt.), and these are marked as such in this checklist.

Further status assessments have more recently been accomplished through an ongoing series of regional IUCN Red Listing workshops held by the TFTSG. These workshops have assessed both previously unevaluated species and updated older previously evaluated species. Since 1999 the TFTSG has held Red Listing workshops in or for Asia, Mexico, the Mediterranean, India, Madagascar, Australia, New Guinea, USA, northern South America, southern South America, the Galápagos Islands, Asia a second time, Sub-Saharan Africa, and India a second time. Although not yet official IUCN Red List evaluations, we can use all these draft evaluations to determine overall threat rates to all turtles and tortoises. The current assessments that are based on the findings and results of these workshops, but have not yet been finalized and published on the IUCN Red List, are included in this checklist as 'TFTSG Draft Red List' status.

Combining the formal IUCN Red List assessments with draft TFTSG status evaluations for previously unlisted species and draft updated assessments for currently listed but outdated assessments, yields the following total current status numbers for all 356 species of turtles and tortoises: 7 Extinct (EX), 1 Critically Endangered (Possibly Extinct) [CR(PE)], 63 Critically Endangered (CR), 50 Endangered (EN), 65 Vulnerable (VU), 38 Near Threatened (NT), 81 Least Concern (LC), 35 Data Deficient (DD), and 16 Not Evaluated (NE). This yields 114 species (32.0%) that are Critically Endangered or Endangered, and 179 (50.3%) that are Threatened (Critically Endangered, Endangered, or Vulnerable). If we also include Extinct species among the Threatened categories (or more generally, "gone or nearly gone"), then 186 turtle species, or 52.2% of all currently recognized modern turtle and tortoise species, are either already extinct or threatened with extinction.

We can provisionally adjust these numbers to account for Data Deficient and Not Evaluated species which may also be Threatened. We follow the calculation method of determining percentage of Threatened species utilized by Hoffmann et al. (2010): the number of Threatened species (179) is divided by the number of data-sufficient species (305), i.e., the total number of species minus those Not Evaluated (NE) and minus those that are Data Deficient (DD). This assumes that DD and NE species will have the same percentage of Threatened species as data-sufficient species. Using this calculation methodology, 58.7% of all assessed data-sufficient turtles and tortoises are Threatened, and 61.0% are Threatened or Extinct. For comparison, using the same methods, Hoffmann et al. (2010) determined that 41% of amphibians, 33% of cartilaginous fishes, 25% of mammals, and 13% of birds were Threatened. Turtles were surpassed only by cycads, with 62% of their 300+ species Threatened.

No matter how we analyze these various percentages of threatened species, turtles and tortoises, with anywhere from ca. 50–59% of all their modern species Threatened, are among the most endangered of any of the major groups of vertebrate species, more than birds (ca. 13%), mammals (ca. 21–25%), cartilaginous and bony fishes (ca. 17–31%), or amphibians (ca. 30–41%), and paralleled among the larger vertebrate groups only by the primates (ca. 49%) (www.iucnredlist.org, Hoffmann et al. 2010).

As part of the process of determining the relative threatened status of the world's tortoises and freshwater turtles, the Turtle Conservation Coalition (2011) published a consensus listing of "*Turtles in Trouble: The World's 25+ Most Endangered Tortoises and Freshwater Turtles—2011*", which listed the top ca. 50 most endangered species at that time. This document has since become widely cited, especially as a basis for justifying and supporting conservation grant proposals and action plans. As such, continuing to evaluate changes to this Top 25+ list, both in terms of improved status for those species benefitting from conservation efforts, and documenting potentially deteriorating survival prospects for other species, will be critically important for future conservation efforts for these highly threatened species. This continuing process is currently being undertaken by the TFTSG in collaboration with other turtle conservation organizations, notably Turtle Conservancy, Turtle Survival Alliance, Global Wildlife Conservation, Wildlife Conservation Society, Conservation International, and Chelonian Research Foundation.

Genetic Pollution

Aside from overt and highly impactful conservation threats such as overexploitation and habitat destruction, the global turtle fauna is also increasingly facing another insidious threat: genetic pollution caused by human-facilitated hybridization and introgression from introduced and invasive species (Rhymer and Simberloff 1996; Simison et al. 2013; Spencer et al. 2014; García-Díaz et al. 2015; Nori et al. 2017). This is not entirely new, but the current extent is unprecedented. Some taxa have historically already been affected. This is most probably true for Asian softshell turtles of the genus *Pelodiscus*. These turtles have been farmed and traded for centuries, with the corollary of translocating different species and local genetic lineages, leading to the admixture of different taxa and lineages in farms and in the wild (Fritz et al. 2010b; Suzuki and Hikida

2014). Similarly, the historical introduction of *Mauremys reevesii* to Japan resulted in massive hybridization with the native *M. japonica* (Suzuki et al. 2014). Another historical case of human-mediated admixture of genetic lineages is known from European pond turtles (*Emys orbicularis*). Here, the non-native populations on the Balearic Islands, most probably introduced in Roman times (Valenzuela et al. 2016), are of admixed origin (Lenk et al. 1999). Another population with genetic signatures of an old or ancient introduction of *E. o. hellenica* was discovered near Rome (Lenk et al. 1999; Vamberger et al. 2015) within the range of another subspecies (*E. o. galloitalica*).

However, unlike in historical times, when only a few turtle species were affected, genetic pollution has become a major issue for nature conservation in recent years, facilitated by the massive pet and food trade and increased human mobility. Today, genetic pollution is also caused by well-meaning augmentation of endangered local turtle populations with genetically mismatched individuals (typically, but not exclusively, from non-coordinated actions by turtle enthusiasts), the release of surplus or abandoned genetically divergent pet turtles, and also by large-scale releases of confiscated turtle shipments, especially in Southeast Asia.

Examples of restocking with mismatched genetic individuals include endangered populations of *E. orbicularis* at the northern edge of its range (Fritz et al. 2004; Velo-Antón et al. 2011: genetic evidence for restocking with several different subspecies), and in southern France (Vamberger et al. 2015; Raemy et al. 2017: restocking with non-native *E. o. hellenica* instead of native *E. o. galloitalica*), also northern edge populations of *Mauremys leprosa* in southern France (Palacios et al. 2015: restocking with *M. l. saharica* and northern African *M. l. leprosa* instead of European *M. l. leprosa*), of *M. rivulata* in Croatia (Vamberger et al. 2014: restocking with Cretan individuals), and of *Testudo graeca* in Doñana National Park in Spain (Graciá et al. 2017b: restocking with non-native *T. g. marokkensis* from Morocco instead of *T. g. graeca* from Spain). Examples of genetic pollution caused by abandoned pet turtles include *Chrysemys picta bellii* from British Columbia introgressed by non-native subspecies (Jensen et al. 2014b) and Antillean *Trachemys* introgressed by red-eared sliders (*Trachemys scripta elegans*; Parham et al. 2013). Also some of the above-mentioned cases for European pond turtles refer at least partially to genetic pollution by abandoned pet turtles. Hybridization in the wild from released trade animals has been recorded in Taiwan for *Mauremys reevesii* and *M. sinensis* (Fong and Chen 2010).

This issue of potentially increasing genetic pollution needs to be kept in mind as conservationists devise management plans designed to reinforce or restore dwindling or extirpated populations of turtles impacted by overexploitation and habitat loss. The need to maintain well-defined and relatively pure non-hybrid genetic lineages, subspecies, and species is important and needs to be kept in focus.

Request for Updates

Please help the TTWG and the TFTSG keep this Turtles of the World Checklist and Atlas up-to-date by e-mailing any or all of us (addresses noted above) and including pdf's of any relevant articles about new taxonomic or distributional information and/or revisions that should be included and annotated here in upcoming checklists, whether you are an author on a paper providing updated information, or have become aware of data that you believe should be included. Also please inform us of any errors or discrepancies in any of our data, especially for geographic distributions (native or introduced) in countries or states, and for cited references and names, so that we may update or correct them as necessary. For sea turtle distribution data, please also submit additions and corrections via the SWOT website. We want this checklist and atlas to be as accurate, up-to-date, and comprehensive as possible, and ask for your assistance to help us accomplish this goal.

The maps published here all represent work in progress, and will continue to be updated and revised in future checklists as we acquire new and improved locality data. We strongly encourage and welcome our readers and professional colleagues, especially field-based turtle specialists and other enthusiasts, to inform us about proposed corrections and changes to these maps, and to submit specific locality data on the presence or absence of species in various locations for consideration of incorporation into the next checklist.

We are especially interested in receiving new point locality data from presumed range areas not well represented by locality points on our maps, especially from gap areas in the presumed range, as well as verified range extensions. Please help us improve and update these maps by submitting any new locality information along with geographic coordinates and the associated citations to Rhodin at rhodincrf@aol.com.

Acknowledgments

We extend special thanks to James Parham, a major contributor and co-author on earlier versions of the checklist, and a source of incisive initial input and analytic debate. Specific thanks also for extensive detailed input from Holger Vetter, Peter Uetz, and Scott Thomson.

We thank various members of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group (TFTSG) as well as many other individuals who have provided pertinent data or references or localities for maps, or helped in various ways with input or review of this and earlier checklists: Rafael Acuña-Mesén, Kraig Adler, Leandro Alcalde, Matthew Aresco, Mark Auliya, Ernst

Baard, Sherif Baha El Din, Albert Bertolero, John Bickham, Torsten Blanck, Bill Branch, Ronald Brooks, Ortwin Bourquin, James Buskirk, Gisella Caccone, Patrick Campbell, Linda Cayot, Eng Heng Chan, Laurent Chirio, Marcelo de la Fuente, Jeffrey Dawson, Tomas Diagne, Andrew DiMateo, David Emmett, Taylor Edwards, Alejandro Fallabrino, Balazs Farkas, Bruno Ferronato, Oscar Flores-Villela, Natàlia Rizzo Friol, Eugene Gaffney, Justin Gerlach, Hanyeh Ghaffari, James Gibbs, Scott Gillingwater, Eric Goode, Steve Gotte, Michael Granatosky, Ute Grimm, Cris Hagen, Brian Henen, Craig Hilton-Taylor, Margaretha Hofmeyr, Marinus Hoogmoed, Brian Horne, Flora Ihlow, Sixto Inchaustegui, Djoko Iskandar, Dale Jackson, Fredric Janzen, Robert Jones, Ross Kiester, Kenneth Krysko, Gerald Kuchling, Minh Le, Thomas Leuteritz, Peter Lindeman, Jeffrey Lovich, Luca Luiselli, Roderic Mast, Peter Mikulíček, David Mifsud, Russell Mittermeier, Robert Murphy, Simon Nemtzov, Dario Ottonello, Vivian Páez, Olivier Pauwels, Fabio Petrozzi, Hans-Dieter Philippen, Nicolas Pilcher, Peter Praschag, Awal Riyanto, Jose Vicente Rueda-Almonacid, Raymond Saumure, Chuck Schaffer, Jason Schaffer, Hans-Hermann Schleich, Sabine Schoppe, Norman Scott, Will Selman, Shi Haitao, Franco Souza, Phil Spinks, Bryan Stuart, Travis Thomas, Robert Thomson, Oguz Türkozan, Melita Vamberger, Richard Vogt, Bruce Weissgold, and Reza Yadollahvand.

Distributional data on sea turtles from the IUCN/SSC Marine Turtle Specialist Group (MTSG), SWOT (The State of the World's Sea Turtles), and Seminoff et al. (2015) were gratefully received from Bryan Wallace, Jeffrey Seminoff, and Kyle Van Houtan.

The Panaphil Foundation provided partial funding support for PPvD, and HBS was partially supported by a grant from the NSF (DEB-0817042). TFTSG-organized IUCN Red Listing workshops and other redlisting efforts have been generously supported by the Frankel Family Foundation, Conservation International, Turtle Conservancy, Moore Family Foundation, George Meyer and Maria Semple, Matt Frankel, Turtle Conservation Fund, Chelonian Research Foundation, Galapagos Conservancy, U.S. Fish and Wildlife Service, Andrew Sabin Family Foundation, and Mohamed bin Zayed Species Conservation Fund.

Initial map production and GIS-analysis by the TFTSG and Chelonian Research Foundation was supported by the BioFresh Project of the IUCN Freshwater Biodiversity Unit, IUCN Species Programme, and Forschungsverbund Berlin e.V., Leibniz-Institut für Gewässerökologie und Binnenfischerei. We thank Kevin Smith, Savrina Carrizo, Will Darwall, Ackbar Joolia, Marcelo Tognelli, Adrian Hughes, and Diego Juffe of IUCN and Melita Vamberger for welcome technical assistance and helpful suggestions in our production of maps. We thank Bryan Wallace, Rod Mast, and Ei Fujioka of SWOT and Duke University for help with sea turtle maps. Ongoing support for map production and checklist preparation has come from Chelonian Research Foundation (CRF), the TFTSG, and Turtle Conservancy (TC). Publication costs have been shared by CRF, TC, TFTSG, Turtle Conservation Fund, Global Wildlife Conservation, and Surprise Spring Foundation.

Photos and Photographers

We also most gratefully acknowledge and very much appreciate the use of the many turtle and tortoise photos by the following photographers that enhance this checklist. We include both previously unpublished and republished photos from previous CRF publications, with each acknowledged and (if republished) identified as to its original source: *Conservation Biology of Freshwater Turtles and Tortoises* species accounts (CBFTT), *Chelonian Conservation and Biology* journal articles (CCB), *Chelonian Research Monographs* books (CRM 1–6), *Turtle and Tortoise Newsletter* (TTN), *TurtleLog* (TL), *Turtle Conservation Fund* 2002 prospectus (TCF), and the *Turtle Conservation Coalition* 2011 Top 25+ document (TCC). We strive to use primarily photos from natural native settings and to include locality data when available, although some photos are from captivity or the trade.

We include photos of 461 taxa (96.4% of all 478) by 188 contributors, but still lack photos of the following 17 taxa: Kinosternidae: *Kinosternon hirtipes hirtipes*; Emydidae: *Trachemys stejnegeri malonei, Trachemys venusta panamensis, Trachemys venusta uhrigi*; Geoemydidae: *Rhinoclemmys punctularia flammigera*; Testudinidae: *Testudo horsfieldii horsfieldii, Testudo horsfieldii bogdanovi, Testudo horsfieldii kuznetzovi*; Trionychidae: *Chitra chitra javanensis, Pelodiscus axenaria*; Chelidae: *Platemys platycephala melanonota, Chelodina gunaleni, Chelodina mccordi roteensis*; Pelomedusidae: *Pelomedusa kobe, Pelomedusa schweinfurthi, Pelusios williamsi laurenti,* and *Pelusios williamsi lutescens*.

We urge those of you who may have photos of any of these missing taxa to submit them for consideration of inclusion in the next checklist. We are also always looking for better quality photos with locality data for those taxa we have already illustrated; if you have photos that may offer such improvement, please submit them for consideration.

Contributing Photographers. — Collette Adams, Bhaba Amatya, Ben Anders, Matthew Aresco (3), Mark Auliya (2), Roy C. Averill-Murray, Dinçer Ayaz, Richard D. Bartlett (5), Chittaranjan Baruah (2), Aaron S. Baxter, Rafael Bernhard, Albert Bertolero (2), S. Bhupathy, Torsten Blanck (16), Roger Bour (9), Richard C. Boycott (2), William R. Branch (5), Elizângela S. Brito, Rafe M. Brown, Kurt A. Buhlmann (2), James R. Buskirk (5), Alejandra Cadavid, Matt Cage, John Cann (7), John L. Carr (3), Vinícius T. de Carvalho (3), Eng

Heng Chan, Tien-Hsi Chen (3), Laurent Chirio, B.C. Choudhury, Andrew T. Coleman, Marilyn Connell, Paul Crow (3), Indraneil Das (11), Shekar Dattatri, Tui De Roy/Roving Tortoise Photos (2), Anslem de Silva, V. Deepak (2), David Dennis, Frank Deschandol, Bernard Devaux, Tomas Diagne (7), Larry Ditto, C. Kenneth Dodd, Jr. (2), Johannes Els, David Emmett (2), Kevin Enge, Pablo Feliz, Vincenzo Ferri (5), Darren Fielder, German Forero-Medina (2), Manuel Merchán Fornelino, Alastair Freeman, Uwe Fritz (6), Carlos A. Galvis-Rizo, Maren Gaulke (2), Saurav Gawan, Arthur Georges (8), Justin Gerlach (3), David J. Germano, Hanyeh Ghaffari, Paul M. Gibbons, Scott D. Gillingwater, James C. Godwin (4), Eric V. Goode (4), Robert H. Goodman, Jr., Wulf Haacke, Cris Hagen (2), Adrian Hailey, Norbert Halasz (2), James H. Harding (6), Douglas B. Hendrie (2), Judith Hirt, Kate Hodges, Margaretha D. Hofmeyr, Brian D. Horne, Janet Hostetter, Jennifer G. Howeth, Rick Hudson, Bonggi R. Ibarrondo, Flora Ihlow (8), Alexander A. Inozemtsev, Iriomote Wildlife Conservation Center, John B. Iverson (40), Dale R. Jackson, S. Jayakumar, John Jensen, Carlos Alberto Jimenez, Chris Johnson, Michael T. Jones (3), Robert L. Jones, Nobuhiro Kawazoe, Rod Kennett, Gerald Kuchling (11), Edgar Lehr, Chris Leone (3), Thomas E.J. Leuteritz, Peter V. Lindeman (6), Victor J.T. Loehr (8), Jeffrey E. Lovich (2), Gary Luciano, Luca Luiselli, William E. Magnusson, Kevin Main, Barry Mansell (4), Jérôme Maran (14), Peter May, Tomáš Mazuch (3), William P. McCord, Timothy E.M. McCormack, Suzanne E. McGaugh, Brian Mealey (2), Melvin Mérida, Peter A. Meylan, Joseph C. Mitchell, Russell A. Mittermeier (5), Asghar Mobaraki (2), Edward O. Moll, Jiří Moravec, Robert H. Mount, Rahul Naik, Andreas Nöllert (4), Michael Ogle, Annette Olsson, Vivian P. Páez (2), Charles W. Painter, James F. Parham, Fred Parker (2), Olivier S.G. Pauwels, Miguel Pedrono, John Pemberton, Fabio Petrozzi, Hans-Dieter Philippen, Pino Piccardo, Carmine Pilcher, Nicolas J. Pilcher, Kalyar Platt, Peter Praschag (2), Peter C.H. Pritchard (9), Michael Redmer, Renae Reed, Anders G.J. Rhodin (20), Maurice Rodrigues (3), John Roe, Philip C. Rosen, José Vicente Rueda-Almonacid, Daniel O. Santana, Chuck Schaffer, Jason Schaffer (2), Hermann Schleich (2), Fabian Schmidt, Sabine Schoppe (2), Gabriel H. Segniagbeto, Shi Haitao (4), Shailendra Singh (3), Pavel Široký (2), Sitha Som, Franco L. Souza, Craig B. Stanford, Bev Steveson, James N. Stuart, Yik-Hei Sung, Chris Tabaka, Washington Tapia, Robert C. Thomson, Stanley E. Trauth (2), Claire Treilibs, Apostolis Trichas, Oguz Türkozan, Melita Vamberger, Robert P. Van Dam, Peter Paul van Dijk (13), Carla Van Ness, Sabine Vinke (2), Thomas Vinke (2), Richard C. Vogt (7), Timothy Walsh, Nikhil Whitaker, Dawn Wilson, Win Ko Ko, Blair Witherington (3), Yuichirou Yasukawa (2), Zhou Ting, Cassiano Zaparoli, Brian Zarate, Thomas Ziegler, Anders Zimny, and Stephen M. Zozaya.

CHECKLIST

Modern Turtle and Tortoise Taxa Extant Since 1500 AD

Phylogenetic Linnaean Classification of Suprageneric Categories as used in this Checklist

- **Testudines** ..... 356 spp., 478 taxa
  - • **Cryptodira** ..... 263 spp., 373 taxa
    - __**Chelydridae** ..... 5 spp., 5 taxa
    - _**Chelonioidea** ..... 7 spp., 7 taxa
    - __**Cheloniidae** ..... 6 spp., 6 taxa
    - ___**Carettinae** ..... 4 spp., 4 taxa
    - ___**Cheloniinae** ..... 2 spp., 2 taxa
    - __**Dermochelyidae** ..... 1 sp., 1 taxon
    - _**Kinosternoidea** ..... 28 spp., 39 taxa
    - __**Dermatemydidae** ..... 1 sp., 1 taxon
    - __**Kinosternidae** ..... 27 spp., 38 taxa
    - ___**Kinosterninae** ..... 24 spp., 35 taxa
    - ___**Staurotypinae** ..... 3 spp., 3 taxa
    - _**Testudinoidea** ..... 190 spp., 278 taxa
    - __**Emydidae** ..... 53 spp., 91 taxa
    - ___**Deirochelyinae** ..... 42 spp., 66 taxa
    - ___**Emydinae** ..... 11 spp., 25 taxa
    - __**Platysternidae** ..... 1 sp., 3 taxa
    - __**Geoemydidae** ..... 71 spp., 96 taxa
    - ___**Geoemydinae** ..... 62 spp., 82 taxa
    - ___**Rhinoclemmydinae** ... 9 spp., 14 taxa
    - __**Testudinidae** ..... 65 spp., 88 taxa
    - _**Trionychoidea** ..... 33 spp., 44 taxa
    - __**Carettochelyidae** ..... 1 sp., 1 taxon
    - __**Trionychidae** ..... 32 spp., 43 taxa
    - ___**Cyclanorbinae** ..... 7 spp., 9 taxa
    - ___**Trionychinae** ..... 25 spp., 34 taxa
  - • **Pleurodira** ..... 93 spp., 105 taxa
    - __**Chelidae** ..... 58 spp., 65 taxa
    - ___**Chelinae** ..... 20 spp., 21 taxa
    - ___**Hydromedusinae** ..... 2 spp., 2 taxa
    - ___**Chelodininae** ..... 35 spp., 41 taxa
    - ___**Pseudemydurinae** ..... 1 sp., 1 taxon
    - __**Pelomedusidae** ..... 27 spp., 32 taxa
    - __**Podocnemididae** ..... 8 spp., 8 taxa

* * * * * *

Alternative Phylogenetic Hierarchical Phylocode Classification [1]

- **Testudines**
  - • **Pleurodira**
    - _**Pelomedusoides**
      - __**Pelomedusidae**
      - __**Podocnemididae**
    - _**Chelidae**
  - • **Cryptodira**
    - _**Durocryptodira**
      - __**Testudinoidea**
        - ___**Emysternia**
          - ____**Emydidae**
          - ____**Platysternidae**
        - ___**Testuguria**
          - ____**Geoemydidae**
          - ____**Testudinidae**
      - __**Americhelydia**
        - ___**Chelydroidea**
          - ____**Kinosternoidea**
            - _____**Kinosternidae**
            - _____**Dermatemydidae**
          - ____**Chelydridae**
        - ___**Chelonioidea**
          - ____**Cheloniidae**
          - ____**Dermochelyidae**
    - _**Trionychia**
      - __**Trionychidae**
      - __**Carettochelyidae**

While the TTWG continues to prefer and adhere to the Linnaean classification presented here to the left (a system fundamental to, and compliant with, the International Code of Zoological Nomenclature), we recognize that alternative, non-Code-compliant chelonian classification arrangements have also been proposed, and include the above Phylocode classification scheme presented by Crawford et al. (2015) as a recent example that has found adoption by some systematists.

TESTUDINES Batsch 1788 (07:1, 10:4, 12:6) (1)

Testudinata Klein 1751:96 (invalid pre-Linnaean name)
Testudines Linnaeus 1758:194 (vernacular)
Testudinata Klein *in* Behn 1760:tab.gen.
Testudines Batsch 1788:437
Testudinea Batsch 1796:179
Cheloniens Brongniart 1800a:196 (vernacular)
Chelonii Latreille 1800:xi
Chelonia Ross and Macartney 1802:tab.iii
Cataphractae Link 1807:51
Testudinata Oppel 1811:3
Perostia Rafinesque 1814:66
Cataphracta Hemprich 1820:101
Chelonea Fleming 1822:268
Fornicata Haworth 1825:373
Chelynae Wagler 1828:861
Sterrichrotes Ritgen 1828:269
Chelonites Burmeister 1837:730
Chelonides Swainson 1839:112
Tylopoda Mayer 1849:197
Testudina Fry 1850:21
Chersemydes Strauch 1862:16
Rhynchochelones Dollo 1886:79
Cheloniae Hoffmann 1890:372
Testudoformes Chang 1957:50
Chelonomorpha Kuhn 1960:30
Casichelydia Gaffney 1975:4
Testudinomorpha Laurin and Reisz 1995:197
Pantestudines Joyce, Parham, and Gauthier 2004:996

CRYPTODIRA Cope 1868b (08:20)

Cryptodères Duméril and Bibron 1834:354
Cryptodera Lichtenstein 1856:1 (08:20)
Cryptodira Cope 1868b:282

CHELYDRIDAE Gray 1831d (09:3)

Chelydrae Gray 1831d:4
Chelydridae Swainson 1839:113
Chelydradae Gray 1869a:178

Chelydra Schweigger 1812 (07:2)

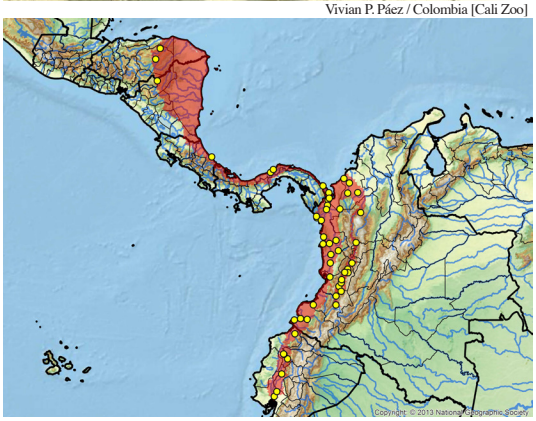
Chelydra Schweigger 1812:292
Type species: *Chelydra serpentina* Schweigger [= *Testudo serpentina* Linnaeus 1758], by subsequent designation by Fitzinger (1843:29).
Cheliurus Rafinesque 1815:75 (*nomen nudum*)
Chelonura Fleming 1822:270 (senior homonym, not = *Chelonura* Rafinesque 1832 = *Cylindraspis*)
Type species: *Chelonura serpentina* [= *Testudo serpentina* Linnaeus 1758], by original monotypy.
Ophichelone Jarocki 1822:21
Type species: *Ophichelone serpentina* [= *Testudo serpentina* Linnaeus 1758], by original monotypy.
Rapara Gray 1825:210
Type species: *Rapara serpentina* Gray [= *Testudo serpentina* Linnaeus 1758], by original monotypy.
Saurochelys Latreille 1825:92
Type species: *Saurochelys* "Tortue à longue queue" [= *Testudo serpentina* Linnaeus 1758], by original monotypy.
Cheliurus Rafinesque 1832:64
Type species: *Cheliurus serpentina* [= *Testudo serpentina* Linnaeus 1758], by original monotypy.
Emysaurus Duméril and Bibron 1835:348
Type species: *Emysaura serpentina* [= *Testudo serpentina* Linnaeus 1758], by original monotypy.
Devisia Ogilby 1905:11
Type species: *Devisia mythodes* Ogilby 1905 [= subjective synonym of *Testudo serpentina* Linnaeus 1758], by original monotypy.

Chelydra acutirostris Peters 1862

South American Snapping Turtle



Vivian P. Páez / Colombia [Cali Zoo]



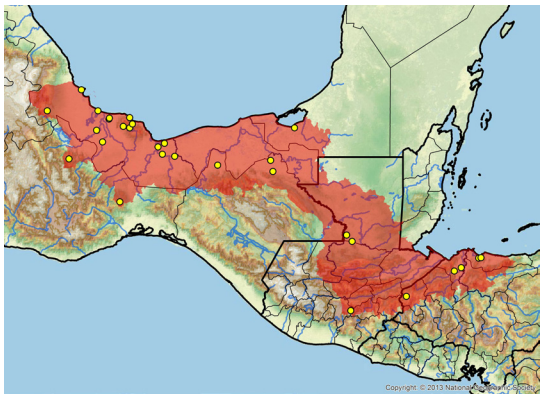
Colombia (Antioquia, Caldas, Cauca, Chocó, Córdoba, Nariño, Quindio, Valle del Cauca), Costa Rica, Ecuador, Honduras, Nicaragua, Panama
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Near Threatened (South America regional) (2011)
Chelydra serpentina acutirostris Peters 1862:627, *Chelydra acutirostris*
Type locality: "Guayaquil" [Ecuador].

Chelydra rossignonii (Bocourt 1868)

Central American Snapping Turtle



Richard C. Vogt / Laguna Oaxaca, Rio Lacantun, Selva Lacandona, Chiapas, Mexico



Belize, Guatemala, Honduras, Mexico (Campeche, Chiapas, Oaxaca, Tabasco, Veracruz)

IUCN Red List: Vulnerable A2d (2007)

Emysaurus rossignonii Bocourt 1868:121, *Chelydra rossignonii, Chelydra serpentina rossignonii*

Type locality: "marais de Pansos, près le Rio Polochic (Guatémala)."

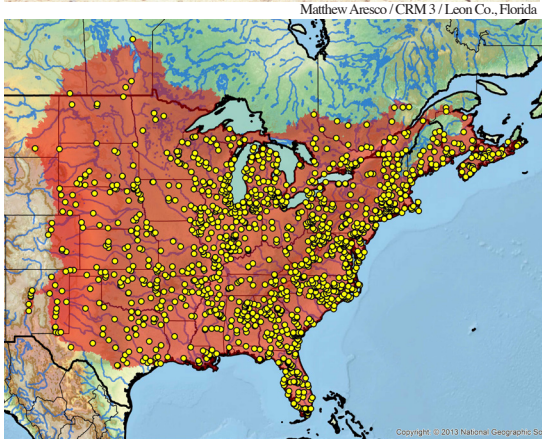
Chelydra serpentina mexicanae Cope *in* Gray 1870c:64 (*nomen nudum*)

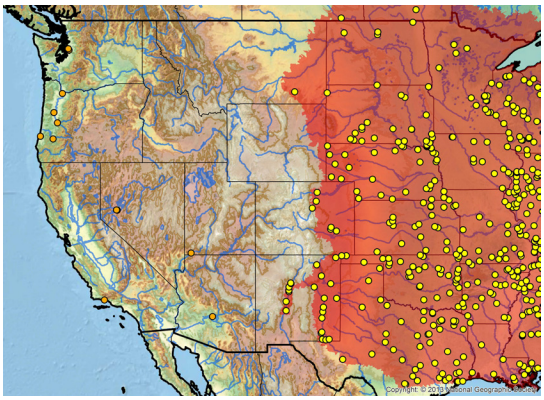
Chelydra serpentina (Linnaeus 1758) [(08:5)]

North American Snapping Turtle, Common Snapping Turtle



Matthew Aresco / CRM 3 / Leon Co., Florida





(orange dots = introduced)

Canada (Manitoba, New Brunswick, Nova Scotia, Ontario, Québec, Saskatchewan), USA (Alabama, Arkansas, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Vermont, Virginia, West Virginia, Wisconsin, Wyoming)

Introduced: China, Japan (mainland), Taiwan, USA (Arizona, California, Nevada, Oregon, Washington)

IUCN Red List: Least Concern (2012); Previously: Least Concern [Not Listed] (1996)

CITES: Appendix III (USA)

Testudo serpentina Linnaeus 1758:199, *Chelydra serpentina, Emys serpentina, Chelonura serpentina, Ophichelone serpentina, Rapara serpentina, Saurochelys serpentina, Chelidra serpentina, Cheliurus serpentina, Emysaurus serpentina, Emysaura serpentina, Hydraspis (Chelydra) serpentina, Emysaurus serpentinus, Chelydra serpentina serpentina*

Type locality: "Calidis regionibus." Restricted to "Algiriae, Chinae aquis dulcibus" by Linnaeus (1766:354); to "New Orleans, La." [Louisiana, USA] by Smith and Taylor (1950a:358, 1950b:21); and to "vicinity of New York City" [New York, USA] by Schmidt (1953:86).

Testudo serpentaria Wiedemann 1802:191 (*nomen novum*)

Chelydra lacertina Schweigger 1812:293 (senior homonym, not = *Gypochelys lacertina* Agassiz 1857a = *Macrochelys temminckii*), *Chelydra serpentina lacertina*

Type locality: Not known. Restricted to "vicinity of New York City" [New York, USA] by Schmidt (1953:86).

Testudo serrata Pennant *in* Gray 1830e:14 (*nomen nudum* and junior homonym, not = *Testudo serrata* Daudin 1801 = *Trachemys scripta scripta* or *Testudo serrata* Shaw 1802 = *Geoemyda spengleri*)

Testudo longicauda Shaw *in* Gray 1831d:36 (*nomen nudum*)

Chelydra emarginata Agassiz 1857a:417

Type locality: "Mobile and New Orleans." Restricted to "Mobile" [Alabama, USA] by Schmidt (1953:86).

Devisia mythodes Ogilby 1905:11

Type locality: "Fly River, British New Guinea" [Papua New Guinea] [in error].

Chelydra laticarinata † Hay 1916a:72 (*nomen suppressum,* ICZN 1986) [Pleistocene, USA (Florida)]

Chelydra sculpta † Hay 1916a:73 (*nomen suppressum,* ICZN 1986) [Pleistocene, USA (Florida)]

Chelydra osceola Stejneger 1918:89 [(08:5)] (*nomen conservandum,* ICZN 1986), *Chelydra serpentina osceola*

Type locality: "Clearwater, Pinellas County, Florida" [USA].

Macrochelys Gray 1856a (07:3) (2)

Macrochelys Gray 1856a:200

Type species: *Macrochelys temminckii* [= *Chelonura temminckii* Troost *in* Harlan 1835], by original monotypy.

Macroclemys Gray 1856b:48 (*nomen novum*)

Gypochelys Agassiz 1857a:248, 413

Type species: *Gypochelys lacertina* Agassiz 1857a [= subjective synonym of *Chelonura temminckii* Troost *in* Harlan 1835], by original monotypy.

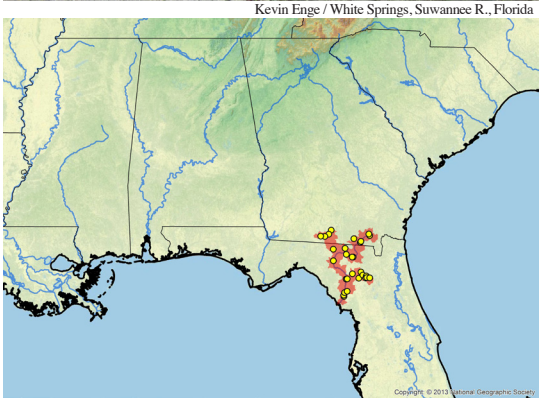
Macroclemmys Strauch 1862:35 (*nomen novum*)

Macrochelys suwanniensis Thomas, Granatosky, Bourque, Krysko, Moler, Gamble, Suarez, Leone, Enge, and Roman 2014 (2)

Suwannee Alligator Snapping Turtle



Kevin Enge / White Springs, Suwannee R., Florida



USA (Florida, Georgia)

IUCN Red List: Not Evaluated

CITES: Appendix III (USA)

Macrochelys maxhoseri Hoser 2013:56 (unavailable name pending ICZN decision; Rhodin et al. 2015) (14:1) (3, 4)

Macrochelys suwanniensis Thomas, Granatosky, Bourque, Krysko, Moler, Gamble, Suarez, Leone, Enge, and Roman 2014:150

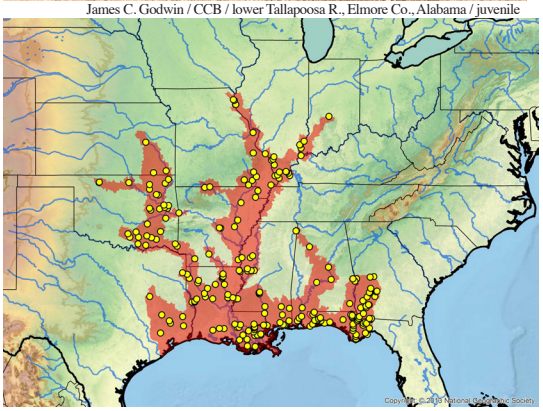
Type locality: "Santa Fe River and State Road 235, Alachua County, Florida (29.87872ºN, 82.33619ºW...elev. 23 m)" [USA].

Macrochelys temminckii (Troost *in* Harlan 1835) (09:4, 14:1) (2)

Western Alligator Snapping Turtle



James C. Godwin / CCB / lower Tallapoosa R., Elmore Co., Alabama / juvenile



USA (Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Oklahoma, Tennessee, Texas)

IUCN Red List: Vulnerable A1cd (1996)

TFTSG Draft Red List: Vulnerable (2011)

CITES: Appendix III (USA)

Testudo planitia Gmelin 1789:1045 (junior homonym, not = *Testudo planitia* Meuschen 1778 = *Pelomedusa subrufa*; *nomen suppressum*, ICZN 1963), *Chersine planitia*

Type locality: "Surinami" [Suriname] [in error].

Chelonura temminckii Troost *in* Harlan 1835:158 (*nomen conservandum*, ICZN 1963), *Emysaurus temminckii, Macrochelys temminckii, Macroclemys temminckii, Chelydra temminckii, Gypochelys temminckii, Macrochelys temminckii temminckii*

Type locality: "a tributary stream of the Mississippi, which enters that river above Memphis, in west Tennessee." Emended to "Wolf River, Shelby County, Tennessee, USA" by Bour (1987b:343).

Gypochelys lacertina Agassiz 1857a:414 (junior homonym, not = *Chelydra lacertina* Schweigger 1812 = *Chelydra serpentina*), *Macrochelys lacertina, Macroclemys lacertina*

Macrochelys temminckii muscati Hoser 2013:55 (unavailable name pending ICZN decision; Rhodin et al. 2015) (14:1) (3, 4)

Macrochelys apalachicolae Thomas, Granatosky, Bourque, Krysko, Moler, Gamble, Suarez, Leone, Enge, and Roman 2014:151 (2)

Type locality: "Apalachicola River, Gadsden County, Florida" [USA].

CHELONIOIDEA Oppel 1811

Chelonii Oppel 1811:8
Chlonopteria Rafinesque 1814:66
Cheloniae Schmid 1819:14
Edigitata Haworth 1825:373
Oiacopodae Wagler 1828:861
Chelonidae Bonaparte 1831:64
Oeacopodes Burmeister 1837:731
Pterodactyli Mayer 1849:199
Chelonioidea Baur 1893b:673

CHELONIIDAE Oppel 1811 (09:5, 12:7, 12:8, 12:9)

Chelonii Oppel 1811:8 (partim)
Cheloniadae Gray 1825:212
Carettidae Gray 1825:212
Mydae Ritgen 1828:269
Chelonina Bonaparte 1831:64
Cheloniidae Cope 1868b:282
Cheloniadi Portis 1890:23

CARETTINAE Gray 1825 (12:7)

Carettidae Gray 1825:212
Carettinae Deraniyagala 1952:57

Caretta Rafinesque 1814 (12:8)

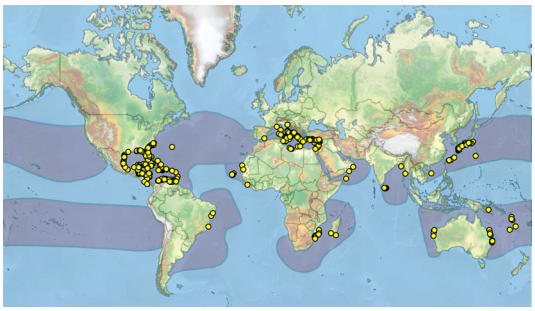
Caretta Rafinesque 1814:66
Type species: *Caretta nasuta* Rafinesque 1814 [= subjective synonym of *Testudo caretta* Linnaeus 1758], by original monotypy.
Thalassochelys Fitzinger 1835:121
Type species: *Thalassochelys caouana* Fitzinger [= *Testudo caouana* Lacepède 1788 (*nomen suppressum*) = *Testudo caouana* Bonnaterre 1789 = subjective synonym of *Testudo caretta* Linnaeus 1758], by subsequent designation by Fitzinger (1843:30).
Caouana Cocteau and Bibron 1838:31
Type species: *Chelonia* (*Caouana) cephalo* [= *Testudo cephalo* Schneider 1783 = subjective synonym of *Testudo caretta* Linnaeus 1758], by original monotypy.
Halichelys Fitzinger 1843:30
Type species: *Thalassochelys* (*Halichelys) atra* Fitzinger [= *Caretta atra* Merrem 1820 = subjective synonym of *Testudo caretta* Linnaeus 1758], by original designation.
Eremonia Gray 1873i:408
Type species: *Eremonia elongata* Gray [= *Caouana elongata* Gray 1844 = subjective synonym of *Testudo caretta* Linnaeus 1758], by original designation.

Caretta caretta (Linnaeus 1758) (10:5, 14:2) (5)

Loggerhead, Loggerhead Sea Turtle



Blair Witherington / CRM 3 / Atlantic Ocean off the Florida Keys, USA



(lines delimit Regional Management Units)

Nesting: Aruba, Australia (Queensland, Western Australia), Bahamas, Bangladesh, Belize, Bermuda, Bonaire, Brazil (Bahia, Espirito Santo, Rio de Janeiro, Sergipe), Cape Verde, Cayman Islands, China, Colombia, Costa Rica, Cuba, Curacao, Cyprus, Dominican Republic, Egypt, France, Greece, Haiti, Honduras, Israel, Italy, Japan, Lebanon, Libya, Madagascar, Mauritania, Mexico, Montserrat, Mozambique, Myanmar, New Caledonia, Oman, Panama, Papua New Guinea (Trobriand Islands), Saint Lucia, Saint Vincent and the Grenadines, Sierra Leone, South Africa, Spain, Sri Lanka, Syria, Tunisia, Turkey, Turks and Caicos, USA (Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Texas), US Virgin Islands, Vanuatu, Venezuela, Yemen
Foraging: Albania, Algeria, Anguilla, Antigua and Barbuda, Argentina, Bahrain, Barbados, British Virgin Islands, Canada, Chile, Comoros, Croatia, Djibouti, Dominica, Eritrea, Fiji, French Guiana, Gambia, Grenada, Guadeloupe, Guinea-Bissau, Guatemala, Guyana, India, Indonesia, Iran, Jamaica, Kenya, Malta, Martinique, Mauritius, Monaco, Montenegro, Morocco, Namibia, Netherlands Antilles (Bonaire, Saba, St. Eustatius), Nicaragua, North Korea, Pakistan, Peru, Philippines, Portugal, Puerto Rico, Qatar, Réunion, Saint Kitts and Nevis, Samoa, Saudi Arabia, Senegal, Seychelles, Sint Maarten, Slovenia, Solomon Islands, Somalia, South Korea, Sudan, Suriname, Taiwan, Tanzania, Tonga, Trinidad and Tobago, United Arab Emirates, Uruguay, USA (California, Hawaii, Oregon), Vietnam, Western Sahara
Vagrant: Angola, Benin, Brunei, Cambodia, Cameroon, Congo (DRC), Congo (ROC), Ecuador, El Salvador, Equatorial Guinea, Gabon, Ghana, Great Britain, Guinea, Iraq, Ireland, Ivory Coast, Kuwait, Liberia, Malaysia, Maldives, New Zealand, Nigeria, Thailand, Togo, Tuvalu
IUCN Red List: Global: Vulnerable A2b (2015); Previously: Endangered (1996); Subpopulations: Mediterranean: Least Concern (2015); North East Atlantic: Endangered B2ab(iii) (2015); North East Indian Ocean: Critically Endangered D (2015); North Pacific: Least Concern (2015); North West Atlantic: Least Concern (2015); North West Indian Ocean: Critically Endangered A4b (2015); South East Indian Ocean: Near Threatened (2015); South Pacific: Critically Endangered A2b (2015); South West Atlantic: Least Concern (2015); South West Indian Ocean: Near Threatened (2015)
CITES: Appendix I, as Cheloniidae spp.
Testudo caretta Linnaeus 1758:197, *Chelone caretta, Chelonia caretta, Thalassochelys caretta, Talassochelys caretta, Caouana caretta, Caretta caretta, Caretta caretta caretta*
Type locality: "insulas Americanas." Restricted to "Mari Mediterraneo, Atlantico" by Schoepff (1793:70); to "Bermuda Islands" by Smith and Taylor (1950a:315, 195b:16); and to "Bimini, British

Bahamas" by Schmidt (1953:107).

Testudo marina Garsault 1764:pl.675 (10:5)

Testudo cephalo Schneider 1783:303, *Caretta cephalo, Chelonia cephalo, Thalassochelys cephalo*
Type locality: Not designated. Restricted to "Charleston, South Carolina" [USA] by Smith and Taylor (1950a:360).

Testudo caouana Lacepède 1788:95, synopsis[table] (09:6) (*nomen suppressum*, ICZN 2005a)
Type locality: "les contrées chaudes du nouveau Continent."

Testudo nasicornis Lacepède 1788:103, synopsis[table] (09:7) (*nomen suppressum*, ICZN 2005a), *Testudo caretta nasicornis, Caretta nasicornis*
Type locality: "mers du nouveau Continent, voisines de l'équateur." Restricted to "Ascension Island" by Smith and Smith (1980:302).

Testudo caouana Bonnaterre 1789:20, *Chelonia caouana, Caretta caouana, Thalassochelys caouana*

Testudo lauanna Meyer 1790:82 (09:8) (*nomen novum et oblitum*)

Testudo gigas Walbaum *in* Donndorff 1798:35
Type locality: Not designated. Restricted to "Westindischen Meere" by Bechstein (1800:273).

Caretta nasuta Rafinesque 1814:66
Type locality: "Sicil." [Sicily, Italy].

Caretta atra Merrem 1820:17, *Chelonia (Thalassochelys) atra, Thalassochelys atra, Thalassochelys (Halichelys) atra, Halichelys atra*
Type locality: "mari ad Insulam Adscensionis" [Ascension].

Testudo corianna Gray 1831d:53 (*nomen novum*)

Chelonia pelasgorum Valenciennes *in* Bory de Saint-Vincent 1833:planches, pl.6 (14:2)
Type locality: "sur la plage sablonneuse entre Arcadia et l'embouchure de la Neda" [Greece].

Chelonia pelasgica Bibron and Bory de Saint-Vincent 1833:64 (*nomen novum*) (14:2)

Caouana elongata Gray 1844:53, *Thalassochelys elongata, Eremonia elongata*
Type locality: Not designated. Restricted to "Ascension Island" by Smith and Smith (1980:303).

Thalassochelys corticata Girard 1858:431
Type locality: "Madeira" [Canary Islands]. Restricted to "Funchal, Madeira (Portugal)" by Cochran (1961:235).

Caretta gigas Deraniyagala 1933:66, *Caretta caretta gigas*
Type locality: "Ceylon" [Sri Lanka]. Restricted to "Gulf of Mannar... Ceylon" [Sri Lanka] by Deraniyagala (1939:164).

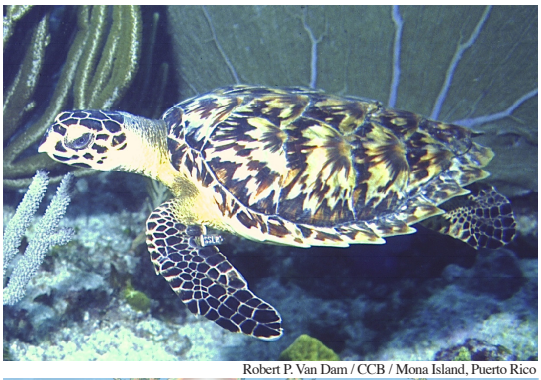
Eretmochelys Fitzinger 1843 (09:5, 12:7, 12:8, 14:3)

Eretmochelys Fitzinger 1843:30
Type species: *Chelonia (Eretmochelys) imbricata* Cuvier [= *Testudo imbricata* Linnaeus 1766], by original designation.

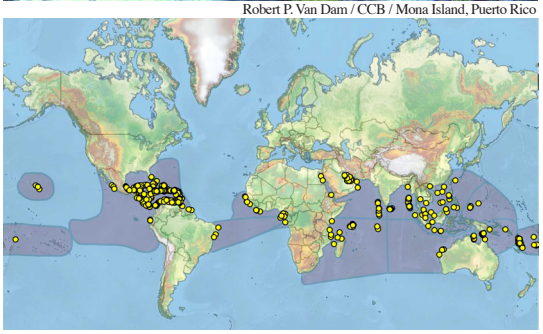
Herpysmostes Gistel 1868:145
Type species: *Herpysmostes imbricatus* [= *Testudo imbricata* Linnaeus 1766], by original monotypy.

Onychochelys Gray 1873i:397
Type species: *Onychochelys kraussi* Gray 1873i [= subjective synonym of *Testudo imbricata* Linnaeus 1766], by original monotypy.

Eretmochelys imbricata (Linnaeus 1766) (07:5, 09:9, 12:9, 14:4) (**6**)
Hawksbill Turtle, Hawksbill Sea Turtle



Robert P. Van Dam / CCB / Mona Island, Puerto Rico



(lines delimit Regional Management Units)

Nesting: Anguilla, Antigua and Barbuda, Aruba, Australia, Bahamas, Bangladesh, Barbados, Belize, Brazil, British Indian Ocean Territory, British Virgin Islands, Cameroon, Cayman Islands, China, Colombia, Congo (ROC), Costa Rica, Cuba, Curacao, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Fiji, French Guiana, French Southern Territories, Gabon, Grenada, Guadeloupe, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, India, Indonesia, Iran, Ivory Coast, Jamaica, Japan, Kenya, Liberia, Madagascar, Malaysia, Maldives, Martinique, Mexico (Campeche, Yucatán), Micronesia, Montserrat, Mozambique, Netherlands Antilles (Bonaire, Sint Eustatius), Nicaragua, Oman, Palau, Panama, Papua New Guinea, Philippines, Puerto Rico, Qatar, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, São Tomé and Príncipe, Saudi Arabia, Senegal, Seychelles, Sint Maarten, Solomon Islands, Sri Lanka, Suriname, Taiwan, Tanzania, Thailand, Trinidad and Tobago, Turks and Caicos, USA (Florida, Hawaii), US Virgin Islands, Vanuatu, Venezuela, Vietnam

Foraging: American Samoa, Argentina, Ascension, Bahrain, Benin, Bermuda, Brunei, Cambodia, Cook Islands, Djibouti, French Polynesia, Gambia, Ghana, Guam, Iraq, Israel, Kuwait, Mauritania, Mauritius, Mayotte, Myanmar, Nigeria, Northern Mariana Islands, Pakistan, Peru, Réunion, Sierra Leone, Singapore, Society Islands, Somalia, South Africa, Sudan, Togo, Tokelau, Tonga, Tuamotu, Tuvalu, United Arab Emirates, Wallis and Futuna, Yemen

Vagrant: Algeria, Angola, Cape Verde, Chile, Comoros, Congo (DRC), Kiribati, Marshall Islands, Morocco, Namibia, Nauru, New Caledonia, North Korea, Pitcairn Island, Portugal, South Korea, Spain, Uruguay

IUCN Red List: Critically Endangered A2bd (2008); Previously: Critically Endangered (1996)

CITES: Appendix I, as Cheloniidae spp.

Testudo imbricata Linnaeus 1766:350, *Chelone imbricata,*

Chelonia imbricata, Caretta imbricata, Eretmochelys imbricata, Herpysmostes imbricatus, Herpysmostes imbricata, Chelonius imbricatus, Eretmochelys imbricata imbricata
Type locality: "Mari Americano, Asiatico." Restricted to "Bermuda Islands" by Smith and Taylor (1950a:315, 1950b:17), and to "Belize, British Honduras" by Schmidt (1953:106).

Testudo nasicornis Bonnaterre 1789:21 (09:7)

Chelonia radiata Cuvier 1829:14
Type locality: Not designated.

Chelonia pseudomydas Lesson 1831b:299
Type locality: "l'Océan atlantique." Restricted to "Bermuda Islands" by Smith and Taylor (1950a:315).

Chelonia pseudocaretta Lesson 1831b:302
Type locality: "l'Océan atlantique." Restricted to "Bermuda Islands" by Smith and Taylor (1950a:315).

Caretta bissa Rüppell 1835:4 (07:5, 09:9), *Eretmochelys imbricata bissa*
Type locality: "im rothen Meere...Abyssinien" [Red Sea...Ethiopia].

Eretmochelys squamata Agassiz 1857a:382, *Caretta squamata, Eretmochelys imbricata squamata*
Type locality: "Singapore and Bengal, India." Restricted to "Singapore, Straits Settlements" by Smith and Taylor (1950a:315, 1950b:17).

Caretta squamosa Girard 1858:442 (*nomen novum*), *Eretmochelys squamosa, Eretmochelys imbricata squamosa*

Caretta rostrata Girard 1858:446
Type locality: "Feejee Islands" [Fiji].

Onychochelys kraussi Gray 1873i:398
Type locality: "Ocean, French Guiana."

Lepidochelys Fitzinger 1843 (12:8)

Lepidochelys Fitzinger 1843:30
Type species: *Thalassochelys (Lepidochelys) olivacea* Eschscholtz 1829a [= *Chelonia olivacea* Eschscholtz 1829a], by original designation.

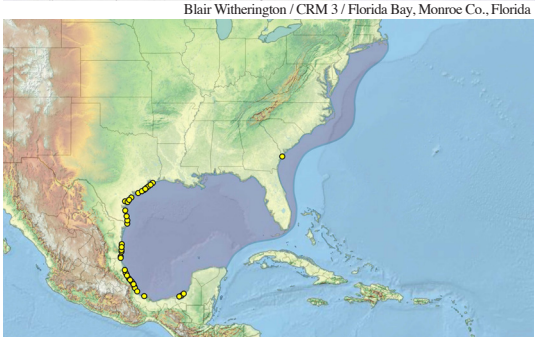
Cephalochelys Gray 1873i:408
Type species: *Cephalochelys oceanica* Gray 1873i [= subjective synonym of *Chelonia olivacea* Eschscholtz 1829a], by original monotypy.

Colpochelys Garman 1880:124
Type species: *Thalassochelys (Colpochelys) kempii* Garman 1880, by original monotypy.

Lepidochelys kempii (Garman 1880)
Kemp's Ridley, Kemp's Ridley Sea Turtle, Atlantic Ridley



Blair Witherington / CRM 3 / Florida Bay, Monroe Co., Florida



Nesting: Mexico (Tamaulipas, Veracruz), USA (Texas)
Foraging: USA (Alabama, Connecticut, Delaware, Florida, Georgia, Louisiana, Maryland, Massachusetts, Mississippi, New Jersey, New York, North Carolina, Rhode Island, South Carolina, Virginia)
Vagrant: Algeria, Anguilla, Bahamas, Bermuda, British Virgin Islands, Canada, Cayman Islands, Cuba, France, Ireland, Italy, Morocco, Portugal, Spain
IUCN Red List: Critically Endangered A1ab (1996)
CITES: Appendix I, as Cheloniidae spp.

Testudo viridisquamosa Lacepède 1788:92, synopsis[table] (09:6) (*partim, nomen dubium et suppressum,* ICZN 1963)

Testudo viridisquamosa Bonnaterre 1789:20 (*partim, nomen dubium*)

Testudo bomarii Meyer 1790:82 (09:8) (*partim, nomen dubium et novum et oblitum*)

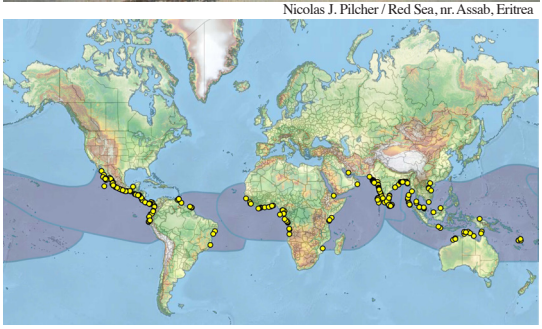
Testudo mydas minor Suckow 1798:30 (*partim, nomen dubium et suppressum,* ICZN 1963)
Type locality: "Amazonen-Flusse..[&]..Südsee..[&]..Cap Blanco in Mexico." Restricted to "the island of Blanquilla...West Indies" [Venezuela] by Brongersma (1961:27).

Thalassochelys (Colpochelys) kempii Garman 1880:123 (*nomen conservandum*, ICZN 1963), *Lepidochelys kempii, Colpochelys kempii, Caretta kempii, Lepidochelys olivacea kempii*
Type locality: "Gulf of Mexico." Restricted to "Key West, Monroe Co., Florida" [USA] by Smith and Taylor (1950a:358, 1950b:15).

Lepidochelys olivacea (Eschscholtz 1829a) [(7)]
Olive Ridley, Olive Ridley Sea Turtle, Pacific Ridley



Nicolas J. Pilcher / Red Sea, nr. Assab, Eritrea



(lines delimit Regional Management Units)

Nesting: Angola, Australia (Northern Territory), Bangladesh, Benin, Brazil (Bahia, Espirito Santo, Sergipe), Brunei, Cameroon, Colombia, Congo (ROC), Costa Rica, Ecuador, El Salvador, Equatorial Guinea, Eritrea, French Guiana, Gabon, Ghana, Guatemala, Guinea-Bissau, Guyana, Honduras, India, Indonesia (Java, Papua), Iran, Ivory Coast, Kenya, Liberia, Malaysia, Mexico (Baja California Sur, Chiapas, Guerrero, Jalisco, Michoacán, Nayarit, Oaxaca, Sinaloa), Mozambique, Myanmar, Nicaragua, Oman, Pakistan, Panama, Peru, São Tomé and Príncipe, Sierra Leone, Sri Lanka, Suriname, Thailand, Togo, Trinidad and Tobago, Vanuatu, Vietnam

Foraging: Bahrain, Cambodia, Cape Verde, China, Comoros, Congo (DRC), Djibouti, Egypt, Gambia, Guinea, Iran, Iraq, Israel (Southern), Kuwait, Liberia, Madagascar, Maldives, Mauritius, New Caledonia, Nigeria, Papua New Guinea, Philippines, Qatar, Saudi Arabia, Senegal, Seychelles, Singapore, Solomon Islands, Somalia, Sudan, Tanzania, Timor-Leste, United Arab Emirates, USA (Hawaii), Venezuela, Yemen

Vagrant: Antigua and Barbuda, Barbados, Canada, Chile, Cuba, Dominica, Dominican Republic, Grenada, Guadeloupe, Haiti, Jamaica, Japan, Marshall Islands, Martinique, Mauritania, Micronesia, Morocco, Namibia, New Zealand, North Korea, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, South Africa, South Korea, Spain, Taiwan, Uruguay, US Virgin Islands

IUCN Red List: Vulnerable A2bd (2008); Previously: Endangered (1996)

CITES: Appendix I, as Cheloniidae spp.

Testudo mydas minor Suckow 1798:30 (*partim, nomen dubium et suppressum,* ICZN 1963)
Type locality: "Amazonen-Flusse..[&]..Südsee..[&]..Cap Blanco in Mexico." Restricted to "the island of Blanquilla...West Indies" [Venezuela] by Brongersma (1961:27).

Chelonia multiscutata Kuhl 1820:78 (*nomen suppressum,* ICZN 1963)
Type locality: Not designated.

Chelonia olivacea Eschscholtz 1829a:15 [(7)], *Chelonia caretta olivacea, Caretta olivacea, Thalassochelys (Lepidochelys) olivacea, Caouana olivacea, Lepidochelys olivacea, Caretta caretta olivacea, Lepidochelys olivacea olivacea, Caretta olivacea olivacea*
Type locality: "Bai von Manilla" [Philippines].

Chelonia dussumierii Duméril and Bibron 1835:557 (*nomen novum*), *Lepidochelys dussumierii*

Caouana ruppellii Gray 1844:53 (*nomen nudum*)
Type locality: "India?"

Chelonia subcarinata Rüppell *in* Gray 1844:53 (*nomen nudum*)

Chelonia polyaspis Bleeker 1857b:239 (*nomen nudum*)
Type locality: "Batavia...Java" [Indonesia].

Chelonia dubia Bleeker *in* Gray 1864a:13 (*nomen nudum*)
Type locality: Not designated.

Cephalochelys oceanica Gray 1873i:408
Type locality: "West Coast of America – Mexico?"

Thalassiochelys tarapacona Philippi 1887:85, *Thalassochelys tarapacona*
Type locality: "Iquique...Chile."

Thalassochelys controversa Philippi 1899:731
Type locality: "Quinteros...Chile."

Caretta remivaga Hay 1908a:194, *Lepidochelys olivacea remivaga*
Type locality: "Ventosa Bay, Gulf of Tehuantepec, Oaxaca, Mexico."

CHELONIINAE Oppel 1811 [(12:7)]

Chelonii Oppel 1811:8 (*partim*)
Cheloniadae Gray 1825:212
Mydae Ritgen 1828:269
Cheloniidae Cope 1868b:282

Chelonia Brongniart 1800 [(09:5, 12:8)]

Chelonia Brongniart 1800b:89
Type species: *Chelonia mydas* [= *Testudo mydas* Linnaeus 1758], by subsequent designation by Bell (1828c:516).

Chelone Brongniart 1805:610 (*nomen novum*)

Chelona Fleming 1828:149 (*nomen novum*)

Mydas Cocteau and Bibron 1838:22
Type species: *Chelonia (Mydas) viridis* [= *Testudo viridis* Schneider 1783 = subjective synonym of *Testudo mydas* Linnaeus 1758], by tautonymy.

Mydasea Gervais 1843:457
Type species: *Chelonia (Mydasea) mydas* [= *Testudo mydas* Linnaeus 1758], by tautonymy.

Euchelonia Tschudi 1846:22
Type species: *Chelonia (Euchelonia) midas* Schweigger [= *Testudo mydas* Linnaeus 1758], by original monotypy.

Megemys Gistel 1848:8 (*nomen novum*)

Euchelys Girard 1858:447
Type species: *Euchelys macropus* Girard [= *Testudo macropus* Walbaum 1782 = subjective synonym of *Testudo mydas* Linnaeus 1758], by original monotypy.

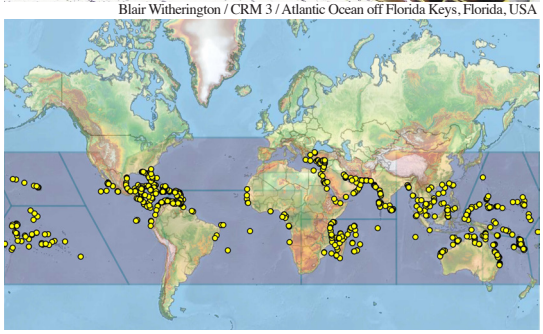
Midas Herrera 1901:68 (*nomen novum et suppressum,* ICZN 1922)

Chelonia mydas (Linnaeus 1758) [07:4, 09:5, 12:9, 12:10] **(8)**

Green Turtle, Green Sea Turtle



Blair Witherington / CRM 3 / Atlantic Ocean off Florida Keys, Florida, USA



(lines delimit Distinctive Population Segments)

Nesting: American Samoa, Angola, Anguilla, Antigua and Barbuda, Aruba, Ascension, Australia (Northern Territory, Queensland, Western Australia), Bahamas, Bangladesh, Barbados, Belize, Brazil, British Virgin Islands, Cayman Islands, China, Cocos (Keeling) Islands, Colombia, Comoros, Congo (ROC), Costa Rica, Cuba, Curacao, Cyprus, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, French Guiana, French Polynesia, French Southern Territories, Gambia, Grenada, Guadeloupe, Guam, Guinea-Bissau, Guyana, Haiti, Honduras, India, Indonesia, Iran, Jamaica, Japan, Kenya, Lebanon, Madagascar, Malaysia, Martinique, Mauritania, Mayotte, Mexico (Baja California, Campeche, Michoacán, Quintana Roo, Sinaloa, Sonora, Tabasco, Tamaulipas, Veracruz, Yucatán), Micronesia, Montserrat, Mozambique, Myanmar, Netherlands Antilles (Bonaire, Sint Eustatius), Nicaragua, Oman, Pakistan, Panama, Papua New Guinea, Peru, Philippines, Puerto Rico, Réunion, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, São Tomé and Príncipe, Saudi Arabia, Senegal, Seychelles, Sint Maarten, Sri Lanka, Suriname, Syria, Taiwan, Tanzania, Thailand, Trinidad and Tobago, Turkey, Turks and Caicos, USA (Florida, Hawaii), US Virgin Islands, Vanuatu, Venezuela, Vietnam, Yemen

Foraging: Argentina, Bahrain, Benin, Bermuda, British Indian Ocean Territory, Brunei, Cambodia, Cameroon, Cape Verde, Chile, Christmas Island, Congo (DRC), Cook Islands, Djibouti, Fiji, Gabon, Ghana, Greece, Guatemala, Guinea, Iraq, Israel, Ivory Coast, Kuwait, Liberia, Libya, Maldives, Marshall Islands, Mauritius, Namibia, New Caledonia, Nigeria, Niue, Palau, Qatar, Samoa, Sierra Leone, Singapore, Somalia, South Africa, Sudan, Timor-Leste, Togo, Tonga, United Arab Emirates, Uruguay, Wallis and Futuna, Western Sahara

Vagrant: Algeria, Canada, Italy, Kiribati, Malta, Northern Mariana Islands, Morocco, Nauru, New Zealand, Portugal, Saint Helena, Slovenia, Solomon Islands, Spain, Tokelau, Tuamotu, Tunisia, Tuvalu

IUCN Red List: Global: Endangered A2bd (2004); Previously: Endangered (1996); Subpopulations: Hawaiian: Least Concern (2012)

CITES: Appendix I, as Cheloniidae spp.

Testudo mydas Linnaeus 1758:197, *Chelonia mydas, Chelone mydas, Caretta mydas, Mydas mydas, Mydasea mydas, Chelonia (Euchelonia) midas, Euchelonia mydas, Megemys mydas, Chelonia mydas mydas*
Type locality: "insulas Pelagi: insulam Adscensionis." Restricted to "Insel Ascension" by Mertens and Müller (1928:23).

Testudo macropus Walbaum 1782:112 (*unavailable name*), *Euchelys macropus, Chelone macropus*

Testudo viridis Schneider 1783:299, *Chelonia viridis, Chelone viridis, Chelonia (Mydas) viridis, Mydas viridis, Chelonia mydas viridis*
Type locality: Not designated. Restricted to "Charleston, South Carolina" [USA] by Smith and Taylor (1950a:360).

Testudo japonica Thunberg 1787:178, *Chelonia japonica, Chelonia mydas japonica*
Type locality: "Japan."

Testudo marina vulgaris Lacepède 1788:54, synopsis[table] [09:6] (*nomen suppressum*, ICZN 2005a)
Type locality: "contrées équatoriales."

Testudo viridisquamosa Lacepède 1788:92, synopsis[table] [09:6] (*partim, nomen dubium et suppressum*, ICZN 1963)
Type locality: "la mer du Sud, auprès du cap Blanco, de la nouvelle Espagne." Restricted to "Bocas del Toro, Panama, Golf von Mexico" by Wermuth (1956:405); and to "the island of Blanquilla... West Indies" [Venezuela] by Brongersma (1961:27).

Testudo viridisquamosa Bonnaterre 1789:20 (*partim, nomen dubium*)

Testudo macropus Gmelin 1789:1038
Type locality: Not designated.

Testudo bomarii Meyer 1790:82 [09:8] (*partim, nomen dubium et novum et oblitum*)

Testudo chloronotus Bechstein 1800:107

Testudo rugosa Van-Ernest *in* Daudin 1801:37 (senior homonym, not = *Testudo rugosa* Shaw 1802 = *Trachemys decussata decussata* or *Trachemys terrapen*)
Type locality: "la mer des Indes...près de la ligne à environ trois dégrés des îles Maldives."

Testudo cepediana Daudin 1801:50
Type locality: Not designated.

Chelonia virgata Schweigger 1812:291, *Caretta virgata, Chelonia (Mydas) virgata, Mydas virgata, Chelone virgata*
Type locality: "mari sub zona torrida." Restricted to "Bermuda Islands" by Smith and Taylor (1950a:315).

Caretta cepedii Merrem 1820:18 (*nomen novum*)

Caretta esculenta Merrem 1820:18, *Chelonia esculenta*
Type locality: "Oceano Atlantico."

Caretta thunbergii Merrem 1820:19 (*nomen novum*)
Type locality: "Japonia" [Japan].

Chelonia castanea Eschscholtz 1829a:11 [14:5] **(7)** (*nomen oblitum*)
Type locality: "karaibischen Meere; küste von Surinam."

Chelonia grisea Eschscholtz 1829a:13 [14:4] **(7)**, *Chelonia griseam*
Type locality: "kaspische Meer" [Caspian Sea] [in error].

Chelonia maculosa Cuvier 1829:13, *Chelone maculosa*
Type locality: Not designated. Restricted to "Ascension Island" by Smith and Taylor (1950a:315).

Chelonia lachrymata Cuvier 1829:13
Type locality: Not designated.

Chelonia midas Wagler 1830b:133 (*nomen novum*)
Chelonia bicarinata Lesson 1831b:301
Type locality: "l'Océan atlantique."
Chelonia marmorata Duméril and Bibron 1835:546, *Chelone marmorata*
Type locality: "l'île de l'Ascension."
Chelonia formosa Girard 1858:456
Type locality: "Feejee Islands" [Fiji].
Chelonia tenuis Girard 1858:459
Type locality: "Honden Island, Paumotu Group; Tahiti and Eimo; Rosa Island." Rosa Island identified by Hirth (1980:1) as Rose Atoll, American Samoa.
Chelonia albiventer Nardo 1864:1420
Type locality: "Adriatico...prossimata del porto di Malamocco" [Italy].
Chelonia agassizii Bocourt 1868:122 (07:4), *Chelonia mydas agassizii*
Type locality: "embouchure du Nagualate...Pacifique (Guatémala)" [mouth of Rio Nagualate, Pacific coast of Guatemala].
Chelonia lata Philippi 1887:84
Type locality: "Valparaiso..[&]..Insel Chiloe" [Chile].
Chelonia mydas carrinegra Caldwell 1962:4
Type locality: "waters adjacent to Isla Angel de la Guarda, Bahia de Los Angeles, central Gulf of California, Mexico."
Testudo nigrita Tamayo 1962:358 (*nomen nudum*)

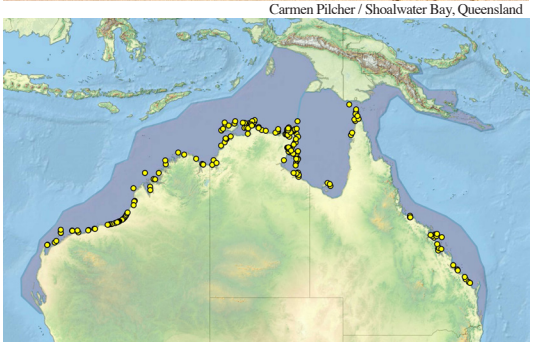
Natator McCulloch 1908 (12:8)

Natator McCulloch 1908:127
Type species: *Natator tessellatus* McCulloch 1908 [= subjective synonym of *Chelonia depressa* Garman 1880], by original monotypy.

Natator depressus (Garman 1880)
Flatback, Flatback Sea Turtle



Carmen Pilcher / Shoalwater Bay, Queensland



(line delimits Regional Management Units)

Nesting: Australia (Northern Territory, Queensland, Western Australia)
Foraging: Indonesia (Papua), Papua New Guinea (Southern)
Vagrant: Indonesia (Java, Lesser Sundas), Timor-Leste
IUCN Red List: Data Deficient (1996)
CITES: Appendix I, as Cheloniidae spp.
Chelonia depressa Garman 1880:124, *Chelonia depressus, Natator depressus, Natator depressa*
Type locality: "East Indies and North Australia." Restricted to "North Australia" by Loveridge (1934:261).
Natator tessellatus McCulloch 1908:127
Type locality: "near Port Darwin, North Australia."

DERMOCHELYIDAE Fitzinger 1843 (12:9)

Sphargidae Gray 1825:212
Sphargidina Bonaparte 1831:64
Dermatochelydae Fitzinger 1843:30
Athecae Cope 1871:235
Athecata Lydekker 1889:223
Dermochelyidae Lydekker 1889:223

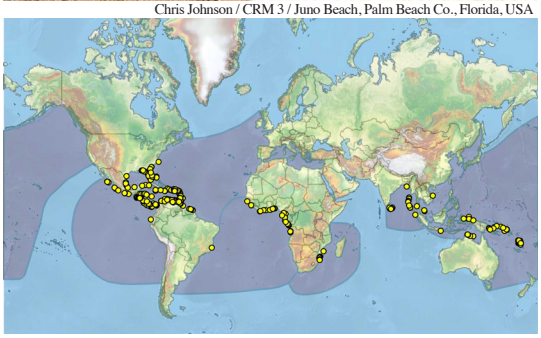
Dermochelys Blainville 1816

Chelonias Rafinesque 1814:66 (*nomen oblitum*)
Chelyra Rafinesque 1815:74 (*nomen nudum*)
Dermochelys Blainville 1816:119 ["111"]
Type species: *Dermochelys coriacea* [= *Testudo coriacea* Vandelli 1761], by subsequent monotypy by Boulenger (1889:10), in accordance with ICZN Article 67.2.2.
Sphargis Merrem 1820:19
Type species: *Sphargis mercurialis* Merrem 1820 [= subjective synonym of *Testudo coriacea* Vandelli 1761], by original monotypy.
Coriudo Fleming 1822:271
Type species: *Coriudo coriacea* [= *Testudo coriacea* Vandelli 1761], by original monotypy.
Scytina Wagler 1828:861 (*nomen novum*)
Dermochelis Cuvier 1829:14 (*nomen novum*)
Dermatochelys Wagler 1830b:133 (*nomen novum*) (9)
Chelyra Rafinesque 1832:64
Type species: *Chelyra coriacea* [= *Testudo coriacea* Vandelli 1761], by original designation.

Dermochelys coriacea (Vandelli 1761) (12:9, 14:6, 14:7) (**10**)
Leatherback, Leatherback Sea Turtle



Chris Johnson / CRM 3 / Juno Beach, Palm Beach Co., Florida, USA



(lines delimit Regional Management Units)

Nesting: Angola, Anguilla, Antigua and Barbuda, Aruba, Australia (Northern Territory), Bahamas, Bangladesh, Barbados, Benin, Brazil, British Virgin Islands, Cameroon,

Colombia, Congo (ROC), Costa Rica, Cuba, Curacao, Dominica, Dominican Republic, Ecuador, El Salvador, Equatorial Guinea, French Guiana, Gabon, Ghana, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, India, Indonesia (Java, Papua), Ivory Coast, Jamaica, Malaysia, Martinique, Mexico (Baja California Sur, Guerrero, Jalisco, Michoacán, Oaxaca), Mozambique, Netherlands Antilles (Bonaire, Sint Eustatius), Nicaragua, Panama, Papua New Guinea (Northern), Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, São Tomé and Príncipe, Sierra Leone, Sint Maarten, Solomon Islands, South Africa, Sri Lanka, Suriname, Thailand, Togo, Trinidad and Tobago, USA (Florida), US Virgin Islands, Vanuatu, Venezuela, Vietnam

Foraging: Albania, Algeria, Argentina, Belize, Brunei, Cambodia, Canada (British Columbia, New Brunswick, Newfoundland, Nova Scotia), Chile, China, Comoros, Congo (DRC), Croatia, Cyprus, Egypt, Fiji, France, Gambia, Great Britain, Greece, Guinea, Guinea-Bissau, Ireland, Israel, Italy, Japan, Kenya, Kiribati, Lebanon, Liberia, Libya, Madagascar, Malta, Marshall Islands, Mauritania, Mauritius, Micronesia, Montenegro, Monaco, Morocco, Myanmar, Namibia, Nauru, New Zealand, Nigeria, North Korea, Palau, Peru, Philippines, Portugal, Russia, Samoa, Senegal, Seychelles, Slovenia, South Korea, Spain, Syria, Taiwan, Tanzania, Tonga, Tunisia, Turkey, Turks and Caicos, Tuvalu, Uruguay, USA (Alaska, California, Connecticut, Delaware, Georgia, Hawaii, Maine, Maryland, Massachusetts, New Jersey, New York, North Carolina, Oregon, Rhode Island, South Carolina, Washington)

Vagrant: Bahrain, Denmark, Djibouti, Eritrea, Iceland, Iran, Iraq, Kuwait, Maldives, Norway, Oman, Pakistan, Qatar, Saudi Arabia, Somalia, Sudan, Sweden, United Arab Emirates, Yemen

IUCN Red List: Global: Vulnerable A2bd (2013); Subpopulations: East Pacific Ocean: Critically Endangered A2bd+4bd (2013); Northeast Indian Ocean: Data Deficient (2013); Northwest Atlantic Ocean: Least Concern (2013); Southeast Atlantic Ocean: Data Deficient (2013); Southwest Atlantic Ocean: Critically Endangered D (2013); Southwest Indian Ocean: Critically Endangered C2a(ii) (2013); West Pacific Ocean: Critically Endangered A2bd+4bd (2013)

CITES: Appendix I

Testudo coriacea Vandelli 1761:1 (senior homonym, not = *Testudo coriacea* Linnaeus 1766), *Chelone coriacea, Chelonia coriacea, Dermochelys coriacea, Coriudo coriacea, Scytina coriacea, Sphargis coriacea, Dermatochelys coriacea, Dermochelys coriacea coriacea, Chelyra coriacea*
Type locality: "maris Tyrrheni oram in agro Laurentiano" [Italy]. Restricted to "Palermo, Sicily" [Italy] by Smith and Taylor (1950a:315, 1950b:13); to "la côte romaine (Italie), Mer Tyrrhénienne, Méditerranée occidentale" [Italy] by Fretey and Bour (1980:198); and to "Laurentum, between Lido di Ostia and Tor Paterno, shore of the Tyrrhenian Sea, Italy" by Bour and Dubois (1984:359).

Testudo coriacea Linnaeus 1766:350 (junior homonym, not = *Testudo coriacea* Vandelli 1761)
Type locality: "Mari mediterraneo, Adriatico." Restricted to "Palermo, Sicily" [Italy] by Smith and Taylor (1950a:315, 1950b:13).

Testudo arcuata Catesby 1771:40
Type locality: Not designated. Restricted to "Küsten-Gebiete von Carolina und Florida" [USA] by Mertens and Wermuth (1955:386).

Testudo lyra Lacepède 1788:111, synopsis[table] (09:6) (*nomen suppressum,* ICZN 2005a)
Type locality: "Méditerranée."

Testudo lyra Bonnaterre 1789:22, *Chelonia lyra*

Testudo tuberculata Pennant *in* Schoepff 1801:123, *Sphargis tuberculata, Dermochelydis tuberculata*
Type locality: Not designated. Restricted to "Palermo, Sicily" [Italy] by Smith and Smith (1980:244).

Chelonias lutaria Rafinesque 1814:66
Type locality: "Sicil." [Sicily, Italy].

Sphargis mercurialis Merrem 1820:19 (*nomen novum et suppressum,* ICZN 1956)
Type locality: "Mari mediterraneo et Oceano atlantico."

Dermochelis atlantica LeSueur *in* Cuvier 1829:14 (*nomen nudum*), *Dermochelys atlantica, Dermatochelys atlantica*

Dermatochelys porcata Wagler 1830c:explicatio tabularum (*nomen novum*) (14:6) (**9**)

Testudo coriacea marina Ranzani 1832:3 (14:7)

Sphargis coriacea schlegelii Garman 1884:303, *Dermochelys schlegelii, Dermochelys coriacea schlegelii, Sphargis schlegelii*
Type locality: "Tropical Pacific and Indian Oceans." Restricted to "Guaymas, Sonora, Mexico" by Smith and Taylor (1950a:344, 1950b:13).

Sphargis angusta Philippi 1899:730, *Dermatochelys angusta*
Type locality: "cerca de Tocopilla" [Chile].

KINOSTERNOIDEA Joyce, Parham, and Gauthier 2004

Kinosternoidea Joyce, Parham, and Gauthier 2004:1003

DERMATEMYDIDAE Gray 1870e

Dermatemydae Gray 1870e:714
Dermatemydidae Baur 1888b:595

Dermatemys Gray 1847

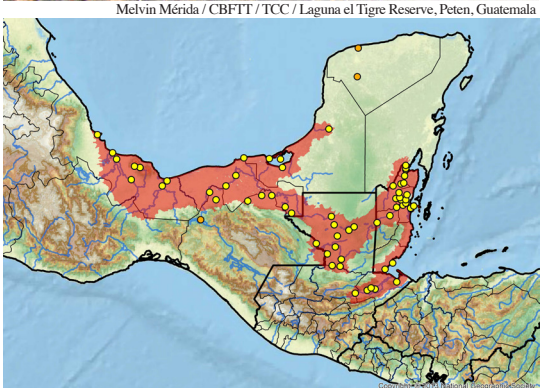
Dermatemys Gray 1847:55
Type species: *Dermatemys mawii* Gray 1847, by original monotypy.
Chloremys Gray 1870c:50
Type species: *Chloremys abnormis* [= *Dermatemys abnormis* Cope 1868a = subjective synonym of *Dermatemys mawii* Gray 1847], by original monotypy.
Limnochelone Werner 1901b:297
Type species: *Limnochelone micrura* Werner 1901b [= subjective synonym of *Dermatemys mawii* Gray 1847], by original monotypy.

Dermatemys mawii Gray 1847 (14:8)

Central American River Turtle



Melvin Mérida / CBFTT / TCC / Laguna el Tigre Reserve, Peten, Guatemala



(orange dots = introduced or trade)

Belize, Guatemala, Mexico (Campeche, Chiapas, Quintana Roo, Tabasco, Veracruz)
CBFTT Account: Vogt, Polisar, Moll, and Gonzalez-Porter (2011)
IUCN Red List: Critically Endangered A2abd+4d (2006); Previously: Endangered (1996)
CITES: Appendix II

Dermatemys mawii Gray 1847:55, *Emys mawii, Dermatemys mavei*
Type locality: "South America." Restricted to "Alvarado, Veracruz, Mexico" by Smith and Taylor (1950a:346).
Emys berardii Duméril and Bibron *in* Duméril and Duméril 1851:11, *Ptychemys berardii, Clemmys berardii, Dermatemys berardii*
Type locality: "l'Amérique mérid., ...environs de Vera-Cruz" [Veracruz, Mexico].
Dermatemys abnormis Cope 1868a:120, *Chloremys abnormis*
Type locality: "Belize River, Yucatan" [Belize]. Restricted to "Belize [city], British Honduras" by Smith and Taylor (1950a:316, 1950b:19); restriction reversed by Dunn and Stuart (1951:59).
Dermatemys salvinii Gray 1870c:50
Type locality: "Guatemala."
Limnochelone micrura Werner 1901b:298
Type locality: "Mexico." Restricted to "Alvarado, Veracruz, Mexico" by Smith and Taylor (1950a:316, 1950b:19).
Dermatemys mawei Neill and Allen 1959:28 (*nomen novum*)

KINOSTERNIDAE Agassiz 1857a (14:9)

Cinosternoidae Agassiz 1857a:249
Kinosterna Gray 1869a:180
Kinosternidae Hay 1892:560

KINOSTERNINAE Agassiz 1857a (14:9)

Cinosternoidae Agassiz 1857a:249
Kinosternina Gray 1869a:180
Kinosterninae Lindholm 1929:277

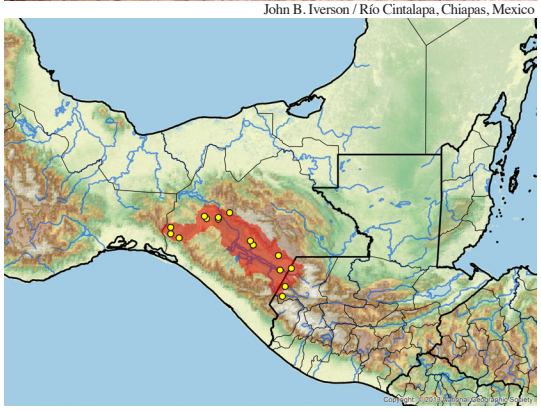
Kinosternon Spix 1824 (14:9) (11)

Monoclida Rafinesque 1815:75 (*nomen nudum*)
Uronyx Rafinesque 1815:75 (*nomen nudum*)
Kinosternon Spix 1824:17 (*nomen conservandum*, ICZN 1989)
Type species: *Kinosternon longicaudatum* Spix 1824 [= subjective synonym of *Testudo scorpioides* Linnaeus 1766], by subsequent designation by Bell (1828c:515).
Kinosternum Bonaparte 1830:166 (*nomen novum*)
Cinosternon Wagler 1830b:137 (*nomen novum*)
Monoclida Rafinesque 1832:64
Type species: *Monoclida retziana* Rafinesque 1832 [= subjective synonym of *Testudo scorpioides* Linnaeus 1766], by original monotypy.
Uronyx Rafinesque 1832:64
Type species: *Uronyx scorpioides* [= *Testudo scorpioides* Linnaeus 1766], by original monotypy.
Cinosternum Burmeister 1837:731 (*nomen novum*)
Swanka Gray 1844:32
Type species: *Swanka scorpiodes* Gray [= *Testudo scorpioides* Linnaeus 1766], by original monotypy.
Thyrosternum Agassiz 1857a:418, 427
Type species: *Thyrosternum pensilvanica* [= *Testudo pensilvanica* Gmelin 1789 = subjective synonym of *Testudo subrubra* Bonnaterre 1789], by subsequent designation by Lindholm (1929:277).
Platythyra Agassiz 1857a:420, 429
Type species: *Platythyra flavescens* Agassiz 1857a, by original monotypy.
Cinosternos Herrera 1901:35 (*nomen novum et suppressum*, ICZN 1922)
Cryptochelys Iverson, Le, and Ingram 2013:933 (*partim*) (14:9) (10)
Type species: *Cryptochelys leucostomum* [= *Cinosternon leucostomum* Duméril and Bibron *in* Duméril and Duméril 1851], by original designation.

Kinosternon abaxillare Baur *in* Stejneger 1925 (14:10) **or**
Kinosternon scorpioides abaxillare
Central Chiapas Mud Turtle



John B. Iverson / Río Cintalapa, Chiapas, Mexico

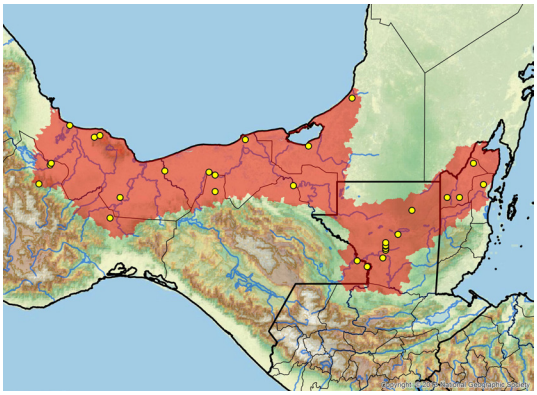


Guatemala, Mexico (Chiapas)
IUCN Red List: Not Evaluated
Kinosternon abaxillare Baur *in* Stejneger 1925:462, *Kinosternon scorpioides abaxillare, Kinosternon cruentatum abaxillare*
Type locality: "Tuxtla, Chiapas, Mexico".

Kinosternon acutum Gray 1831d (14:9) **or**
Cryptochelys acuta
Tabasco Mud Turtle



John B. Iverson / CBFTT / Belize

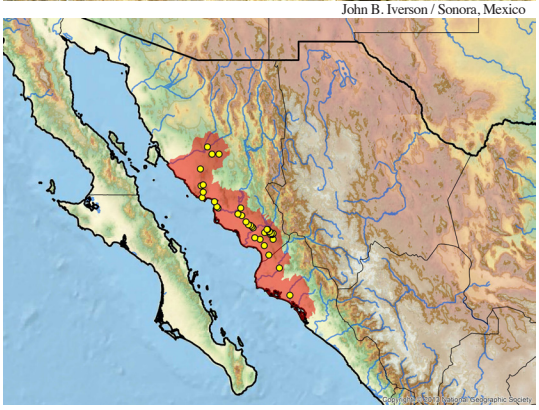


Belize, Guatemala, Mexico (Campeche, Chiapas, Tabasco, Veracruz)
CBFTT Account: Iverson and Vogt (2011)
IUCN Red List: Near Threatened (1996)
Kinosternon scorpioides acuta Gray 1831d:34, *Kinosternon acutum, Cryptochelys acuta*
Type locality: Not designated. Restricted to "C. America" [Central America] by Gray (1844:33); to "British Honduras" [Belize] by Schmidt (1941:476); and to "Cosamaloapan, Veracruz, Mexico" by Smith and Taylor (1950a:347, 1950b:23).
Cinosternum berendtianum Cope 1865:189, *Cinosternon berendtianum, Kinosternon berendtianum*
Type locality: "Tabasco" [Mexico].
Cinosternon effeldtii Peters 1873:603, *Cinosternum effeldtii*
Type locality: "angeblich aus Mexico (Veracruz)." Restricted to "Cosamaloapan, Veracruz, Mexico" by Smith and Taylor (1950a:347).

Kinosternon alamosae Berry and Legler 1980
Alamos Mud Turtle



John B. Iverson / Sonora, Mexico

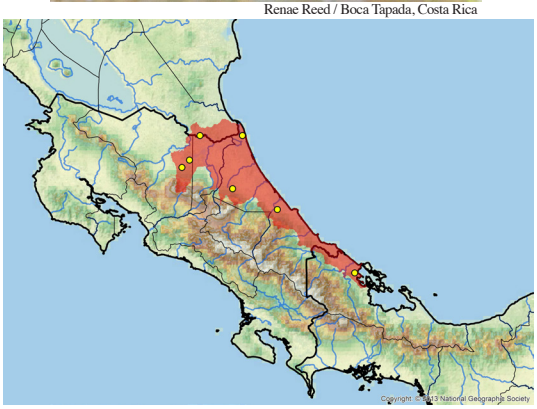


Mexico (Sinaloa, Sonora)
IUCN Red List: Data Deficient (2007); Previously: Least Concern [Not Listed] (1996)

Kinosternon alamose Pritchard 1979:556 (*nomen suppressum,* ICZN 1985c)
Type locality: "vicinity of Alamos, Sonora, and the lower Rio Yaqui" [Mexico].
Kinosternon alamosae Berry and Legler 1980:1 (*nomen conservandum,* ICZN 1985c)
Type locality: "Rancho Carrizal, 7.2 km north and 11.5 km west of Alamos, Sonora, Mexico (27° 05' N, 109° 03' W)."

Kinosternon angustipons Legler 1965 (14:9) **or**
Cryptochelys angustipons
Narrow-bridged Mud Turtle

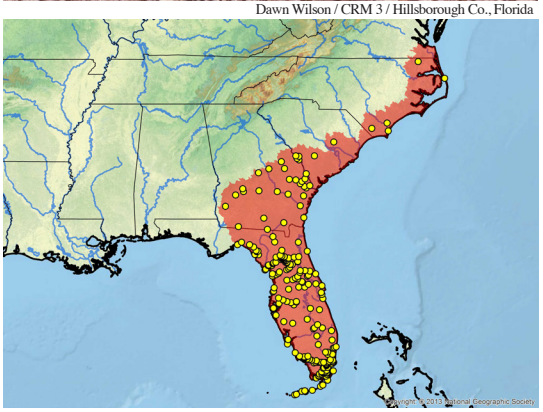

Renae Reed / Boca Tapada, Costa Rica



Costa Rica, Nicaragua, Panama
IUCN Red List: Vulnerable B1+2c (1996)
Kinosternon angustipons Legler 1965:617, *Cryptochelys angustipons*
Type locality: "Los Diamantes, Limón Province, Costa Rica."

Kinosternon baurii Garman 1891
Striped Mud Turtle

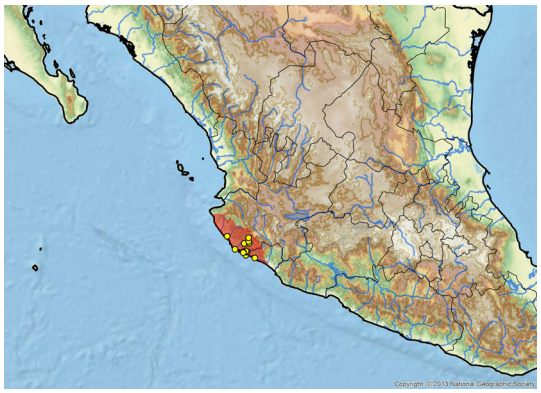

Dawn Wilson / CRM 3 / Hillsborough Co., Florida



USA (Florida, Georgia, North Carolina, South Carolina, Virginia)
IUCN Red List: Least Concern (2013); Previously: Least Concern [Not Listed] (1996)
Cinosternum baurii Garman 1891:141, *Kinosternon baurii, Kinosternon baurii baurii*
Type locality: "the island Key West...Florida..[&]..Cuba." Restricted to "Key West, Monroe County, Florida" [USA] by Uzzell and Schwartz (1955:33).
Kinosternon bauri palmarum Stejneger 1925:463, *Kinosternon baurii palmarum*
Type locality: "Royal Palm State Park, Dade County, Florida" [USA]. Restricted to "Paradise Key, Dade County, Florida" [USA] by Uzzell and Schwartz (1955:34).

Kinosternon chimalhuaca Berry, Seidel, and Iverson *in* Rogner 1996 (07:7, 14:11)
Jalisco Mud Turtle


John B. Iverson / Rio Purificación, Jalisco, Mexico



Mexico (Colima, Jalisco)
IUCN Red List: Least Concern (2007)

Kinosternon chimalhuaca Berry, Seidel, and Iverson *in* Rogner 1996:23

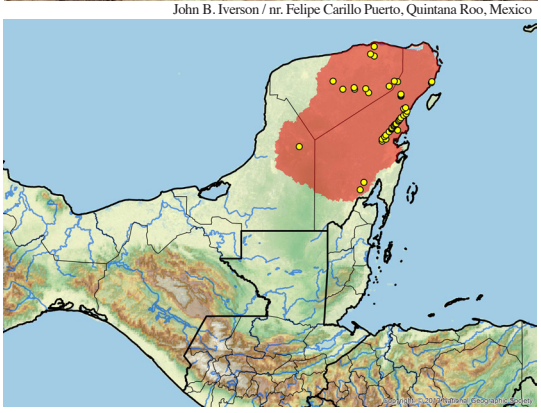
Kinosternon chimalhuaca Berry, Seidel, and Iverson 1997:331

Type locality: "30 m southeast of Mexico Highway 80, 1.9 km northeast of Barra de Navidad, Jalisco, Mexico (19º 15' N, 104º 43' S)."

Kinosternon creaseri Hartweg 1934 [(14:9)] **or**
Cryptochelys creaseri
Creaser's Mud Turtle



John B. Iverson / nr. Felipe Carillo Puerto, Quintana Roo, Mexico



Mexico (Campeche, Quintana Roo, Yucatán)
IUCN Red List: Least Concern (2007)

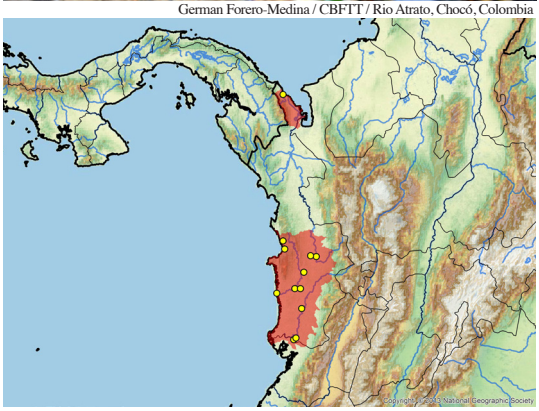
Kinosternon creaseri Hartweg 1934:1, *Cryptochelys creaseri*

Type locality: "one mile south of the Hacienda, Chichen Itza, Yucatan" [Mexico].

Kinosternon dunni Schmidt 1947 [(14:9)] **or**
Cryptochelys dunni
Dunn's Mud Turtle



German Forero-Medina / CBFTT / Rio Atrato, Chocó, Colombia



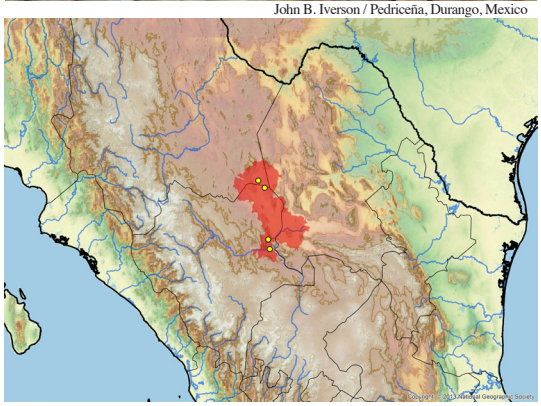
Colombia (Chocó, Valle del Cauca [?])
CBFTT Account: Iverson, Carr, Castaño-Mora, Galvis-Rizo, Rentería-Moreno, and Forero-Medina (2012)
IUCN Red List: Vulnerable B1+2c (1996)
TFTSG Draft Red List: Vulnerable (2011)

Kinosternon dunni Schmidt 1947:109, *Cryptochelys dunni*

Type locality: "Pizarro, Choco, Colombia."

Kinosternon durangoense Iverson 1979b (07:6)
Durango Mud Turtle

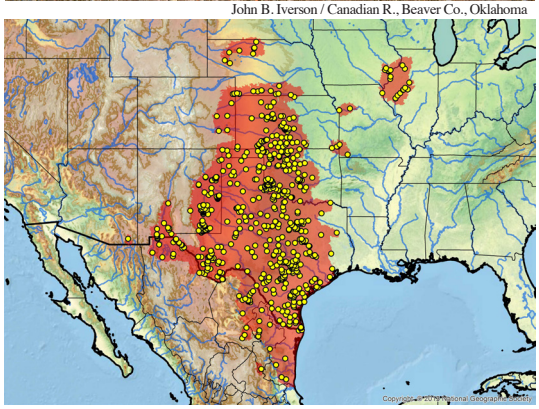

John B. Iverson / Pedriceña, Durango, Mexico



Mexico (Chihuahua, Coahuila, Durango)
IUCN Red List: Data Deficient (2007)
Kinosternon flavescens durangoense Iverson 1979b:219, *Kinosternon durangoense*
Type locality: "8 km from Ceballos, in Lago de los Palomas, Durango, Mexico."

Kinosternon flavescens Agassiz 1857a (07:6)
Yellow Mud Turtle


John B. Iverson / Canadian R., Beaver Co., Oklahoma



Mexico (Chihuahua, Coahuila, Nuevo Leon, Tamaulipas, Veracruz?), USA (Arizona, Arkansas?, Colorado, Illinois, Iowa, Kansas, Missouri, Nebraska, New Mexico, Oklahoma, Texas)
IUCN Red List: Least Concern (2013); Previously: Least Concern [Not Listed] (1996)
Platythyra flavescens Agassiz 1857a:430, *Cinosternon flavescens, Cinosternum flavescens, Kinosternum flavescens, Kinosternon flavescens, Kinosternon flavescens flavescens*
Type locality: "Texas, near San Antonio;...lower Rio Grande;... Red River, Arkansas;...Camp Yuma;...Gila River" [USA]. Restricted to "Waco, McLennan County, Texas, USA" by Smith and Taylor (1950a:362, 1950b:24), but rejected by Maslin (1959:22); and to "Rio Blanco, near San Antonio, Texas" [USA] by Schmidt (1953:89) and by lectotype designation by Iverson (1978:478).
Kinosternon flavescens spooneri Smith 1951:195, *Kinosternon spooneri*
Type locality: "Henderson County State Forest, 7 miles north of Oquawka, Illinois" [USA].

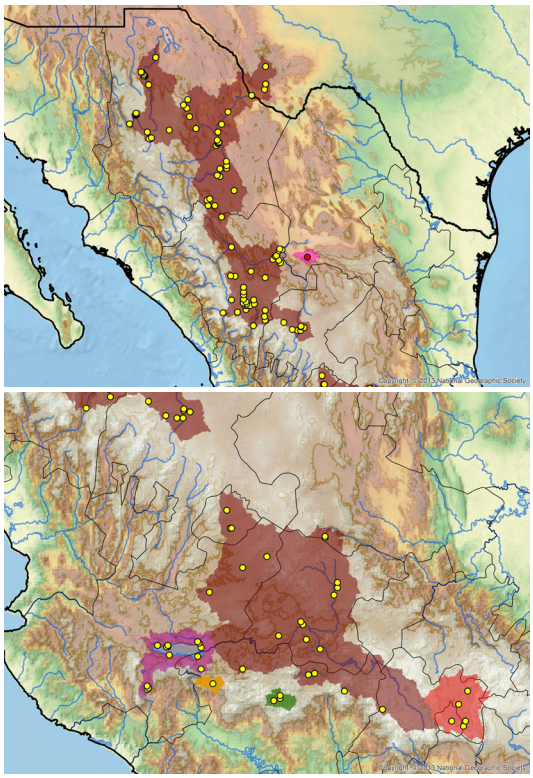
Kinosternon herrerai Stejneger 1925 (14:9) **or**
Cryptochelys herrerai
Herrera's Mud Turtle


John B. Iverson / nr. Gutiérrez Zamora, Veracruz, Mexico



Mexico (Hidalgo, San Luis Potosi, Tamaulipas, Veracruz)
IUCN Red List: Near Threatened (2007); Previously: Least Concern [Not Listed] (1996)
Kinosternon herrerai Stejneger 1925:462, *Cryptochelys herrerai*
Type locality: "Xochimilco, Valley of Mexico" [in error]. Restricted to "La Laja, Veracruz, Mexico" by Smith and Taylor (1950a:349, 1950b:24); and to "vicinity of Tampico" [Tamaulipas, Mexico] by Smith and Brandon (1968:54).

Kinosternon hirtipes Wagler 1830c [(09:11)] [(9)]
Rough-footed Mud Turtle



(subspecies: *hirtipes* = red, *chapalaense* = purple, *magdalense* = orange, *megacephalum* = pink, *murrayi* = brown, *tarascense* = green)

Mexico (Aguascalientes, Chihuahua, Coahuila, Distrito Federal, Durango, Guanajuato, Jalisco, México, Michoacán, Morelos, Zacatecas), USA (Texas)

IUCN Red List: Least Concern (2007); Previously: Least Concern [Not Listed] (1996)

Kinosternon hirtipes hirtipes Wagler 1830c [(09:11)] [(9)]
Valley of Mexico Mud Turtle
Mexico (Distrito Federal, México, Morelos)

Cinosternon hirtipes Wagler 1830b:137 (*nomen nudum*) [(9)]

Cinosternon hirtipes Wagler 1830c:explicatio tabularum, pl.V, figs.29-30 [(09:11)] [(9)], *Clemmys (Cinosternon) hirtipes, Kinosternum hirtipes, Kinosternon hirtipes, Cinosternum hirtipes, Thyrosternum hirtipes, Ozotheca hirtipes, Kinosternon hirtipes hirtipes*

Type locality: Not designated. Restricted to "Mexico" by Wagler (1833:unpaginated); to "Mazatlán, Sinaloa" [Mexico] [in error] by Smith and Taylor (1950a:343, 1950b:25); and to "lakes near Mexico City" [Mexico] by Schmidt (1953:89).

Kinosternon hirtipes chapalaense Iverson 1981
Lake Chapala Mud Turtle



John B. Iverson / Lago Zapotlan, Jalisco, Mexico

Mexico (Jalisco, Michoacán)

Kinosternon hirtipes chapalaense Iverson *in* Pritchard 1979:557 (*nomen nudum*)

Kinosternon hirtipes chapalaense Iverson 1981:51

Type locality: "Lake Chapala, 0.25 mile off Chapala, Jalisco, Mexico [20° 18' N, 103° 12' W]."

Kinosternon hirtipes magdalense Iverson 1981
San Juanico Mud Turtle



John B. Iverson / Presa San Juanico, Michoacán, Mexico

Mexico (Michoacán)

Kinosternon hirtipes magdalense Iverson 1981:53

Type locality: "along the face of the dam at *Presa* San Juanico, Michoacán [ca. 19° 50' N, 102° 40' W]" [Mexico].

Kinosternon hirtipes megacephalum Iverson 1981
(Extinct, ca. 1970)
Viesca Mud Turtle



John B. Iverson / 3.2 km SE Viesca, Coahuila, Mexico

Mexico (Coahuila [extinct])

Kinosternon hirtipes megacephalum Iverson 1981:52, *Kinosternon hirtipes megalocephala, Kinosternon megacephalum*

Type locality: "3.2 km SE Viesca [25° 21' N, 102° 48' W], Coahuila" [Mexico].

Kinosternon hirtipes murrayi Glass and Hartweg 1951
Mexican Plateau Mud Turtle



John B. Iverson / north of Durango, Durango, Mexico

Mexico (Aguascalientes, Chihuahua, Coahuila, Durango, Guanajuato, Jalisco, México, Michoacán, Zacatecas), USA (Texas)

Kinosternon murrayi Glass and Hartweg 1951:50, *Kinosternon hirtipes murrayi*
Type locality: "Harper Ranch, 37 miles south of Marfa, Presidio County, Texas" [USA].

Kinosternon hirtipes tarascense Iverson 1981
Pátzcuaro Mud Turtle



Judith Hirt / Ichupio, Lago de Pátzcuaro, Michoacán, Mexico

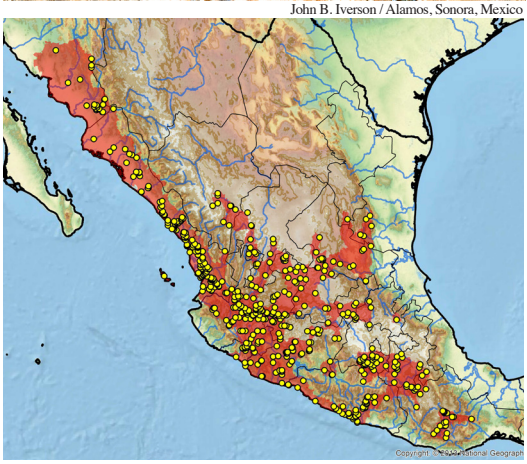
Mexico (Michoacán)

Kinosternon hirtipes tarascense Iverson 1981:52
Type locality: "Lago de Pátzcuaro, adjacent to city of Pátzcuaro [19º 32' N, 101º 36' W]" [Michoacán, Mexico].

Kinosternon integrum Le Conte 1854
Mexican Mud Turtle



John B. Iverson / Alamos, Sonora, Mexico



Mexico (Colima, Durango, Guanajuato, Guerrero, Hidalgo, Jalisco, Michoacán, Morelos, Nayarit, Oaxaca, Puebla, San Luis Potosi, Sinaloa, Sonora, Tamaulipas, Zacatecas)

IUCN Red List: Least Concern (2007); Previously: Least Concern [Not Listed] (1996)

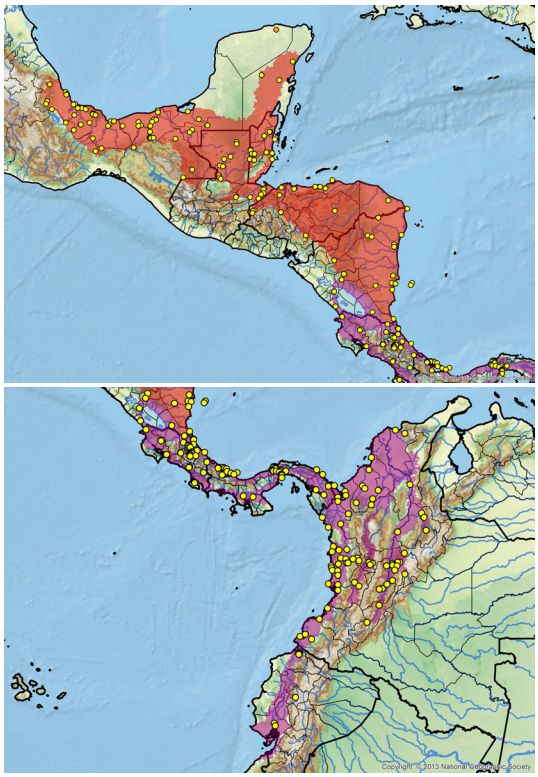
Kinosternum integrum Le Conte 1854:183, *Cinosternum integrum, Thyrosternum integrum, Thyrosternon integrum, Cinosternon integrum, Kinosternon integrum, Swanka integra, Cinosternum scorpioides integrum, Kinosternon scorpioides integrum*
Type locality: "Mexico." Restricted to "Acapulco, Guerrero, Mexico" by Smith and Taylor (1950a:331, 1950b:25).

Cinosternon rostellum Bocourt 1876a:391, *Cinosternum rostellum*
Type locality: "Guanajuato" [Mexico].

Cinosternon guanajuatense Dugès 1888:107 (*nomen nudum*)

Cinosternum scorpioides integrum mexicana Siebenrock 1907:579 (*unavailable name*)
Type locality: "Mexiko." Restricted to "Mazatlan" [Mexico] by Smith and Smith (1980:115).

Kinosternon leucostomum Duméril and Bibron *in* Duméril and Duméril 1851 (14:9) **or**
Cryptochelys leucostoma
White-lipped Mud Turtle



(subspecies: *leucostomum* = red, *postinguinale* = purple; orange dot = probable trade or erroneous)

Belize, Colombia (Antioquia, Atlántico, Bolívar, Boyacá, Caldas, Cauca, Cesar, Chocó, Córdoba, Cundinamarca, Huila [?], Magdalena, Nariño, Santander, Sucre, Tolima, Valle del Cauca), Costa Rica, Ecuador, Guatemala, Honduras, Mexico (Campeche, Chiapas, Oaxaca, Quintana Roo, Tabasco, Veracruz, Yucatán [?]), Nicaragua, Panama, Peru (Tumbes)

IUCN Red List: Least Concern [Not Listed] (1996)

TFTSG Draft Red List: Least Concern (South America regional) (2011)

Kinosternon leucostomum leucostomum Duméril and Bibron *in* Duméril and Duméril 1851
Northern White-lipped Mud Turtle



John B. Iverson / Belize Distr., Belize

Belize, Guatemala, Honduras, Mexico (Campeche, Chiapas, Oaxaca, Quintana Roo, Tabasco, Veracruz, Yucatán [?]), Nicaragua

Cinosternon leucostomum Duméril and Bibron *in* Duméril and Duméril 1851:17, *Kinosternum leucostomum, Kinosternon leucostomum, Cinosternum leucostomum, Thyrosternum leucostomum, Swanka leucostoma, Kinosternon leucostomum leucostomum, Cryptochelys leucostoma*
Type locality: "N.-Orléans; Mexique; Rio-Sumasinta (Amér. centr.)." Restricted to "Rio Usumacinta, El Peten, Guatemala" by Schmidt (1941:488); and to "Cosamaloapam, Veracruz, Mexico" by Smith and Taylor (1950a:347, 1950b:26).

Swanka maculata Gray 1869a:182
Type locality: "Mexico...Papalco Apoia; Vera Paz" [Mexico; Guatemala]. Restricted to "Cosamaloapam, Veracruz, Mexico" by Stejneger (1941:457).

Cinosternum brevigulare Günther 1885:17 (senior homonym, not = *Cinosternum brevigulare* Cope 1885 = *Kinosternon leucostomum postinguinale*)
Type locality: "Mexico, Playa Vicente" [Veracruz].

Cinosternum cobanum Günther 1885:18, *Cinosternon cobanum*
Type locality: "Guatemala, Coban; Cahabon." Restricted to "Cobán, Alta Verapaz, Guatemala" by Smith and Taylor (1950a:317, 1950b:25).

Kinosternon mopanum Neill 1965:117
Type locality: "Waha Leaf Creek, southern Stann Creek District, British Honduras" [Belize].

Kinosternon leucostomum postinguinale Cope 1887
Southern White-lipped Mud Turtle



John B. Iverson / Turbo, Antioquia, Colombia

Colombia (Antioquia, Atlántico, Bolívar, Boyacá, Caldas, Cauca, Cesar, Chocó, Córdoba, Cundinamarca, Huila [?], Magdalena, Nariño, Santander, Sucre, Tolima, Valle del Cauca), Costa Rica, Ecuador, Nicaragua, Panama, Peru (Tumbes)

Cinosternum brevigulare Cope 1885:389 (junior homonym, not = *Cinosternum brevigulare* Günther 1885 = *Kinosternon leucostomum leucostomum*), *Cinosternon brevigulare*
Type locality: "Tierra Caliente of Costa Rica at Sipurio, on the east coast."

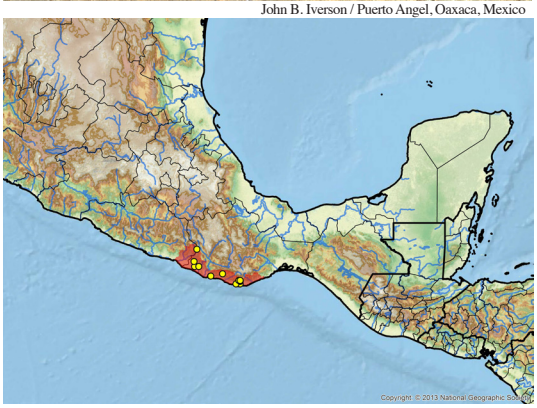
Cinosternum postinguinale Cope 1887:23 (*nomen novum*), *Kinosternon postinguinale, Kinosternon leucostomum postinguinale*
Type locality: "E. coast Costa Rica."

Cinosternum spurrelli Boulenger 1913:1030, *Kinosternon spurrelli, Kinosternon leucostomum spurrelli*
Type locality: "Choco, Colombia...Peña Lisa, Condoto, altitude 300 feet."

Kinosternon oaxacae Berry and Iverson 1980
Oaxaca Mud Turtle

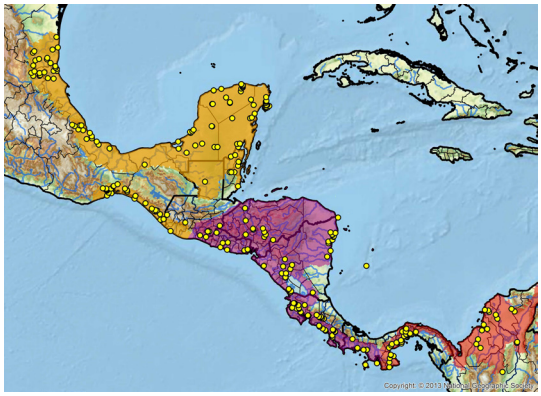


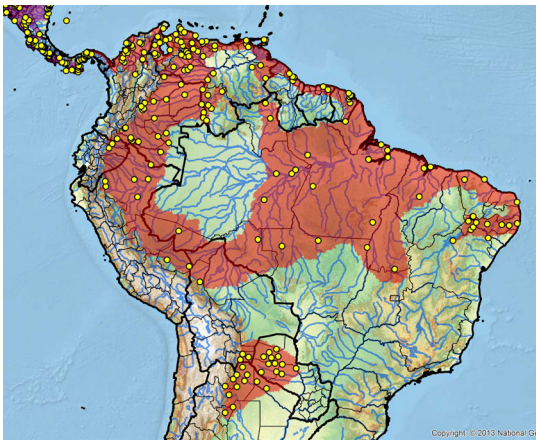
John B. Iverson / Puerto Angel, Oaxaca, Mexico



Mexico (Guerrero, Oaxaca)
IUCN Red List: Data Deficient (2007); Previously: Near Threatened (1996)
Kinosternon oaxacae Pritchard 1979:557 (*nomen suppressum,* ICZN 1985c)
Type locality: "vicinity of Pochutla, Oaxaca" [Mexico].
Kinosternon oaxacae Berry and Iverson 1980:313 (*nomen conservandum,* ICZN 1985c)
Type locality: "11.6 km N. of Pochutla (San Pedro Pochutla), along Mexican Hwy. 175 (ca. 235 m), Oaxaca, Mexico (15º46' N, 96º28' W)."

Kinosternon scorpioides (Linnaeus 1766)
Scorpion Mud Turtle





(subspecies: *scorpioides* = red, *albogulare* = purple, *cruentatum* = orange)
Argentina (Formosa, Jujuy, Salta, Tucumán), Belize, Bolivia, Brazil (Acre, Alagoas, Amapá, Amazonas, Bahia, Ceará, Goiás, Maranhão, Mato Grosso, Minas Gerais, Pará, Paraiba, Pernambuco, Piauí, Rio Grande do Norte, Rondônia, Sergipe, Tocantins), Colombia (Amazonas, Antioquia, Arauca, Atlántico, Bolívar, Caldas, Caquetá, Casanare, Cesar, Chocó, Córdoba, Guainía, Magdalena, Meta, Norte de Santander, Putumayo, San Andrés, Sucre, Vaupés, Vichada), Costa Rica, Ecuador, El Salvador, French Guiana, Guatemala, Guyana, Honduras, Mexico (Campeche, Chiapas, Oaxaca, Quintana Roo, Tabasco, Tamaulipas, Veracruz, Yucatán), Nicaragua, Panama, Paraguay, Peru (Amazonas, Huánuco, Loreto, Madre de Dios, Ucayali), Suriname, Trinidad, Venezuela (Amazonas, Apure, Aragua, Bolívar, Cojedes, Falcón, Guárico, Lara, Monagas, Portuguesa, Sucre, Táchira, Trujillo, Yaracuy, Zulia)
CBFTT Account: Berry and Iverson (2011)
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (South America regional) (2011)

Kinosternon scorpioides scorpioides (Linnaeus 1766) [(07:8)]
Scorpion Mud Turtle



Frank Deschandol / French Guiana

Argentina (Formosa, Jujuy, Salta, Tucumán), Bolivia, Brazil (Acre, Alagoas, Amapá, Amazonas, Bahia, Ceará, Goiás, Maranhão, Mato Grosso, Minas Gerais, Pará, Paraiba, Pernambuco, Piauí, Rio Grande do Norte, Rondônia, Sergipe, Tocantins), Colombia (Amazonas, Antioquia, Arauca, Atlántico, Bolívar, Caldas, Caquetá, Casanare, Cesar, Chocó, Córdoba, Guainía, Magdalena, Meta, Norte de Santander, Putumayo, Sucre, Vaupés, Vichada), Ecuador, French Guiana, Guyana, Panama, Paraguay, Peru (Amazonas, Huánuco, Loreto, Madre de Dios, Ucayali), Suriname, Trinidad, Venezuela (Amazonas, Apure, Aragua, Bolívar, Cojedes, Falcón, Guárico, Lara, Monagas, Portuguesa, Sucre, Táchira, Trujillo, Yaracuy, Zulia)

Testudo scorpioides Linnaeus 1766:352, *Emys scorpioides, Chersine scorpioides, Terrapene scorpioidea, Cinosternon scorpioidea, Kinosternon scorpioides, Uronyx scorpioides, Terrapene scorpioides, Cinosternon scorpioides, Clemmys (Cinosternon) scorpioidea, Kinosternum scorpioides, Cinosternum scorpioides, Thyrosternum scorpioides, Swanka scorpiodes, Swanka scorpioides, Cinosternum scorpioides scorpioides, Kinosternon scorpioides scorpioides*
Type locality: "Surinami" [Surinam].

Testudo tricarinata Retzius *in* Schoepff 1792:9 (senior homonym, not = *Testudo tricarinata* Bory de Saint-Vincent 1804 = *Geoemyda spengleri*), *Terrapene tricarinata, Clemmys tricarinata*
Type locality: Not known. Restricted to "Surinam" by Fritz and Havaš (2007:256).

Testudo retzii Daudin 1801:174 (*nomen novum*), *Emys retzii, Terrapene retzii*
Type locality: Not known. Restricted to "Surinam" by Fritz and Havaš (2007:256).

Kinosternon longicaudatum Spix 1824:17 (*nomen conservandum,* ICZN 1989), *Cinosternon longicaudatum, Kinosternum longicaudatum, Cinosternum longicaudatum, Thyrosternum longicaudatum, Swanka longicaudata*
Type locality: "Brasiliam...ad campis aquosis" [Brazil].

Kinosternon brevicaudatum Spix 1824:18, *Cinosternon brevicaudatum, Kinosternum brevicaudatum, Cinosternum brevicaudatum*
Type locality: "Brasiliam...ad ripam fluminis Solimöens" [Brazil].

Kinosternon shavianum Bell 1825a:302, *Cinosternon shavianum, Cinosternum shavianum, Thyrosternum shavianum*
Type locality: Not known.

Monoclida retziana Rafinesque 1832:64 (*nomen novum*), *Testudo retziana*

Cinosternon shawianum Bocourt 1876a:387 (*nomen novum*)

Cinosternum scorpioides integrum brasiliana Siebenrock 1907:579 (*unavailable name*)
Type locality: "Südamerika" [Brazil].

Kinosternon scorpioides pachyurum Müller and Hellmich 1936:100
Type locality: "Bolivien...Chaco...Villa Montes" [Bolivia].

Kinosternon scorpioides seriei Freiberg 1936:169 (07:8)
Type locality: "El Tabacal (Salta)" [Argentina].

Kinosternon panamensis Schmidt 1946:5
Type locality: "Panama Railroad, Canal Zone" [Panama].

Kinosternon scorpioides carajasensis Cunha 1970:1 (07:8)
Type locality: "compartimento da serra dos Carajás (serra Norte) Pará" [Brazil].

Kinosternon scorpioides albogulare Duméril and Bocourt 1870
White-throated Mud Turtle


John B. Iverson / CBFTT / Rio Corobizi, Guanacaste, Costa Rica

Colombia (Archipiélago de San Andrés, Providencia y Santa Catalina [prehistoric or modern introduction?]), Costa Rica, El Salvador, Honduras, Nicaragua, Panama

CBFTT Account: Forero-Medina and Castaño-Mora (2011)

Cinosternon albogulare Duméril and Bocourt 1870:24, *Cinosternum albogulare, Kinosternon cruentatum albogulare, Kinosternon scorpioides albogulare*
Type locality: "S. Jose (Costa Rica)."

Kinosternon scorpioides cruentatum Duméril and Bibron *in* Duméril and Duméril 1851
Red-cheeked Mud Turtle


John B. Iverson / CBFTT / Manuel, Tamaulipas, Mexico

Belize, Guatemala, Honduras, Mexico (Campeche, Chiapas, Oaxaca, Quintana Roo, Tamaulipas, Veracruz, Yucatán)

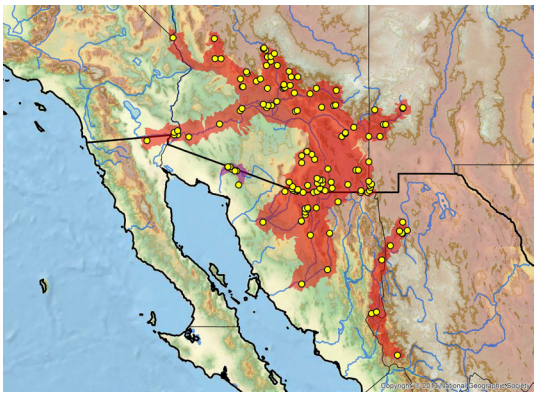
Cinosternon cruentatum Duméril and Bibron *in* Duméril and Duméril 1851:16, *Kinosternum cruentatum, Kinosternon cruentatum, Cinosternum cruentatum, Swanka cruentata, Thyrosternum cruentatum, Kinosternon cruentatum cruentatum, Kinosternon scorpioides cruentatum*
Type locality: "Amér. septentr." Restricted to "San Mateo del Mar, Oaxaca, Mexico" by Smith and Taylor (1950a:339, 1950b:23).

Kinosternum mexicanum Le Conte 1854:182, *Cinosternum mexicanum, Cinosternon mexicanum, Kinosternon mexicanum, Swanka mexicana*
Type locality: "Mexico." Restricted to "San Mateo del Mar, Oaxaca, Mexico" by Smith and Taylor (1950a:339, 1950b:23).

Kinosternum triliratum Le Conte 1860:6, *Cinosternon triliratum, Swanka trilirata, Cinosternum triliratum*
Type locality: "Mexico." Restricted to "San Mateo del Mar, Oaxaca, Mexico" by Smith and Taylor (1950a:339, 1950b:23).

Kinosternon cruentatum consors Stejneger 1941:458
Type locality: "Cozumel Island, Yucatan, Mexico."

Kinosternon sonoriense Le Conte 1854
Sonora Mud Turtle



(subspecies: *sonoriense* = red, *longifemorale* = purple)

Mexico (Baja California, Chihuahua, Sonora), USA (Arizona, California [extirpated], New Mexico)

IUCN Red List: Near Threatened (2013); Previously: Least Concern [Not Listed] (1996)

Kinosternon sonoriense sonoriense Le Conte 1854
Sonora Mud Turtle



Jeffrey E. Lovich / Montezuma Well, Yavapai Co., Arizona

Mexico (Chihuahua, Sonora), USA (Arizona, California [extirpated], New Mexico)

Kinosternum sonoriense Le Conte 1854:184, *Kinosternon sonoriense, Cinosternum sonoriense, Thyrosternum sonoriense, Cinosternon sonoriense, Kinosternon sonoriense sonoriense*
Type locality: "Tucson...province of Sonora" [Mexico; now Arizona, USA].

Kinosternum henrici Le Conte 1860:4, *Thyrosternum henrici, Cinosternon henrici, Cinosternum henrici, Swanka henrici*
Type locality: "New Mexico" [USA]. Data with holotype is "Gila River, New Mexico"; incorrectly restricted to "vicinity of Las Cruces" [New Mexico, USA] by Schmidt (1953:91).

Kinosternon sonoriense longifemorale Iverson 1981
Sonoyta Mud Turtle



John B. Iverson / Quitobaquito Springs, Organ Pipe National Monument, Arizona

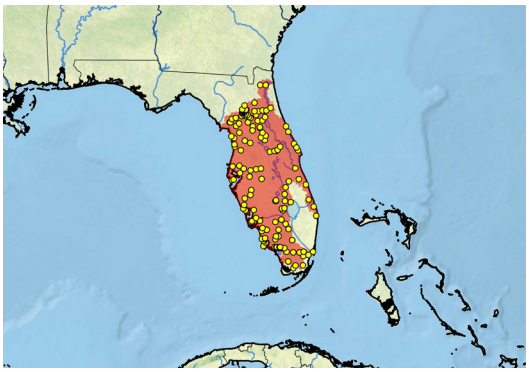
Mexico (Sonora), USA (Arizona)
TFTSG Draft Red List: Critically Endangered (2016)

Kinosternon sonoriense longifemorale Iverson 1981:43
Type locality: "artificial pond fed by springs, Sonoyta, Sonora, Mexico (31°51' N, 112°50' W)."

Kinosternon steindachneri Siebenrock 1906b (12:11, 14:12) (**12**)
Florida Mud Turtle



John B. Iverson / CRM 3 / CBFTT / Monroe Co., Florida



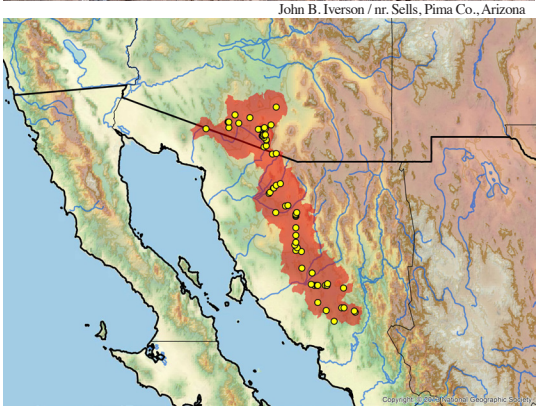
USA (Florida)
IUCN Red List: Least Concern (2013), as part of *Kinosternon subrubrum*

Cinosternum steindachneri Siebenrock 1906b:727, *Kinosternon steindachneri, Kinosternon subrubrum steindachneri*
Type locality: "Orlando in Florida" [USA].

Kinosternon stejnegeri (Hartweg 1938) (07:6, 09:10) (**13**)
[previously listed as *Kinosternon arizonense*] (07:6, 09:10)
Arizona Mud Turtle



John B. Iverson / nr. Sells, Pima Co., Arizona



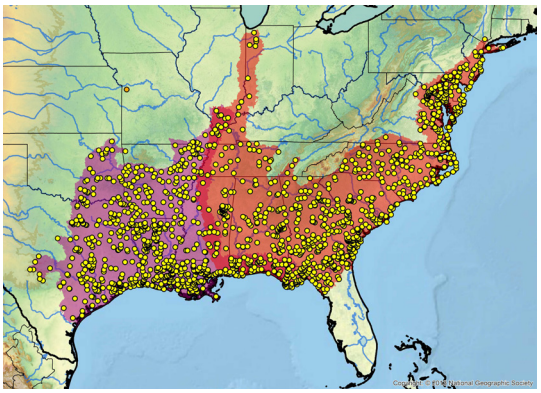
Mexico (Sonora), USA (Arizona)
IUCN Red List: Least Concern (2007), as *Kinosternon arizonense*

Kinosternon flavescens stejnegeri Hartweg 1938:1 (**12**), *Kinosternon stejnegeri*
Type locality: "Llano, Sonora...approximately midway between Nogales and Hermosillo" [Mexico].

Previously listed as *K. arizonense* (now considered distinct and extinct):

Kinosternon arizonense † Gilmore 1923:2 (07:6, 09:10) (**12**) [Pliocene–Pleistocene, USA (Arizona)], *Kinosternon flavescens arizonense*
Type locality: "Benson Locality Quarry, two miles south of Benson, Cochise County, Arizona" [USA].

Kinosternon subrubrum (Bonnaterre 1789) (09:6, 14:12)
Eastern Mud Turtle, Common Mud Turtle



(subspecies: *subrubrum* = red, *hippocrepis* = purple; overlap = intergrades; orange dot = possibly introduced)

USA (Alabama, Arkansas, Delaware, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maryland, Mississippi, Missouri, New Jersey, New York, North Carolina, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia)

IUCN Red List: Least Concern (2013); Previously: Least Concern [Not Listed] (1996)

Kinosternon subrubrum subrubrum (Bonnaterre 1789) (09:6)
Eastern Mud Turtle



Richard D. Bartlett / Apalachicola National Forest, Florida

USA (Alabama, Delaware, Florida, Georgia, Illinois, Indiana, Kentucky, Maryland, Mississippi, New Jersey, New York, North Carolina, Pennsylvania, South Carolina, Tennessee, Virginia)

Testudo subrubra Lacepède 1788:132, synopsis[table] (09:6) (*nomen suppressum*, ICZN 2005a)
Type locality: "Pensylvanie" [USA]. Restricted to "vicinity of Philadelphia" [Pennsylvania, USA] by Schmidt (1953:90).

Testudo subrubra Bonnaterre 1789:27, *Kinosternon subrubrum, Kinosternon subrubrum subrubrum*

Testudo pensilvanica Gmelin 1789:1042, *Emydes pensilvanica, Kinosternon pensilvanicum, Cinosternum pensilvanicum*
Type locality: "Pensilvaniae aquis stagnantibus" [USA]. Restricted to "vicinity of Philadelphia" [Pennsylvania, USA] by Schmidt (1953:90).

Emys pensylvanica Schweigger 1812:282 (*nomen novum*), *Terrapene pensylvanica, Cistuda pensylvanica, Sternotherus pensylvanica, Kinosternum pensylvanicum, Cinosternon pensylvanicum, Clemmys (Cinosternon) pensylvanica, Kinosternon pensylvanicum, Cinosternum pensylvanicum*

Kinosternon pennsylvanicum Bell 1825a:304 (*nomen novum*), *Emys (Kinosternon) pennsylvanica, Kinosternum pennsylvanicum, Cinosternon pennsylvanicum, Cinosternum pennsylvanicum, Cistudo pennsylvanica, Terrapene pennsylvanica, Thyrosternum pennsylvanicum*

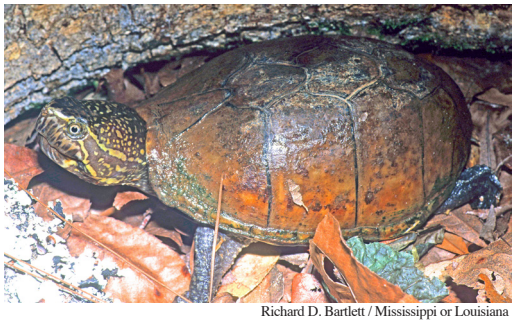
Kinosternon (Kinosternon) doubledayii Gray 1844:33, *Kinosternon doubledayii, Kinosternum doubledayii, Cinosternum doubledayii, Cinosternon doubledayii*
Type locality: "California" [in error]. Restricted to "vicinity of Philadelphia" [Pennsylvania, USA] by Schmidt (1953:90).

Kinosternon (Kinosternon) oblongum Gray 1844:33, *Kinosternon oblongum, Cinosternum oblongum*
Type locality: "America." Restricted to "vicinity of Philadelphia" [Pennsylvania, USA] by Schmidt (1953:90).

Kinosternon punctatum Gray 1856a:198, *Cinosternum punctatum*
Type locality: "North America." Restricted to "East Florida" [USA] by Gray (1856b:46).

Swanka fasciata Gray 1869a:183
Type locality: Not known. Restricted to "vicinity of Philadelphia" [Pennsylvania, USA] by Schmidt (1953:90).

Kinosternon subrubrum hippocrepis Gray 1856a (14)
Mississippi Mud Turtle



Richard D. Bartlett / Mississippi or Louisiana

USA (Arkansas, Louisiana, Mississippi, Missouri, Oklahoma, Texas)

Kinosternon hippocrepis Gray 1856a:198 (13), *Cinosternum hippocrepis, Cinosternon hippocrepis, Kinosternon subrubrum hippocrepis*
Type locality: "North America; New Orleans" [Louisiana, USA].

Kinosternon louisianae Baur 1893c:676, *Cinosternum louisianae*
Type locality: "New Orleans, La." [Louisiana, USA].

Sternotherus Bell *in* Gray 1825 (07:9) (10)

Sternothaerus Bell 1825a:305 (*partim, nomen suppressum*, ICZN 1989)
Type species: *Sternothaerus leachianus* Bell 1825a [= subjective synonym of *Emys castanea* Schweigger 1812 = *Pelusios castaneus*], by subsequent designation by Bell (1828c:515); not *Sternothaerus odoratus* Bell [= *Testudo odorata* Latreille *in* Sonnini and Latreille 1801], by subsequent incorrect designation by Fitzinger (1843:290).

Sternotherus Bell *in* Gray 1825:211 [Bell 1825b] (*nomen conservandum*, ICZN 1989)
Type species: *Sternotherus odoratus* [= *Testudo odorata* Latreille *in* Sonnini and Latreille 1801], by subsequent designation by Stejneger (1902:237).

Aromochelys Gray 1856a:199
Type species: *Aromochelys odorata* [= *Testudo odorata* Latreille *in* Sonnini and Latreille 1801], by subsequent designation by Strauch (1862:38).

Ozotheca Agassiz 1857a:251,424
Type species: *Ozotheca odorata* [= *Testudo odorata* Latreille *in* Sonnini and Latreille 1801], by subsequent designation by Lindholm (1929:277).

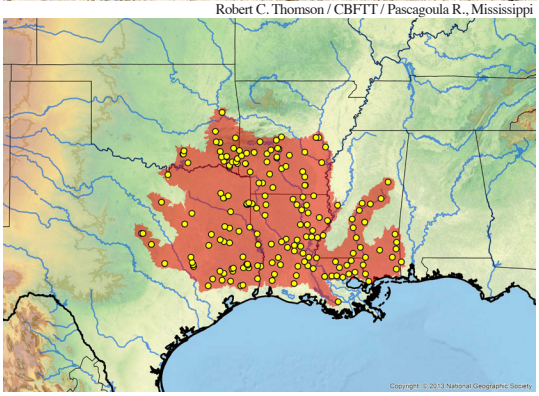
Goniochelys Agassiz 1857a:420,423

Type species: *Goniochelys triquetra* Agassiz 1857a [= subjective synonym of *Aromochelys carinata* Gray 1856a], by subsequent designation by Lindholm (1929:277).

Sternotherus carinatus (Gray 1856a)
Razor-backed Musk Turtle



Robert C. Thomson / CBFTT / Pascagoula R., Mississippi



USA (Alabama, Arkansas, Louisiana, Mississippi, Oklahoma, Texas)

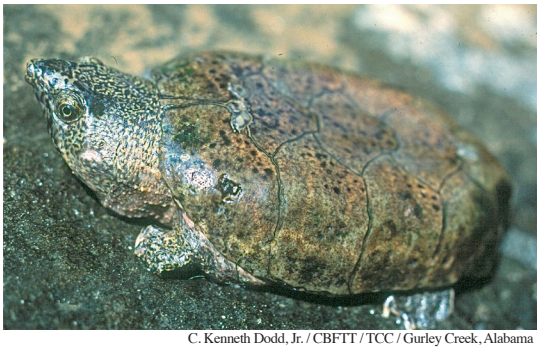
CBFTT Account: Lindeman (2008)

IUCN Red List: Least Concern (2013); Previously: Least Concern [Not Listed] (1996)

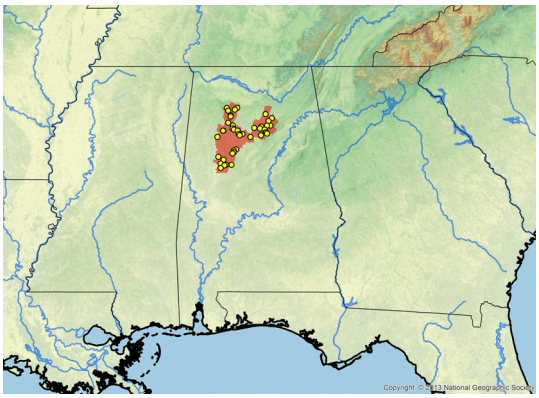
Aromochelys carinata Gray 1856a:199, *Aromochelys carinatum, Aromochelys carinatus, Goniochelys carinata, Cinosternum carinata, Kinosternon carinatum, Sternotherus carinata, Sternotherus carinata carinata, Kinosternon carinata*
Type locality: "North America, Louisiana" [USA]. Restricted to "vicinity of New Orleans" [Louisiana, USA] by Schmidt (1953:87).

Goniochelys triquetra Agassiz 1857a:420,423
Type locality: "Lake Concordia, in Louisiana" [USA].

Sternotherus depressus Tinkle and Webb 1955 (07:10) (**15**)
Flattened Musk Turtle



C. Kenneth Dodd, Jr. / CBFTT / TCC / Gurley Creek, Alabama



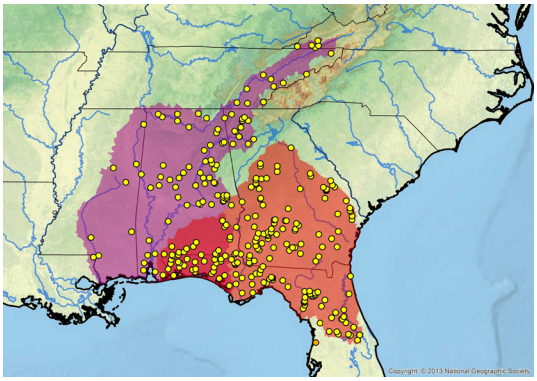
USA (Alabama)

CBFTT Account: Dodd (2008)

IUCN Red List: Critically Endangered A2bce+4bce (2013); Previously: Vulnerable (1996)

Sternotherus depressus Tinkle and Webb 1955:53, *Sternothaerus depressus, Sternotherus minor depressus, Kinosternon depressum, Kinosternon depressus*
Type locality: "Mulberry Fork of the Black Warrior River, 9 miles east of Jasper, Walker County, Alabama, near the bridge crossing of U.S. highway 78" [USA].

Sternotherus minor (Agassiz 1857a)
Loggerhead Musk Turtle

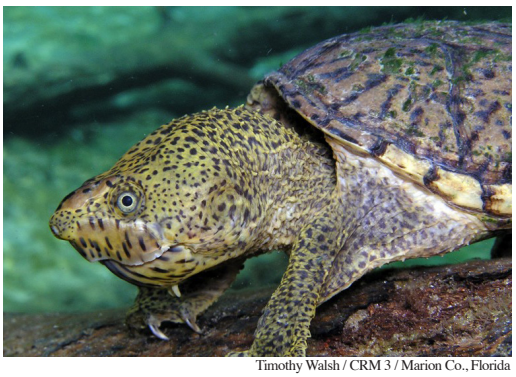


(subspecies: *minor* = red, *peltifer* = purple; overlap = intergrades; orange dot = introduced)

USA (Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, Tennessee, Virginia)

IUCN Red List: Least Concern (2013); Previously: Least Concern [Not Listed] (1996)

Sternotherus minor minor (Agassiz 1857a)
Loggerhead Musk Turtle



Timothy Walsh / CRM 3 / Marion Co., Florida

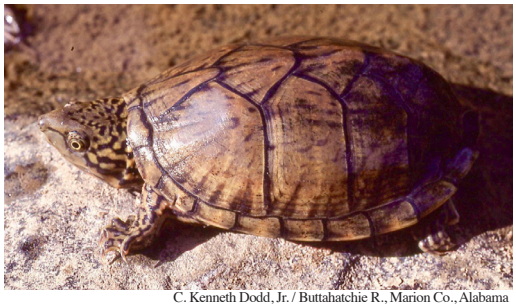
USA (Alabama, Florida, Georgia)

Goniochelys minor Agassiz 1857a:424, *Aromochelys minor, Sternotherus minor, Sternotherus carinatus minor, Sternotherus minor minor, Sternothaerus minor minor, Kinosternon minor, Kinosternon minor minor*

Type locality: "neighborhood of Mobile;...Columbus, Georgia;...and New Orleans" [USA]. Restricted to "Columbus, Georgia" [USA] by Schmidt (1953:88).

Sternotherus minor peltifer Smith and Glass 1947 [16]

Stripe-necked Musk Turtle



C. Kenneth Dodd, Jr. / Buttahatchie R., Marion Co., Alabama

USA (Alabama, Georgia, Kentucky, Mississippi, Tennessee, Virginia)

Sternotherus peltifer Smith and Glass 1947:22, *Sternotherus carinatus peltifer, Sternotherus minor peltifer, Sternothaerus minor peltifer, Kinosternon minor peltifer*

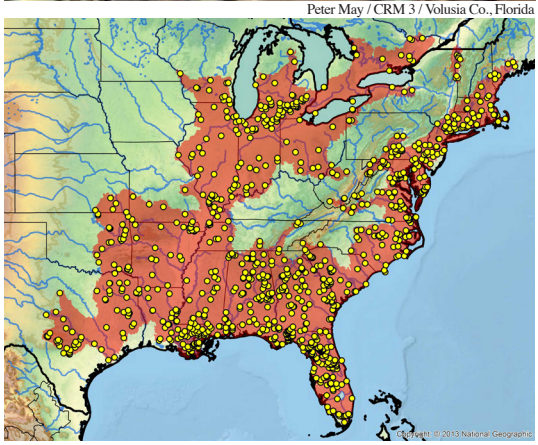
Type locality: "Bassfield, Jefferson Davis County, 30 miles west of Hattiesburg, Miss." [Mississippi, USA].

Sternotherus odoratus (Latreille *in* Sonnini and Latreille 1801)

Musk Turtle, Stinkpot, Common Musk Turtle



Peter May / CRM 3 / Volusia Co., Florida



Canada (Ontario, Québec), USA (Alabama, Arkansas, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, West Virginia, Wisconsin)

IUCN Red List: Least Concern (2011); Previously: Least Concern [Not Listed] (1996)

Testudo odorata Latreille *in* Sonnini and Latreille 1801:122 (*nomen conservandum*, ICZN 1989), *Emys odorata, Terrapene odorata, Cistuda odorata, Sternotherus odorata, Sternothaerus odoratus, Kinosternum odoratum, Emys (Kinosternon) odoratum, Kinosternon odoratum, Didicla odorata, Staurotypus odoratus, Clemmys (Sternothaerus) odorata, Cistudo odorata, Sternotherus odoratus, Aromochelys odorata, Aromochelys odoratum, Cinosternum odoratum, Ozotheca odorata*

Type locality: "les eaux dormantes de la Caroline" [USA]. Restricted to "vicinity of Charleston, South Carolina" [USA] by Schmidt (1953:87).

Testudo glutinata Daudin 1801:194, *Emys glutinata, Clemmys glutinata*

Type locality: "les Etats-Unis d'Amérique" [USA]. Restricted to "vicinity of Lancaster, Pennsylvania" [USA] by Schmidt (1953:87).

Terrapene boscii Merrem 1820:27, *Sternothaerus boscii*

Type locality: "America septentrionali." Restricted to "vicinity of Philadelphia" [Pennsylvania, USA] by Schmidt (1953:87).

Kinosternum guttatum Le Conte 1854:185, *Cinosternum guttatum, Aromochelys guttata*

Type locality: "Pennsylvania" [USA]. Restricted to "vicinity of Philadelphia" [Pennsylvania, USA] by Schmidt (1953:87).

Ozotheca tristycha Agassiz 1857a:392,425, *Aromochelys tristycha*

Type locality: "Osage River, in Missouri, and in Williamson County, in Texas...near San Antonio,...Medina River, in Texas" [USA]. Restricted to "San Antonio" [Texas, USA] by Schmidt (1953:87).

Testudo glutinosa Agassiz 1857a:425 (*nomen novum*), *Emys glutinosa*

STAUROTYPINAE Gray 1869a [14:13] or STAUROTYPIDAE

Staurotypina Gray 1869a:180

Staurotypinae Siebenrock 1907:531

Staurotypidae Bickham and Carr 1983:925

Claudius Cope 1865

Claudius Cope 1865:187

Type species: *Claudius angustatus* Cope 1865, by original monotypy.

Staurosternon Duméril *in* Bocourt 1868:122

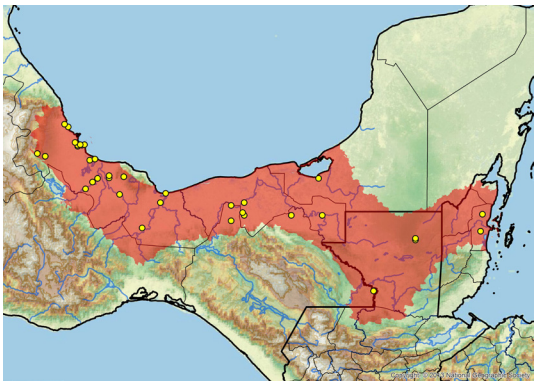
Type species: *Claudius megalocephalus* Bocourt 1868 [= subjective synonym of *Claudius angustatus* Cope 1865], by original monotypy.

Claudius angustatus Cope 1865

Narrow-bridged Musk Turtle



John B. Iverson / Hattieville, Belize Dist., Belize



Belize, Guatemala, Mexico (Campeche, Chiapas, Oaxaca, Quintana Roo, Tabasco, Veracruz)
IUCN Red List: Near Threatened (1996)

Claudius angustatus Cope 1865:187, *Claudius angustatum*
Type locality: "Tabasco, Mexico."

Claudius megalocephalus Bocourt 1868:122
Type locality: "Mexico." Restricted to "Tabasco, Mexico" by Smith and Taylor (1950a:345).

Claudius macrocephalus Gray 1873d:69 (*nomen novum*)

Claudius megacephalus Boulenger 1889:33 (*nomen novum*)

Claudius agassizii Smith and Taylor 1950a:345 (*nomen nudum*)

Staurotypus Wagler 1830b

Staurotypus Wagler 1830b:137
Type species: *Staurotypus triporcata* [= *Terrapene triporcata* Wiegmann 1828], by original monotypy.

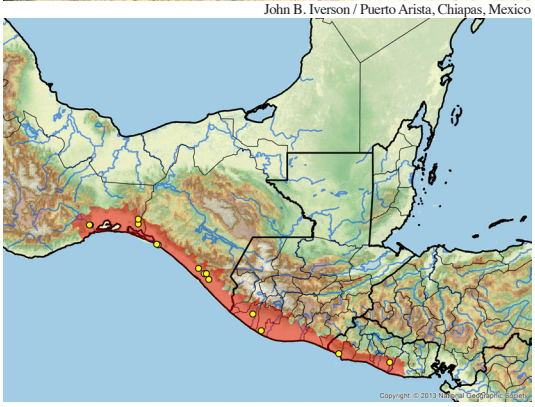
Stauremys Gray 1864c:127
Type species: *Staurotypus (Stauremys) salvinii* Gray 1864c, by original monotypy.

Staurotypus salvinii Gray 1864c

Pacific Coast Giant Musk Turtle



John B. Iverson / Puerto Arista, Chiapas, Mexico



El Salvador, Guatemala, Mexico (Chiapas, Oaxaca)
Introduced: USA (Florida)
IUCN Red List: Near Threatened (1996)

Staurotypus (Stauremys) salvinii Gray 1864c:127, *Stauremys salvinii, Staurotypus salvinii*
Type locality: "Haumanchal, Guatemala" [= Huamúchil, Oaxaca, Mexico].

Staurotypus marmoratus Fischer 1872:265
Type locality: "Mexico, Tejas." Restricted to "Santa Efigenia, Oaxaca, Mexico" by Smith and Taylor (1950a:339, 1950b:27).

Claudius severus Cope 1872:24, *Staurotypus (Claudius) severus*
Type locality: "Santa Efigenia, on the western side of the Isthmus of Tehuantepec, Mexico."

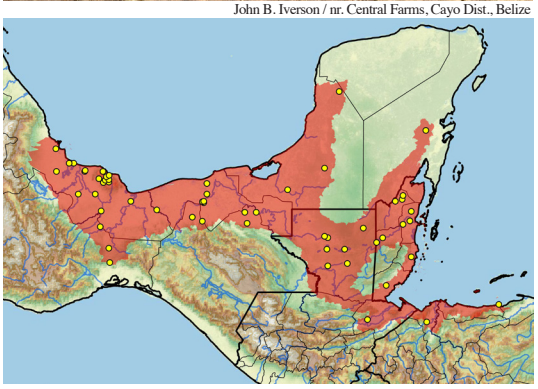
Staurotypus biporcatus Gadow 1905:209 (*nomen nudum*)

Staurotypus triporcatus (Wiegmann 1828)

Northern Giant Musk Turtle



John B. Iverson / nr. Central Farms, Cayo Dist., Belize



Belize, Guatemala, Honduras, Mexico (Campeche, Chiapas, Oaxaca, Quintana Roo, Tabasco, Veracruz)
IUCN Red List: Near Threatened (1996)

Terrapene triporcata Wiegmann 1828:364, *Staurotypus triporcata, Staurotypus triporcatus, Staurotypus (Staurotypus) triporcatus, Emys (Kinosternon) triporcata, Kinosternon triporcatum, Clemmys (Staurotypus) triporcata*
Type locality: "Rio Alvarado" [Veracruz, Mexico].

Claudius pictus Cope 1872:26
Type locality: "Vera Paz" [Guatemala]. Emended to "Alta Verapaz" [Guatemala] by Smith and Taylor (1950a:317, 1950b:27); and to "a tributary of the Rio Polochic...Alta Verapaz, Guatemala" by Dunn and Stuart (1951:59).

TESTUDINOIDEA Fitzinger 1826

Testudinoidea Fitzinger 1826:5

EMYDIDAE Rafinesque 1815 (09:12) (17)

Emidania Rafinesque 1815:75
Emydes Schmid 1819:11
Emydidae Bell 1825a:302
Emydae Swainson 1839:113
Emididi Portis 1890:12

DEIROCHELYINAE Agassiz 1857a (09:12) (17)

Deirochelyoidae Agassiz 1857a:355
Deirochelyinae Gaffney and Meylan 1988:201

Chrysemys Gray 1844 (12:12)

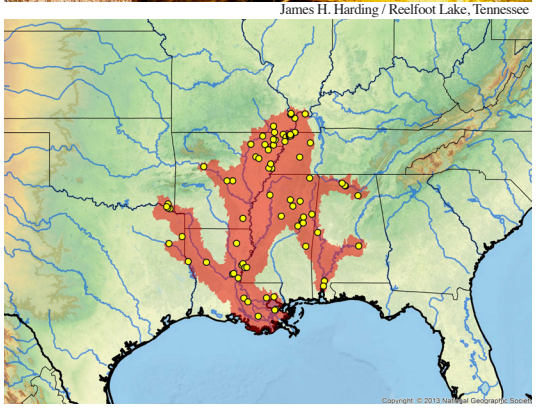
Hydrochelys Wagler 1821:12 (12:12) (*nomen oblitum*)
Type species: *Hydrochelys picta* [= *Testudo picta* Schneider 1783], by original monotypy.
Chrysemys Gray 1844:27
Type species: *Emys* (*Chrysemys*) *picta* Schweigger [= *Testudo picta* Schneider 1783], by subsequent designation by Brown (1908:114).

Chrysemys dorsalis Agassiz 1857a (07:11, 10:6) (18) or *Chrysemys picta dorsalis*

Southern Painted Turtle



James H. Harding / Reelfoot Lake, Tennessee

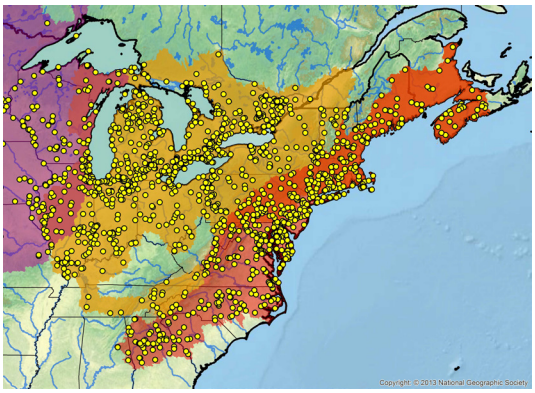


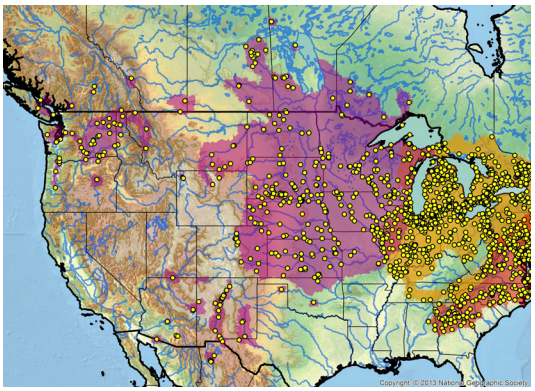
USA (Alabama, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, Oklahoma, Tennessee, Texas)
Introduced: USA (Florida)
IUCN Red List: Least Concern (2013), as *Chrysemys picta dorsalis*

Chrysemys dorsalis Agassiz 1857a:439,440 (07:11, 10:6), *Clemmys picta dorsalis, Chrysemys cinerea dorsalis, Chrysemys marginata dorsalis, Chrysemys bellii dorsalis, Chrysemys picta dorsalis*
Type locality: "Mississippi and Louisiana...Lake Concordia" [USA]. Restricted to "vicinity of New Orleans" [Louisiana, USA] by Schmidt (1953:100), but see Ernst (1967:133).

Chrysemys picta (Schneider 1783) (07:11, 10:6, 12:13) (18)

Painted Turtle





(subspecies: *picta* = red, *bellii* = purple, *marginata* = orange; overlap = intergrades)
Canada (Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia, Ontario, Québec, Saskatchewan), Mexico (Chihuahua), USA (Alabama, Arizona, Colorado, Connecticut, Delaware, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming)
Introduced: Germany, Indonesia, Philippines, Spain, USA (California)
IUCN Red List: Least Concern (2013); Previously: Least Concern [Not Listed] (1996)

Chrysemys picta picta (Schneider 1783) (07:11, 12:13)
Eastern Painted Turtle


Anders G.J. Rhodin / Acadia National Park, Bar Harbor, Mt. Desert Island, Maine

Canada (New Brunswick, Nova Scotia, Québec), USA (Alabama, Connecticut, Delaware, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia)

Testudo picta Schneider 1783:348, *Emys picta, Clemmys picta, Terrapene picta, Emys (Chrysemys) picta, Chrysemys picta, Chrysemys picta picta, Pseudemys picta*
Type locality: "England" [in error]. Restricted to "Lancaster, Pennsylvania" [USA] by Mittleman (1945:171); and to "vicinity of New York City" [New York, USA] by Schmidt (1953:99) [in error according to Smith and Smith (1980:424)].

Testudo cinerea Bonnaterre 1789:25, *Emys cinerea, Chrysemys cinerea, Chrysemys cinerea cinerea*
Type locality: Not known. Restricted to "vicinity of Philadelphia" [Pennsylvania, USA] by Schmidt (1953:99).

Chrysemys picta bellii (Gray 1830e) (10:7) (**18**)
Western Painted Turtle


John B. Iverson / Oshkosh, Garden Co., Nebraska

Canada (Alberta, British Columbia, Manitoba, Ontario, Saskatchewan), Mexico (Chihuahua), USA (Arizona, Colorado, Idaho, Illinois, Iowa, Kansas, Michigan, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, Wisconsin, Wyoming)

Emys bellii Gray 1830e:12 (10:7), *Clemmys (Clemmys) bellii, Emys (Chrysemys) bellii, Chrysemys bellii, Emys bellii, Chrysemys cinerea bellii, Chrysemys marginata bellii, Chrysemys bellii bellii, Chrysemys picta bellii*
Type locality: Not known. Restricted to "West coast of North America; British Columbia" by Gray (1873a:147); to "Manhattan, Kans." [Kansas, USA] by Smith and Taylor (1950b:34); and to "Puget Sound, Washington" [USA] by Schmidt (1953:100).

Emys oregoniensis Harlan 1837:382, *Chrysemys oregoniensis, Clemmys oregoniensis, Chrysemys oregonensis*
Type locality: "fresh water ponds in the vicinity of the Oregon or Columbia River" [Oregon, USA].

Chrysemys nuttalii Agassiz 1857a:451 (*nomen nudum*)

Chrysemys nuttalii Agassiz 1857b:642 (*nomen novum*)
Type locality: "Minesota and westward to the junction of the Yellowstone and Missouri" [Minnesota, USA].

Chrysemys pulchra Gray 1873a:147
Type locality: "North America, Mississippi" [USA]. Restricted to "upper Mississippi River" [USA] by Schmidt (1953:100).

Chrysemys timida Hay † 1908b:345 [Pleistocene, USA (Nebraska)]
Type locality: "Equus beds of Sheridan County, Nebraska, not far from the Niobrara River" [USA].

Chrysemys treleasei Hurter 1911:235
Type locality: "east side of the Mississippi River, in Madison, St. Clair, and Monroe Counties, Ill." [Illinois, USA].

Chrysemys picta marginata Agassiz 1857a
Midland Painted Turtle


Scott D. Gillingwater / Long Point, Norfolk Co., Ontario, Canada

Canada (Ontario, Québec), USA (Alabama, Illinois, Indiana, Kentucky, Michigan, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Vermont, Virginia, West Virginia)

Chrysemys marginata Agassiz 1857a:262,439, *Clemmys marginata, Chrysemys marginata marginata, Chrysemys bellii marginata, Chrysemys picta marginata*
Type locality: "Racine, Wisconsin...Milwaukee, Wisconsin...Flint, Michigan...Ann-Arbor, Michigan...Delphi, Indiana...Burlington, Iowa" [USA]. Restricted to "northern Indiana" [USA] by Schmidt (1953:99).

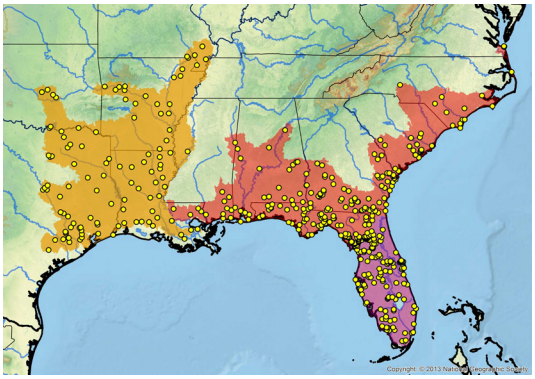
Deirochelys Agassiz 1857a

Deirochelys Agassiz 1857a:252,441

Type species: *Deirochelys reticulata* Schweigger [= *Testudo reticulata* Daudin 1801 = objective synonym of *Testudo reticularia* Latreille *in* Sonnini and Latreille 1801], by original monotypy.

Hirochelys Beyer 1900:21 (*nomen novum*)

Deirochelys reticularia (Latreille *in* Sonnini and Latreille 1801)
Chicken Turtle



(subspecies: *reticularia* = red, *chrysea* = purple, *miaria* = orange)

USA (Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Texas, Virginia)

CBFTT Account: Buhlmann, Gibbons, and Jackson (2008)

IUCN Red List: Least Concern [Not Listed] (1996)

TFTSG Draft Red List: Near Threatened (2011)

Deirochelys reticularia reticularia (Latreille *in* Sonnini and Latreille 1801)
Eastern Chicken Turtle



Kurt A. Buhlmann / Virginia

USA (Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Virginia)

Testudo reticularia Latreille *in* Sonnini and Latreille 1801:124, *Emys reticularia, Clemmys reticularia, Deirochelys reticularia, Deirochelys reticularia reticularia*

Type locality: "Caroline" [USA]. Restricted to "Charleston" [South Carolina, USA] by Harper (1940:711); to "vicinity of Charleston, South Carolina" [USA] by Schmidt (1953:104); and to "9 miles northwest of Charleston, Charleston County, South Carolina" [USA] by neotype designation by Schwartz (1956a:466).

Testudo reticulata Daudin 1801:144 (*nomen novum*), *Emys reticulata, Clemmys (Clemmys) reticulata, Deirochelys reticulata, Hirochelys reticulata, Chrysemys reticulata, Chrysemys reticulatus*

Type locality: "Caroline" [USA]. Restricted to "vicinity of Charleston, South Carolina" [USA] by Schmidt (1953:104).

Deirochelys reticularia chrysea Schwartz 1956a
Florida Chicken Turtle



Barry Mansell / CRM 3 / Glades Co., Florida

USA (Florida)

Deirochelys reticularia chrysea Schwartz 1956a:476

Type locality: "5.8 miles east of Monroe Station, Collier County, Florida" [USA].

Deirochelys reticularia miaria Schwartz 1956a
Western Chicken Turtle



John L. Carr / Ouachita Parish, Louisiana

USA (Arkansas, Louisiana, Mississippi, Missouri, Oklahoma, Texas)

Deirochelys reticularia miaria Schwartz 1956a:486

Type locality: "College Station, Brazos County, Texas" [USA].

Graptemys Agassiz 1857a [12:14, 14:14] [19]

Graptemys Agassiz 1857a:252,436

Type species: *Graptemys geographica* [= *Testudo geographica* LeSueur 1817], by subsequent designation by Stejneger and Barbour (1917:117).

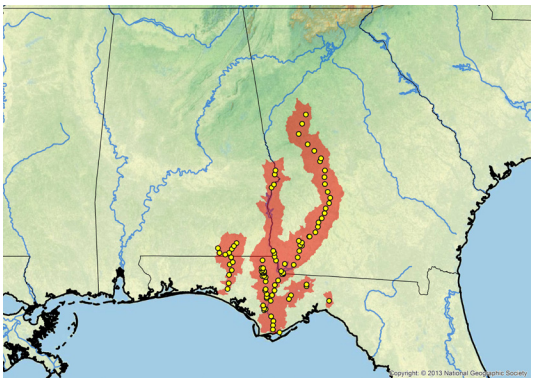
Neoclemmys Baur *in* Lindeman 2013:20 (*nomen nudum*)

Megaloclemmys Baur *in* Lindeman 2013:20 (*nomen nudum*)

Graptemys barbouri Carr and Marchand 1942 [19, 21]
Barbour's Map Turtle



David Dennis / CRM 3 / Florida

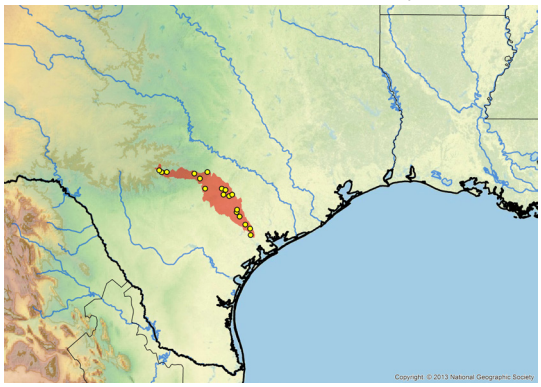


USA (Alabama, Florida, Georgia)
IUCN Red List: Vulnerable A2bcde (2013); Previously: Near Threatened (1996)
CITES: Appendix III (USA), as *Graptemys* spp.
Graptemys barbouri Carr and Marchand 1942:98, *Malaclemys barbouri*
Type locality: "Chipola River north of Marianna, Jackson County, Florida" [USA].

Graptemys caglei Haynes and McKown 1974 [19,20]
Cagle's Map Turtle



John B. Iverson / Texas

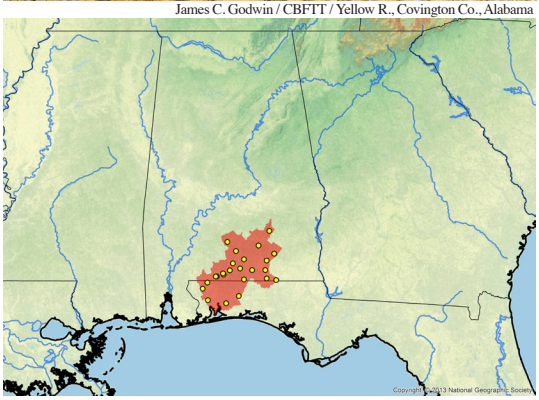


USA (Texas)
IUCN Red List: Endangered A2c+4c; B2ab(iii) (2013); Previously: Vulnerable (1996)
CITES: Appendix III (USA), as *Graptemys* spp.
Graptemys caglei Haynes and McKown 1974:143
Type locality: "Guadalupe River, 8 km NW Cuero, DeWitt Co., Texas" [USA].

Graptemys ernsti Lovich and McCoy 1992 [19,21]
Escambia Map Turtle



James C. Godwin / CBFTT / Yellow R., Covington Co., Alabama



USA (Alabama, Florida)
CBFTT Account: Lovich, Godwin, and McCoy (2011)
IUCN Red List: Near Threatened (2013); Previously: Near Threatened (1996)
CITES: Appendix III (USA), as *Graptemys* spp.
Graptemys ernsti Lovich and McCoy 1992:300, *Graptemys pulchra ernsti*
Type locality: "Conecuh River, 1 mile upstream from County Road 4 Bridge, 14 km east of East Brewton, Escambia County, Alabama, USA."

Graptemys flavimaculata Cagle 1954 [14:15] [19]
Yellow-blotched Map Turtle, Yellow-blotched Sawback



Peter V. Lindeman / Merrill, Mississippi



USA (Mississippi)

CBFTT Account: Selman and Jones (2011)

IUCN Red List: Vulnerable A2bce+4ce (2013); Previously: Endangered (1996)

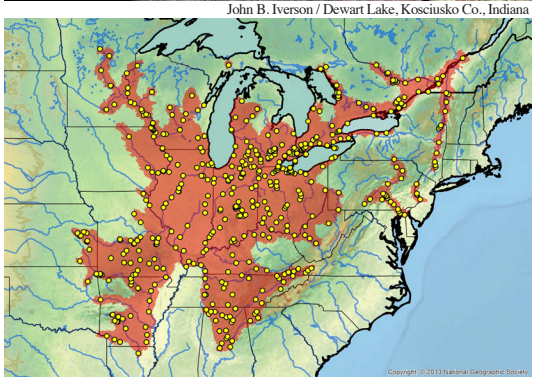
CITES: Appendix III (USA), as *Graptemys* spp.

Graptemys flavimaculata Cagle 1954:167, *Graptemys oculifera flavimaculata, Malaclemys flavimaculata*
Type locality: "Pascagoula River, 13 miles S.W. of Lucedale, George Co., Mississippi" [USA]. Emended to "Pascagoula River at Old Benndale Crossing (T3S, R8W, Sec. 1), George County" [Mississippi, USA] by Cliburn (1971:17).

Graptemys geographica (LeSueur 1817) (08:18, 12:14) (**19**)
Northern Map Turtle, Common Map Turtle



John B. Iverson / Dewart Lake, Kosciusko Co., Indiana



Canada (Ontario, Québec), USA (Alabama, Arkansas, Delaware, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Tennessee, Vermont, Virginia, West Virginia, Wisconsin)

IUCN Red List: Least Concern (2013); Previously: Least Concern [Not Listed] (1996)

CITES: Appendix III (USA), as *Graptemys* spp.

Testudo geographica LeSueur 1817:86, *Emys geographica, Terrapene geographica, Clemmys (Clemmys) geographica, Clemmys geographica, Graptemys geographica, Malacoclemmys geographica, Malacoclemmys geographicus, Malaclemys geographica, Malaclemys geographicus, Malaclemmys geographicus, Graptemys geographicus*
Type locality: "marsh, on the borders of Lake Erie" [USA]. Restricted to "peninsula of Presque Isle and adjacent Presque Isle Bay in Erie County, Pennsylvania" [USA] by Lindeman (2009:97).

Emys lesueurii Gray 1830e:12 (08:18, 10:7), *Graptemys lesueurii, Malacoclemmys lesueurii, Malaclemys lesueurii, Malaclemys lesueurii lesueurii*
Type locality: "North America."

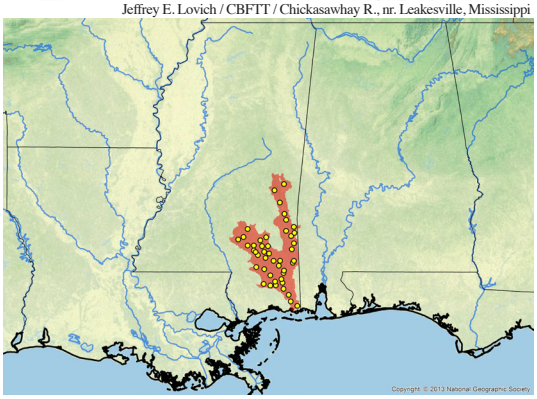
Emys megacephala Holbrook 1836:51
Type locality: "Cumberland river...[&]...in the neighbourhood of Nashville, Tennessee" [USA].

Emys macrocephala Agassiz 1857a:436 (*nomen novum*)

Graptemys gibbonsi Lovich and McCoy 1992 (10:8) (**19**)
Pascagoula Map Turtle



Jeffrey E. Lovich / CBFTT / Chickasawhay R., nr. Leakesville, Mississippi



USA (Mississippi)

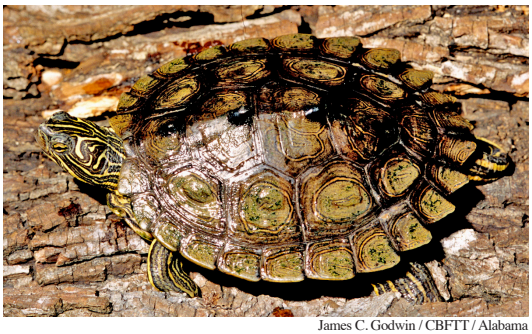
CBFTT Account: Lovich, Selman, and McCoy (2009)

IUCN Red List: Endangered A2bce+4ce (2013); Previously: Near Threatened (1996)

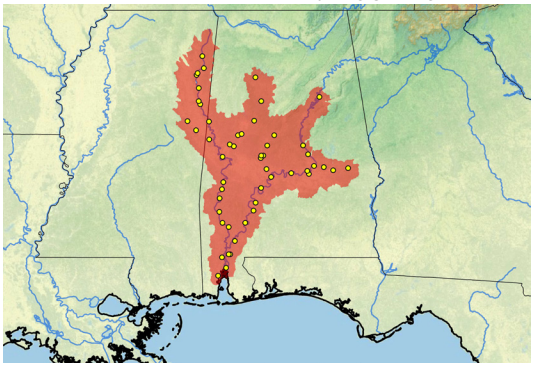
CITES: Appendix III (USA), as *Graptemys* spp.

Graptemys gibbonsi Lovich and McCoy 1992:302, *Graptemys pulchra gibbonsi*
Type locality: "Chickasawhay River, Leakesville, Greene Co., Mississippi, USA."

Graptemys nigrinoda Cagle 1954 [19,22]
Black-knobbed Map Turtle, Black-knobbed Sawback

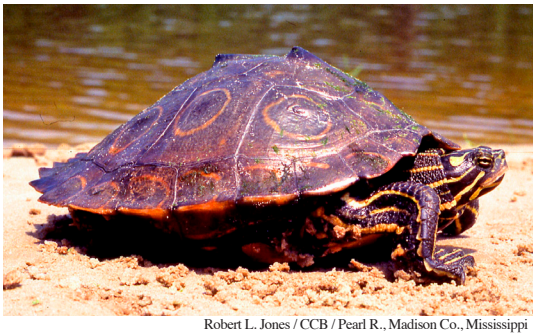


James C. Godwin / CBFTT / Alabama

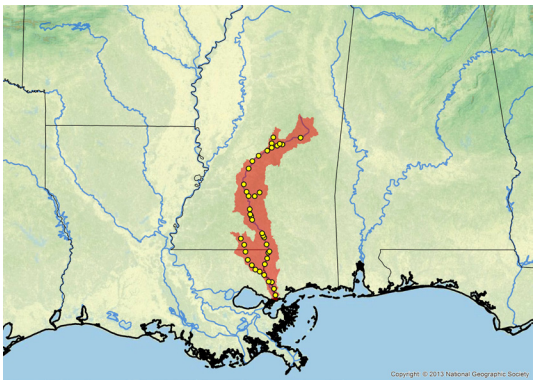


USA (Alabama, Mississippi)
CBFTT Account: Blankenship, Butterfield, and Godwin (2008)
IUCN Red List: Least Concern (2013); Previously: Near Threatened (1996)
CITES: Appendix III (USA), as *Graptemys* spp.
Graptemys nigrinoda Cagle 1954:173 [22], *Graptemys oculifera nigrinoda, Graptemys nigrinoda nigrinoda, Malaclemys nigrinoda*
Type locality: "Black Warrior River, above Lock 9, 17.5 miles SSW of Tuscaloosa, Tuscaloosa County, Alabama" [USA].
Graptemys nigrinoda delticola Folkerts and Mount 1969:677 [22]
Type locality: "Hubbard's Landing on Tensaw Lake, 2.6 air miles SW of Latham, Baldwin County, Alabama" [USA].

Graptemys oculifera (Baur 1890a) [19]
Ringed Map Turtle, Ringed Sawback



Robert L. Jones / CCB / Pearl R., Madison Co., Mississippi

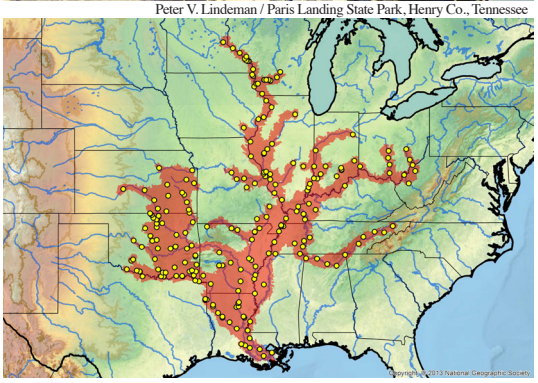


USA (Louisiana, Mississippi)
CBFTT Account: Jones and Selman (2009)
IUCN Red List: Vulnerable B2ab(iii) (2013); Previously: Endangered (1996)
CITES: Appendix III (USA), as *Graptemys* spp.
Malacoclemmys oculifera Baur 1890a:262, *Graptemys oculifera, Malaclemys lesueurii oculifera, Graptemys pseudogeographica oculifera, Graptemys oculifera oculifera, Malaclemys oculifera*
Type locality: "Mandeville, La." [Louisiana, USA]. Emended to "Pearl River, 26 miles east of Mandeville" [Louisiana, USA] by Cagle (1953b:138).

Graptemys ouachitensis Cagle 1953a [12:14, 12:15, 14:16] [19] **or**
Graptemys ouachitensis ouachitensis
Ouachita Map Turtle



Peter V. Lindeman / Paris Landing State Park, Henry Co., Tennessee

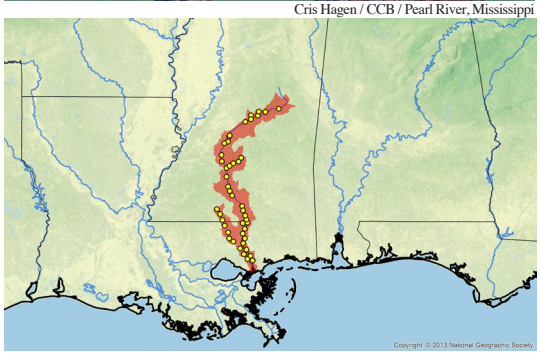


USA (Alabama, Arkansas, Georgia (?), Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Ohio, Oklahoma, Tennessee, Texas, West Virginia, Wisconsin)
IUCN Red List: Least Concern (2013); Previously: Least Concern [Not Listed] (1996)
CITES: Appendix III (USA), as *Graptemys* spp.

Graptemys pseudogeographica ouachitensis Cagle 1953a:10, *Malaclemys pseudogeographica ouachitensis, Graptemys ouachitensis, Graptemys ouachitensis ouachitensis*
Type locality: "Ouachita River, four miles northeast of Harrisonburg, Louisiana" [USA].

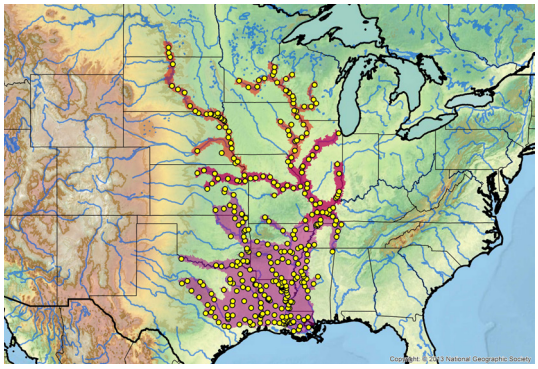
Graptemys pearlensis Ennen, Lovich, Kreiser, Selman, and Qualls 2010 (10:8) **(19)**
Pearl River Map Turtle


Cris Hagen / CCB / Pearl River, Mississippi



USA (Louisiana, Mississippi)
CBFTT Account: Ennen, Lovich, and Jones (2016)
IUCN Red List: Endangered A1bcde+A4bcde (2013)
CITES: Appendix III (USA), as *Graptemys* spp.
Graptemys pearlensis Ennen, Lovich, Kreiser, Selman, and Qualls 2010:104
Type locality: "Mississippi, Copiah County, Pearl River at State Highway 28, near Georgetown" [USA].

Graptemys pseudogeographica (Gray 1831d) (12:14, 12:15) **(19, 23)**
False Map Turtle


(subspecies: *pseudogeographica* = red, *kohnii* = purple; overlap = intergrades)

USA (Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Nebraska, North Dakota, Oklahoma, South Dakota, Tennessee, Texas, Wisconsin)
Introduced: USA (Florida, Virginia)
IUCN Red List: Least Concern (2013); Previously: Least Concern [Not Listed] (1996)
CITES: Appendix III (USA), as *Graptemys* spp.

Graptemys pseudogeographica pseudogeographica (Gray 1831d) (08:19)
False Map Turtle


James H. Harding / Indiana

USA (Illinois, Indiana, Iowa, Kansas, Kentucky, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Tennessee, Wisconsin)
Introduced: USA (Florida, Virginia)
Emys pseudogeographica Gray 1831d:31, *Clemmys pseudogeographica, Graptemys pseudogeographica, Malaco-clemmys pseudogeographicus, Malaclemys pseudogeographica, Malaclemys pseudogeographicus, Graptemys pseudogeographicus, Graptemys pseudogeographica pseudogeographica, Malaclemys pseudogeographica pseudogeographica*
Type locality: Not designated. Restricted to "Etats-Unis, Indiana, rivière Wabash, entre Mont Vernon et Chaumetown (= Shawneetown)...près du confluent de la Wabash et de l'Ohio" [USA] by Bour and Dubois (1983:45).

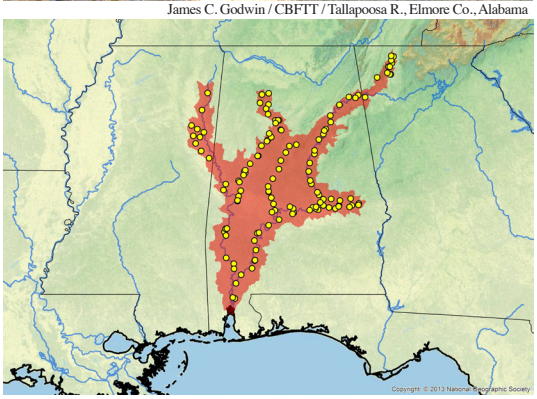
Graptemys pseudogeographica kohnii (Baur 1890a)
Mississippi Map Turtle


Stanley E. Trauth / Strawberry R., Lawrence Co., Arkansas

USA (Arkansas, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Oklahoma, Tennessee, Texas)
Malacoclemmys kohnii Baur 1890a:263, *Graptemys kohnii, Malaclemys lesueurii kohnii, Graptemys pseudogeographica kohnii, Malaclemys kohnii*
Type locality: "Bayou Lafourche, La.; Bayou Teche, St. Martinsville, La." [Louisiana, USA].

Graptemys pulchra Baur 1893c (14:17) (19)
Alabama Map Turtle

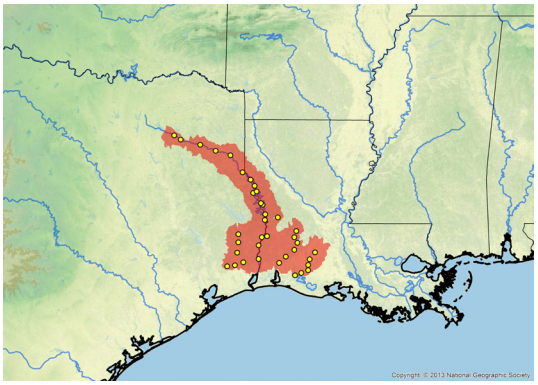

James C. Godwin / CBFTT / Tallapoosa R., Elmore Co., Alabama



USA (Alabama, Georgia, Mississippi)
CBFTT Account: Lovich, Godwin, and McCoy (2014)
IUCN Red List: Near Threatened (2013); Previously: Least Concern (1996)
CITES: Appendix III (USA), as *Graptemys* spp.
Graptemys pulchra Baur 1893c:675, *Malacoclemmys pulchra, Malaclemys lesueurii pulchra, Malaclemys pulchra, Graptemys pulchra pulchra*
Type locality: "Montgomery, Alabama" [USA].
Graptemys alabamensis Baur *in* Lindeman 2013:20 (14:17) (*nomen nudum*)
Graptemys grandis Baur *in* Lindeman 2013:20 (14:17) (*nomen nudum*)

Graptemys sabinensis Cagle 1953a (07:12, 12:15, 14:18) (19) **or**
Graptemys ouachitensis sabinensis
Sabine Map Turtle

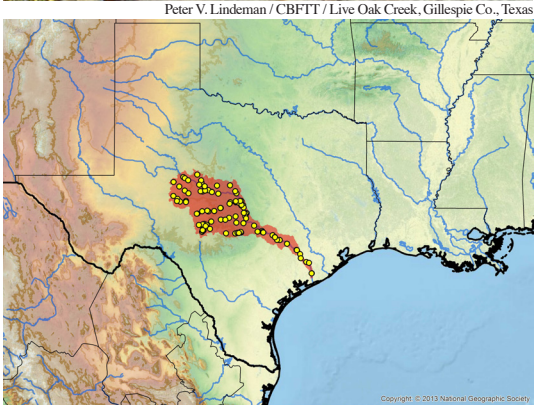

Peter V. Lindeman / CCB / nr. Estherwood, Acadia Parish, Louisiana



USA (Louisiana, Texas)
IUCN Red List: Least Concern (2013), as part of *Graptemys ouachitensis*
CITES: Appendix III (USA), as *Graptemys* spp.
Malacoclemmys intermedia Baur *in* Beyer 1900:21 (14:19) (*nomen nudum*), *Graptemys intermedia*
Graptemys pseudogeographica sabinensis Cagle 1953a:2, *Malaclemys pseudogeographica sabinensis, Graptemys ouachitensis sabinensis, Graptemys sabinensis*
Type locality: "Sabine River, eight miles southwest of Negreet, Louisiana" [USA].

Graptemys versa Stejneger 1925 (19)
Texas Map Turtle


Peter V. Lindeman / CBFTT / Live Oak Creek, Gillespie Co., Texas



USA (Texas)
CBFTT Account: Lindeman, Stuart, and Killebrew (2016)
IUCN Red List: Least Concern (2013); Previously: Near Threatened (1996)
CITES: Appendix III (USA), as *Graptemys* spp.
Graptemys pseudogeographica versa Stejneger 1925:463, *Graptemys versa, Malaclemys versa*
Type locality: "Austin, Texas" [USA].

Malaclemys Gray 1844

Malaclemys Gray 1844:28

Type species: *Malaclemys concentrica* [= *Testudo concentrica* Shaw 1802 = subjective synonym of *Testudo terrapin* Schoepff 1793], by original monotypy.

Malacoclemmys Agassiz 1857a:392,437 (*nomen novum*)

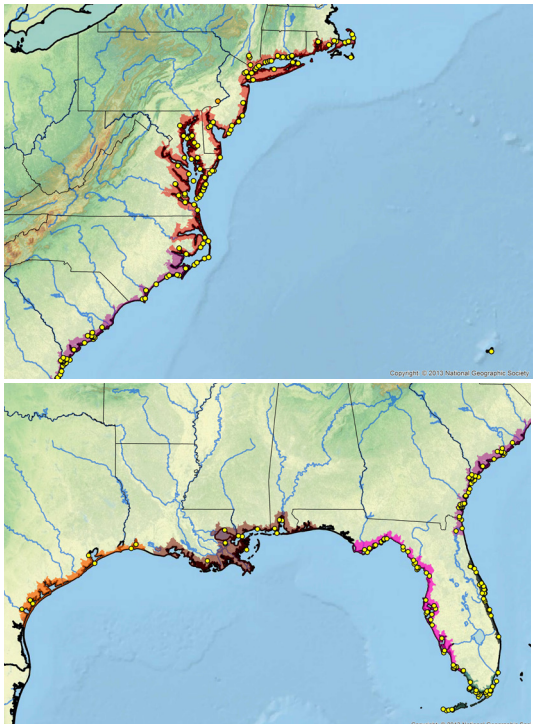
Euchyloclemmys Sclater 1858:292 (*nomen novum*)

Euchyloclemys Sclater *in* Gray 1863c:181 (*nomen novum*)

Malaclemmys Gray 1870c:41 (*nomen novum*)

Malaclemys terrapin (Schoepff 1793) (11:5) (**24**)

Diamondback Terrapin



(subspecies: *terrapin* = red, *centrata* = purple, *littoralis* = orange, *macrospilota* = pink, *pileata* = brown, *rhizophorarum* = green, *tequesta* = gray; orange dot = trade)

Bermuda, USA (Alabama, Connecticut, Delaware, Florida, Georgia, Louisiana, Maryland, Massachusetts, Mississippi, New Jersey, New York, North Carolina, Rhode Island, South Carolina, Texas, Virginia)

IUCN Red List: Near Threatened (1996)

TFTSG Draft Red List: Vulnerable (2011)

CITES: Appendix II

Malaclemys terrapin terrapin (Schoepff 1793)

Northern Diamondback Terrapin



Joseph C. Mitchell / Fisherman Island, Northampton Co., Virginia

USA (Connecticut, Delaware, Massachusetts, New Jersey, New York, North Carolina, Maryland, Rhode Island, Virginia)

Testudo terrapin Schoepff 1793:64, *Emys terrapin, Clemmys terrapin, Malaclemys terrapin, Malacoclemmys terrapin, Malaclemys terrapin terrapin*

Type locality: "America septentrionali...in foris Philadelphiae...et... aquis subdulcibus Insulae Longae" [USA]. Restricted to "probably Delaware Bay" [Delaware and New Jersey, USA] by Hay (1905:16); and to "coastal waters of Long Island" [New York, USA] by Schmidt (1953:95).

Testudo concentrica Shaw 1802:43, *Emys concentrica, Malaclemys concentrica, Malaclemmys concentrica, Malaclemmys centrata concentrica, Malaclemys centrata concentrica, Malaclemys terrapin concentrica*

Type locality: "North America...sold in the markets at Philadelphia" [Pennsylvania, USA]. Restricted to "probably Delaware Bay" [Delaware or New Jersey, USA] by Hay (1905:16).

Testudo ocellata Link 1807:52

Type locality: "Nord-Amerika." Restricted to "Philadelphia markets" [Pennsylvania, USA] by Schmidt (1953:96).

Emys concentrica polita Gray 1830e:11 (10:7)

Type locality: Not designated.

Testudo palustris Le Conte 1830:113 (*nomen novum* and junior homonym, not = *Testudo palustris* Gmelin 1789 = *Trachemys terrapen*), *Emys palustris, Malacoclemmys palustris*

Type locality: "New-York to Florida, and even in the West Indies, in salt water" [USA].

Emys macrocephalus Gray 1844:26 (junior homonym, not = *Emys macrocephala* Spix 1824 = *Peltocephalus dumerilianus*), *Emys macrocephala*

Type locality: "America?" Restricted to "Philadelphia markets" [Pennsylvania, USA] by Schmidt (1953:96).

Malaclemys terrapin centrata (Latreille *in* Sonnini and Latreille 1801) (11:5)

Carolina Diamondback Terrapin



Carla Van Ness / CRM 3 / Duval Co., Florida

Bermuda, USA (Georgia, Florida, North Carolina, South Carolina)

Testudo centrata Latreille *in* Sonnini and Latreille 1801:145, *Emys centrata, Clemmys (Clemmys) centrata, Malaclemmys centrata, Malaclemys centrata, Malaclemys centrata centrata, Malaclemmys terrapin centrata, Malaclemys terrapin centrata*

Type locality: "les grands marais de la Caroline" [USA]. Restricted to "neighborhood of Charleston, South Carolina" [USA] by Hay (1905:14).

Emys concentrica livida Gray 1831d:27, *Emys livida*

Type locality: "America Boreali." Restricted to "vicinity of Charleston, South Carolina" [USA] by Schmidt (1953:96).

Malaclemys terrapin littoralis Hay 1905
Texas Diamondback Terrapin


Aaron S. Baxter / Nueces Bay, Nueces Co., Texas

USA (Texas)

Malaclemmys littoralis Hay 1905:18, *Malaclemys centrata littoralis, Malaclemys pileata littoralis, Malaclemys terrapin littoralis*
Type locality: "Rockport, Texas" [USA].

Malaclemys terrapin macrospilota Hay 1905
Ornate Diamondback Terrapin


Brian Mealey / CRM 3 / Monroe Co., Florida

USA (Florida)

Malaclemmys macrospilota Hay 1905:16, *Malaclemys centrata macrospilota, Malaclemys pileata macrospilota, Malaclemys terrapin macrospilota*
Type locality: "Charlotte Harbor, Florida" [USA].

Malaclemys terrapin pileata (Wied 1865)
Mississippi Diamondback Terrapin


Andrew T. Coleman / CCB / Bayou Caddy, Hancock Co., Mississippi

USA (Alabama, Florida, Louisiana, Mississippi, Texas)

Emys pileata Wied 1865:17, *Malaclemmys pileata, Malaclemys centrata pileata, Malaclemys pileata pileata, Malaclemys terrapin pileata*
Type locality: "Sümpfen mit salzigem Wasser an der Mündung des Mississippi bei New-Orleans" [Louisiana, USA]. Emended to "New Orleans, Louisiana" [USA] by Hay (1905:17).

Malaclemys terrapin rhizophorarum Fowler 1906
Mangrove Diamondback Terrapin


Brian Mealey / CRM 3 / Monroe Co., Florida

USA (Florida)

Malaclemys tuberculifera Gray 1844:29 (*nomen oblitum*)
Type locality: "California" [in error]. Restricted to "Philadelphia market" [Pennsylvania, USA] by Schmidt (1953:96) [in error]; shown to be from the Florida Keys [Florida, USA] by Ernst and Hartsell (2000:887), but they did not formally restrict the type locality.

Malaclemmys littoralis rhizophorarum Fowler 1906:112, *Malaclemmys terrapin rhizophorarum, Malaclemys terrapin rhizophorarum*
Type locality: "Boca Grande Key, Florida" [USA].

Malaclemys terrapin fordorum Wood 1994:1 (*nomen nudum*)

Malaclemys terrapin tequesta Schwartz 1955
Eastern Florida Diamondback Terrapin


Richard D. Bartlett / CRM 3 / Martin Co., Florida

USA (Florida)

Malaclemys terrapin tequesta Schwartz 1955:158
Type locality: "Miami Beach, Dade County, Florida" [USA].

Pseudemys Gray 1856a (09:13, 12:16, 14:20)

Pseudemys Gray 1856a:197

Type species: *Pseudemys concinna* [= *Testudo concinna* LeConte 1830], by subsequent designation by Baur (1893a:221).

Ptychemys Agassiz 1857a:252,431

Type species: *Ptychemys concinna* [= *Testudo concinna* LeConte 1830], by subsequent designation by Brown (1908:114).

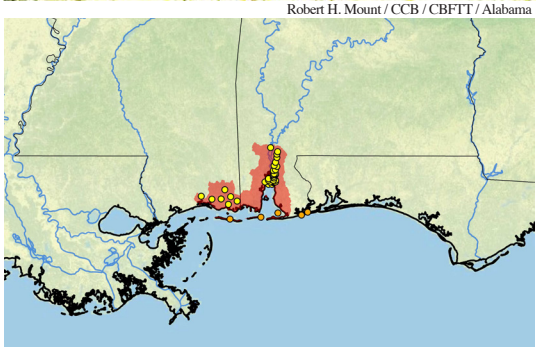
Nectemys Agassiz 1857b:642 (*nomen novum*)

Pseudemys alabamensis Baur 1893a

Alabama Red-bellied Cooter



Robert H. Mount / CCB / CBFTT / Alabama



(orange dots = waifs on offshore islands)

USA (Alabama, Mississippi)

CBFTT Account: Leary, Dobie, Mann, Floyd, and Nelson (2008)

IUCN Red List: Endangered B1+2c (1996)

TFTSG Draft Red List: Endangered (2011)

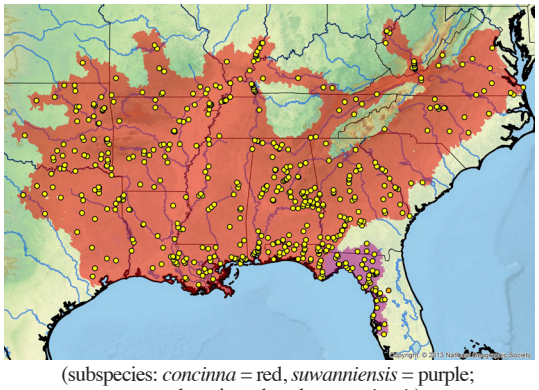
Pseudemys alabamensis Baur 1893a:224, *Pseudemys rubriventris alabamensis, Chrysemys (Pseudemys) alabamensis, Chrysemys rubriventris alabamensis*

Type locality: "Mobile bay, Ala." [Alabama, USA].

Pseudemys alabamiensis Beyer 1900:20 (*nomen nudum*)

Pseudemys concinna (Le Conte 1830) (09:13) (25)

River Cooter



(subspecies: *concinna* = red, *suwanniensis* = purple; orange dot = introduced *suwanniensis*)

USA (Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Kansas, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, Ohio, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia)

CBFTT Account: Ward and Jackson (2008)

IUCN Red List: Least Concern (2013); Previously: Least Concern [Not Listed] (1996)

Pseudemys concinna concinna (Le Conte 1830) (07:13, 09:13, 10:9) (25)

Eastern River Cooter



Peter A. Meylan / CBFTT / CRM 3 / Spring Creek, Decatur Co., Georgia

USA (Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Kansas, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, Ohio, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia)

Testudo concinna Le Conte 1830:106 (junior homonym, not = *Emys concinna* Guérin 1829 [*nomen oblitum*] = *Trachemys scripta elegans*) (25), *Emys (Testudo) concinna, Terrapene concinna, Clemmys (Clemmys) concinna, Pseudemys concinna, Ptychemys concinna, Chrysemys concinna, Pseudemys floridana concinna, Pseudemys concinna concinna, Chrysemys concinna concinna*

Type locality: "rivers of Georgia and Carolina, where the beds are rocky...never...below Augusta on the Savannah, or Columbia on the Congaree" [USA]. Restricted to "vicinity of Columbia, South Carolina" [USA] by Schmidt (1953:101).

Emys annulifera Gray 1830e:12 (10:7), *Trachemys annulifera*

Type locality: Not known. Restricted to "Columbia, South Carolina" [USA] by Schmidt (1953:101).

Emys hieroglyphica Holbrook 1836:47, *Pseudemys hieroglyphica, Ptychemys hieroglyphica, Clemmys hieroglyphica, Chrysemys hieroglyphica, Pseudemys floridana hieroglyphica, Pseudemys concinna hieroglyphica, Chrysemys concinna hieroglyphica*

Type locality: "Cumberland river" [probably Tennessee, USA].

Emys mobilensis Holbrook 1838a:53, *Ptychemys mobilensis, Clemmys mobilensis, Pseudemys mobilensis, Chrysemys mobilensis, Pseudemys floridana mobilensis, Pseudemys concinna mobilensis, Chrysemys concinna mobilensis*

Type locality: "Alabama...in the neighbourhood of Mobile" [USA].

Emys labyrinthica Duméril and Bibron *in* Duméril and Duméril 1851:13, *Clemmys labyrinthica, Pseudemys labyrinthica, Chrysemys labyrinthica*

Type locality: "Wabash-River (États-Unis)" [Indiana, USA].

Ptychemys hoyi Agassiz 1857a:433, *Pseudemys concinna hoyi, Pseudemys floridana hoyi, Chrysemys floridana hoyi*

Type locality: Not designated. Restricted to "vicinity of Springfield, Missouri" [USA] by Schmidt (1953:101).

Emys orthonyx Wied 1865:23

Type locality: "südlichen Gewässern bei New-Orleans" [Louisiana, USA].

Pseudemys vioscana Brimley 1928:66

Type locality: "Lake Des Allemands, La." [Louisiana, USA].

Pseudemys elonae Brimley 1928:67

Type locality: "a pond in Guilford County, North Carolina, not far from Elon College, in the Cape Fear drainage" [USA].

Pseudemys concinna metteri Ward 1984:34
Type locality: "Old Fort Cobb, Caddo County, Oklahoma" [USA].

Pseudemys concinna suwanniensis Carr 1937 (07:15, 09:13)
Suwannee Cooter



Dale R. Jackson / CBFTT / CRM 3 / Wakulla River, Wakulla Co., Florida

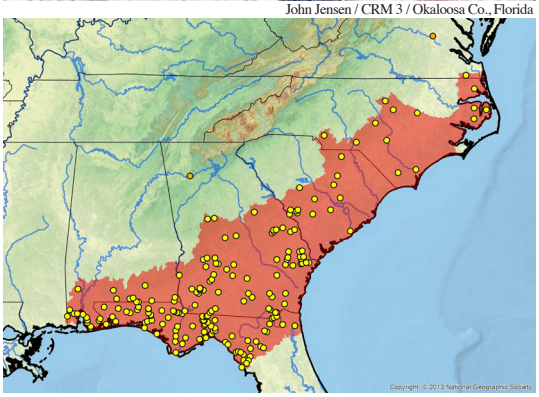
USA (Florida, Georgia)

Pseudemys floridana suwanniensis Carr 1937:4, *Pseudemys concinna suwanniensis, Chrysemys concinna suwanniensis, Pseudemys suwanniensis*
Type locality: "Suwannee River at Manatee Springs, Levy-Dixie County line, Florida" [USA].

Pseudemys floridana (Le Conte 1830) (07:14, 09:13, 10:9) **or**
***Pseudemys concinna floridana* or**
Pseudemys floridana floridana
Coastal Plain Cooter



John Jensen / CRM 3 / Okaloosa Co., Florida



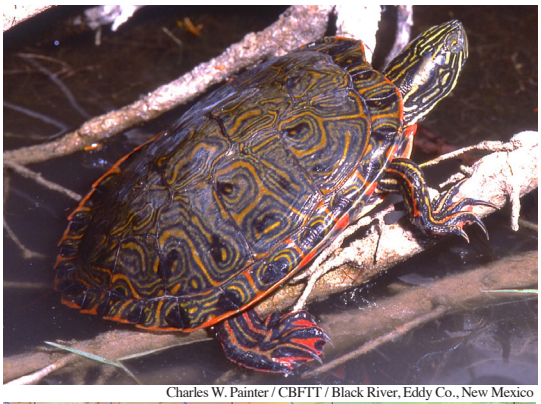
(orange dots = possibly introduced)

USA (Alabama, Georgia, Florida, Mississippi, North Carolina, South Carolina, Virginia)

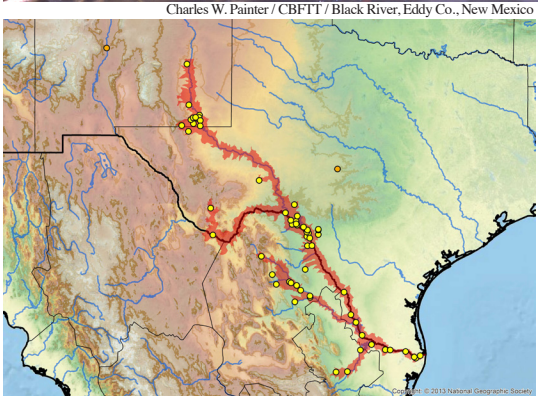
IUCN Red List: Least Concern (2013), as *Pseudemys concinna floridana*; Previously: Least Concern [Not Listed] (1996)

Testudo floridana Le Conte 1830:100, *Terrapene floridana, Emys floridana, Clemmys (Clemmys) floridana, Pseudemys floridana, Chrysemys floridana, Pseudemys floridana floridana, Chrysemys floridana floridana, Pseudemys concinna floridana*
Type locality: "St. John's river of East Florida" [USA]. Emended to "lower reaches of the St. John's River (Duval County), Florida" [USA] by Bour (2003:540).

Pseudemys gorzugi Ward 1984 (07:16, 12:16, 14:19)
Rio Grande Cooter



Charles W. Painter / CBFTT / Black River, Eddy Co., New Mexico



(orange dots = introduced or misidentified)

Mexico (Chihuahua [?], Coahuila, Nuevo Leon, Tamaulipas), USA (New Mexico, Texas)

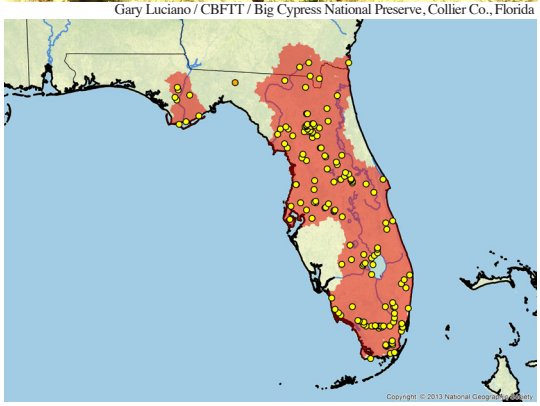
CBFTT Account: Pierce, Stuart, Ward, and Painter (2016)

IUCN Red List: Near Threatened (2013); Previously: Near Threatened (1996)

Pseudemys concinna gorzugi Ward 1984:29, *Pseudemys gorzugi*
Type locality: "3 1/2 mi. W Jimenez, Río San Diego, Coahuila, México, 850 feet altitude."

Pseudemys nelsoni Carr 1938a [(09:13)]
Florida Red-bellied Cooter


Gary Luciano / CBFTT / Big Cypress National Preserve, Collier Co., Florida


(orange dot = possibly introduced)

USA (Florida, Georgia)
Introduced: British Virgin Islands (Tortola), USA (Texas)
CBFTT Account: Jackson (2010)
IUCN Red List: Least Concern (2013); Previously: Least Concern [Not Listed] (1996)

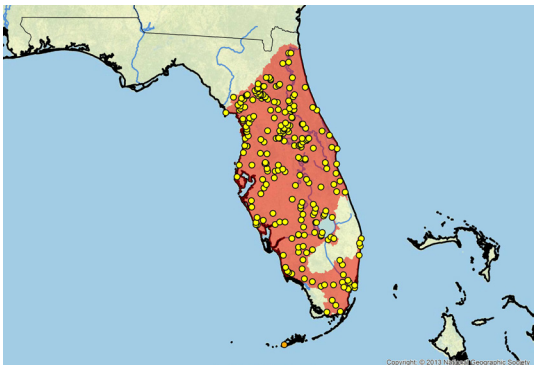
Deirochelys floridana † Hay 1908b:346 (*nomen dubium*) [Pleistocene, USA (Florida)]
Type locality: "Hillsboro County, Florida...Peace Creek beds" [USA].

Trachemys jarmani † Hay 1908b:351 (*nomen dubium*) [Late Pleistocene, USA (Florida)], *Pseudemys jarmani*
Type locality: "Hillsboro County, Florida...Peace Creek beds" [USA].

Pseudemys nelsoni Carr 1938a:307, *Pseudemys rubriventris nelsoni, Chrysemys (Pseudemys) nelsoni, Chrysemys rubriventris nelsoni*
Type locality: "Fellsmere, Indian River County, Florida" [USA].

Pseudemys peninsularis Carr 1938b [(07:17, 09:13, 10:9)] **or**
Pseudemys floridana peninsularis
Peninsula Cooter


Richard D. Bartlett / CRM 3 / Lee Co., Florida


(orange dot = introduced)

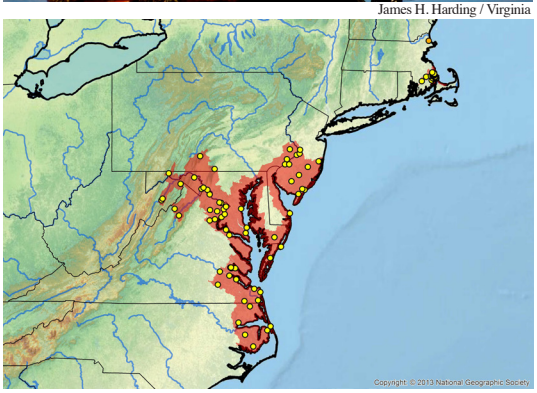
USA (Florida)
IUCN Red List: Least Concern (2013), as *Pseudemys peninsularis*

Pseudemys floridana persimilis † Hay 1916a:71 (*nomen dubium et oblitum*) [Pleistocene, USA (Florida)]
Type locality: "Vero, St. Lucie County, Florida" [USA].

Pseudemys floridana peninsularis Carr 1938b:105, *Chrysemys floridana peninsularis, Pseudemys peninsularis*
Type locality: "Crystal Springs, Pasco County, Florida" [USA].

Pseudemys rubriventris (Le Conte 1830)
Northern Red-bellied Cooter


James H. Harding / Virginia


(orange dot = possible occurrence)

USA (Delaware, Maryland, Massachusetts, New Jersey, North Carolina, Pennsylvania, Virginia, West Virginia)
Introduced: South Korea
IUCN Red List: Near Threatened (2013); Previously: Near Threatened (1996)

Testudo rubriventris Le Conte 1830:101, *Terrapene rubriventris, Emys rubriventris, Clemmys (Clemmys) rubriventris, Chrysemys rubriventris, Pseudemys rubriventris, Pseudemys rubiventris, Pseudemys rubriventris rubriventris,*

Chrysemys rubriventris rubriventris
Type locality: "rivers from New-Jersey to Virginia, chiefly...in such as are rocky; in the Delaware, near Trenton" [USA]. Restricted to "in the Delaware, near Trenton" [New Jersey, USA] by Baur (1893a:224).

Emys irrigata Bell *in* Duméril and Bibron 1835:276, *Emys irrigita*
Type locality: "la partie septentrionale du Nouveau-Monde." Restricted to "vicinity of Trenton, New Jersey" [USA] by Schmidt (1953:103).

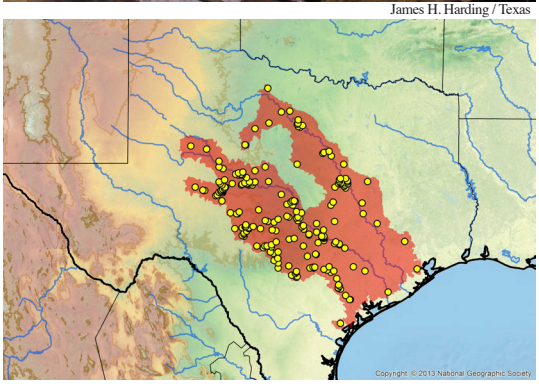
Emys rivulata Gray 1844:22 (junior homonym, not = *Emys rivulata* Valenciennes *in* Bory de Saint-Vincent 1833 = *Mauremys rivulata*)
Type locality: "N. America." Restricted to "vicinity of Trenton, New Jersey" [USA] by Schmidt (1953:103).

Pseudemys extincta † Hay 1908b:356 (*nomen dubium*) [Early Pleistocene, Blancan, USA (Florida)]
Type locality: "Hillsboro County, Florida...probably the Peace Creek formation" [USA].

Pseudemys rubriventris bangsi Babcock 1937:293, *Chrysemys rubriventris bangsi, Pseudemys bangsi*
Type locality: "Boot Pond, Plymouth, Massachusetts" [USA]. Corrected to "Gunner's Exchange Pond, Plymouth, Massachusetts" [USA] by Graham (1991:1).

Pseudemys texana Baur 1893a (12:16)
Texas Cooter


James H. Harding / Texas



USA (Texas)
IUCN Red List: Least Concern (2013); Previously: Least Concern [Not Listed] (1996)

Pseudemys texana Baur 1893a:223, *Chrysemys texana, Pseudemys floridana texana, Pseudemys concinna texana, Chrysemys concinna texana*
Type locality: "San Antonio, Texas" [USA].

Trachemys Agassiz 1857a (07:18, 09:14, 11:6, 14:21, 14:22, 14:23) (**26**)

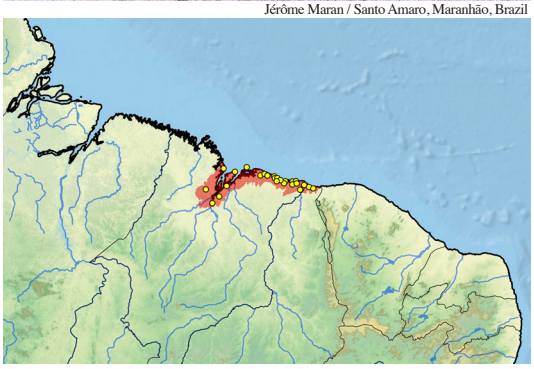
Trachemys Agassiz 1857a:252,434
Type species: *Trachemys scabra* [= *Testudo scabra* Linnaeus 1758], by subsequent designation by Brown (1908:114), but its uncertain identity led Lindholm (1929:280) to designate *Trachemys troosti* [= *Emys troosti* Holbrook 1836] as the type species (see also Smith and Smith 1980:434). Rhodin and Carr (2009:14) demonstrated that *Testudo scabra* Linnaeus 1758 was synonymous with *Rhinoclemmys punctularia* [= *Testudo punctularia* Daudin 1801] and declared *T. scabra* a *nomen oblitum*, validating Lindholm's designation.

Callichelys Gray 1863c:179,181
Type species: *Callichelys ornata* [= *Emys ornata* Gray *in* Griffith and Pidgeon 1830], by original designation.

Redamia Gray 1870c:35
Type species: *Redamia olivacea* [= *Emys olivacea* Gray 1856b = subjective synonym of *Pseudemys stejnegeri* Schmidt 1928], by original monotypy.

Trachemys adiutrix Vanzolini 1995 (11:6) (**27**) **or**
Trachemys dorbigni adiutrix
Maranhao Slider

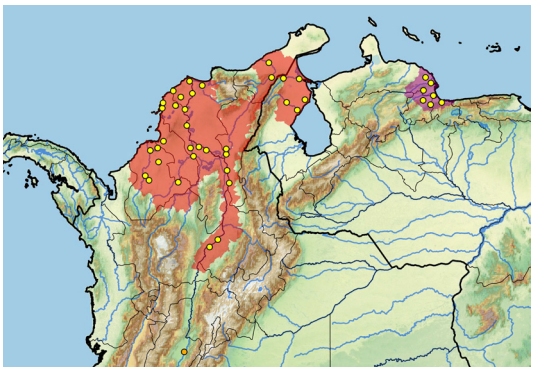

Jérôme Maran / Santo Amaro, Maranhão, Brazil



Brazil (Maranhão, Piauí)
IUCN Red List: Endangered B1+2c (1996)
TFTSG Draft Red List: Near Threatened (2011)

Trachemys adiutrix Vanzolini 1995:111, *Trachemys dorbigni adiutrix*
Type locality: "Brasil: Maranhão: Santo Amaro, 02º33' S, 43º14' W" [Brazil]

Trachemys callirostris (Gray 1856b) (11:6) (**26**) **or**
Trachemys venusta callirostris
Colombian Slider


(subspecies: *callirostris* = red, *chichiriviche* = purple; orange dot = trade or introduced)

Colombia (Antioquia, Atlántico, Bolívar, Cesar, Córdoba, Cundinamarca, La Guajira, Magdalena, Santander, Sucre), Venezuela (Carabobo, Falcón, Yaracuy, Zulia)
CBFTT Account: Bock, Páez, and Daza (2010)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Vulnerable (2011)

Trachemys callirostris callirostris (Gray 1856b) [(07:19, 11:6) (26)] **or**
Trachemys venusta callirostris
Colombian Slider


Vivian P. Páez / CBFTT / Colombia

Colombia (Antioquia, Atlántico, Bolívar, Cesar, Córdoba, Cundinamarca, La Guajira, Magdalena, Santander, Sucre), Venezuela (Zulia)
Emys callirostris Gray 1856b:25, *Callichelys callirostris, Pseudemys callirostris, Chrysemys ornata callirostris, Pseudemys scripta callirostris, Pseudemys ornata callirostris, Chrysemys callirostris, Chrysemys scripta callirostris, Trachemys scripta callirostris, Trachemys callirostris, Trachemys ornata callirostris, Trachemys dorbigni callirostris, Trachemys callirostris callirostris*
Type locality: "America." Restricted to "Unterlauf des Rio Magdalena" [Colombia] by Müller (1940:109).

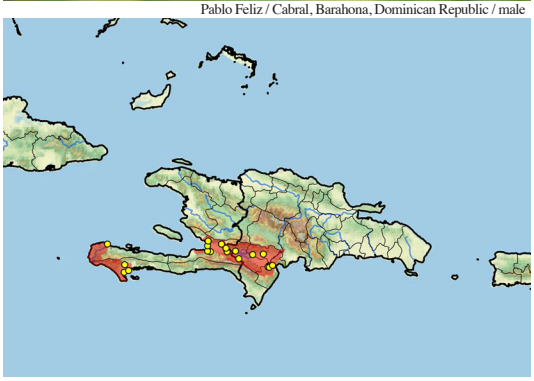
Trachemys callirostris chichiriviche (Pritchard and Trebbau 1984) [(07:19, 11:6) (26)] **or**
Trachemys venusta chichiriviche
Venezuelan Slider


Peter C.H. Pritchard / CBFTT / central coastal Venezuela

Venezuela (Carabobo, Falcón, Yaracuy)
Pseudemys scripta chichiriviche Pritchard and Trebbau 1984:191, *Trachemys scripta chichiriviche, Trachemys ornata chichiriviche, Trachemys callirostris chichiriviche*
Type locality: "Lago de Tacarigua, Edo. Falcón, Venezuela (68°15' W, 11°4' N)."

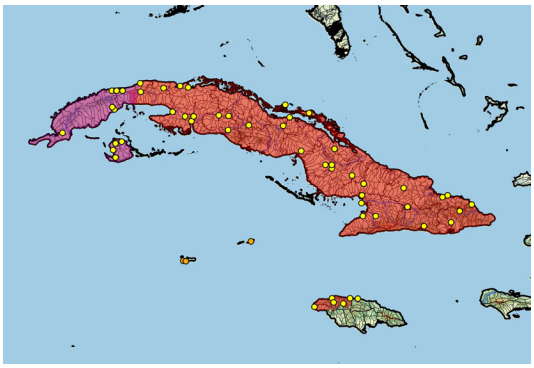
Trachemys decorata (Barbour and Carr 1940) [(14:21)]
Hispaniolan Slider


Pablo Feliz / Cabral, Barahona, Dominican Republic / male



Dominican Republic, Haiti
IUCN Red List: Vulnerable B1+2c (1996)
Pseudemys decorata Barbour and Carr 1940:409, *Pseudemys terrapen decorata, Chrysemys (Trachemys) decorata, Chrysemys terrapen decorata, Trachemys decorata, Trachemys stejnegeri decorata*
Type locality: "Fond Parisien, Haiti."

Trachemys decussata (Bell *in* Griffith and Pidgeon 1830) [(14:22)]
Cuban Slider


(subspecies: *decussata* = red, *angusta* = purple; orange dots = introduced *angusta*)

Cayman Islands [historic introduction?], Cuba, Jamaica [prehistoric introduction?]
IUCN Red List: Least Concern [Not Listed] (1996)

Trachemys decussata decussata (Bell *in* Griffith and Pidgeon 1830) (08:17, 14:22)

Eastern Cuban Slider



Vincenzo Ferri / Cuba [captivity]

Cuba, Jamaica [prehistoric introduction?]

Testudo rugosa Shaw 1802:28 (*partim, nomen dubium* and junior homonym, not = *Testudo rugosa* Van-Ernest *in* Daudin 1801 = *Chelonia mydas*), *Emys rugosa, Trachemys rugosa, Clemmys rugosa, Pseudemys rugosa, Pseudemys rugosa rugosa, Pseudemys terrapen rugosa, Chrysemys terrapen rugosa, Trachemys terrapen rugosa*
Type locality: Not designated. Restricted to "Rio Jobabo drainage in eastern Cuba" by Mittleman (1947:176).

Emys decussata Bell *in* Griffith and Pidgeon 1830:76 (08:17), *Ptychemys decussata, Clemmys decussata, Pseudemys decussata, Pseudemys decussata decussata, Pseudemys rugosa decussata, Pseudemys terrapen decussata, Chrysemys (Trachemys) decussata, Chrysemys decussata decussata, Chrysemys terrapen decussata, Trachemys decussata, Trachemys decussata decussata*
Type locality: Not designated. Restricted to "North America" by Gray (1830e:11); to "America Boreali" by Gray (1831d:28); to "Cuba, exclusive of the drainage systems of the Rio Jobabo and the Caribbean slope of Pinar del Rio Province" by Mittleman (1947:176); and to "Westindien" by Mertens and Wermuth (1955:366).

Emys vermiculata Gray 1844:25
Type locality: "Tropical America." Restricted to "Westindien" by Mertens and Wermuth (1955:366).

Emys jamao Duméril 1861b:435 (*nomen nudum*)

Emys jamao Vilaró 1867a:121
Type locality: Not designated. [Cuba].

Emys gnatho Vilaró 1867b:204
Type locality: Not designated. [Cuba].

Pseudemys decussata plana Barbour and Carr 1940:405, *Pseudemys terrapen plana, Chrysemys terrapen plana, Trachemys decussata plana*
Type locality: "Rio Jobabo, Western Oriente, Cuba."

Trachemys decussata angusta (Barbour and Carr 1940) (14:22)

Western Cuban Slider



James H. Harding / Grand Cayman Island

Cayman Islands [historic introduction?], Cuba

Pseudemys decussata angusta Barbour and Carr 1940:402, *Pseudemys rugosa angusta, Pseudemys terrapen angusta, Chrysemys terrapen angusta, Trachemys decussata angusta, Trachemys decorata angusta*
Type locality: "Taco River, Pinar del Rio, Cuba."

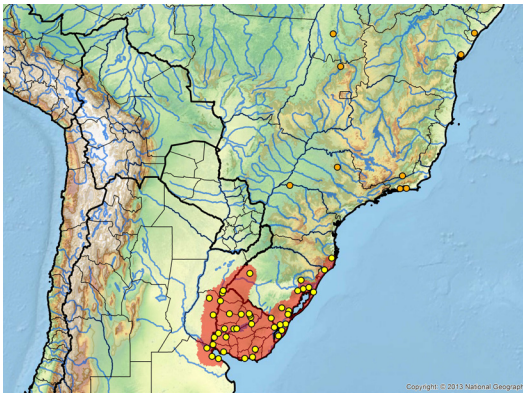
Pseudemys granti Barbour and Carr 1941:59, *Pseudemys terrapen granti, Pseudemys decussata granti, Pseudemys stejnegeri granti, Chrysemys terrapen granti, Chrysemys decussata granti, Trachemys decussata granti, Trachemys granti, Trachemys stejnegeri granti*
Type locality: "Grand Cayman" [Cayman Islands].

Trachemys dorbigni (Duméril and Bibron 1835) (07:20, 11:6) (**27**) **or** ***Trachemys dorbigni dorbigni***

D'Orbigny's Slider



Jérôme Maran / Brazil



(orange dots = introduced)

Argentina (Buenos Aires, Corrientes, Entre Rios), Brazil (Rio Grande do Sul, Santa Catarina), Uruguay

Introduced: Brazil (Bahia, Goiás, Minas Gerais, Paraná, Rio de Janeiro, São Paulo, Sergipe, Tocantins)

IUCN Red List: Least Concern [Not Listed] (1996)

TFTSG Draft Red List: Least Concern (2011)

Emys dorbigni Duméril and Bibron 1835:272, *Clemmys dorbigni, Pseudemys dorbigni, Chrysemys (Trachemys) dorbigni, Pseudemys scripta dorbigni, Pseudemys dorbigni dorbigni, Chrysemys dorbigni dorbigni, Chrysemys scripta dorbigni, Trachemys scripta dorbigni, Trachemys dorbigni, Trachemys dorbigni dorbigni*
Type locality: "Buenos-Ayres" [Argentina].

Clemmys (Rhinoclemmys) orbignyi Fitzinger 1835:124 (*nomen novum*), *Emys orbignyi*

Clemmys dorbignyi Boulenger 1886b:424 (*nomen novum*), *Chrysemys dorbignyi, Emys dorbignyi, Pseudemys dorbignyi, Pseudemys dorbignyi dorbignyi, Pseudemys scripta dorbignyi, Chrysemys scripta dorbignyi, Trachemys scripta dorbignyi, Trachemys dorbignyi, Trachemys dorbignyi dorbignyi*

Pseudemys dorbignyi brasiliensis Freiberg 1969:301 (07:20), *Pseudemys dorbigni brasiliensis, Pseudemys scripta brasiliensis, Chrysemys dorbigni brasiliensis, Chrysemys scripta brasiliensis, Trachemys scripta brasiliensis, Trachemys dorbigni brasiliensis, Trachemys dorbignyi brasiliensis*
Type locality: "río Guaíba, Porto Alegre, Brasil."

Trachemys gaigeae (Hartweg 1939)
Big Bend Slider



(subspecies: *gaigeae* = red, *hartwegi* = purple)

Mexico (Chihuahua, Coahuila, Durango), USA (New Mexico, Texas)

CBFTT Account: Stuart and Ward (2009)

IUCN Red List: Vulnerable A2ce+4ce (2013); Previously: Vulnerable (1996)

Trachemys gaigeae gaigeae (Hartweg 1939) (07:18)
Big Bend Slider



James N. Stuart / CBFTT / Socorro Co., New Mexico

Mexico (Chihuahua, Coahuila), USA (New Mexico, Texas)

Pseudemys scripta gaigeae Hartweg 1939:1, *Pseudemys gaigeae, Chrysemys scripta gaigeae, Chrysemys gaigeae, Trachemys nebulosa gaigeae, Trachemys scripta gaigeae, Trachemys gaigeae, Trachemys ornata gaigeae, Trachemys gaigeae gaigeae*
Type locality: "Boquillas, Rio Grande River, Brewster County, Texas" [USA].

Trachemys gaigeae hartwegi (Legler 1990) (07:18)
Nazas Slider

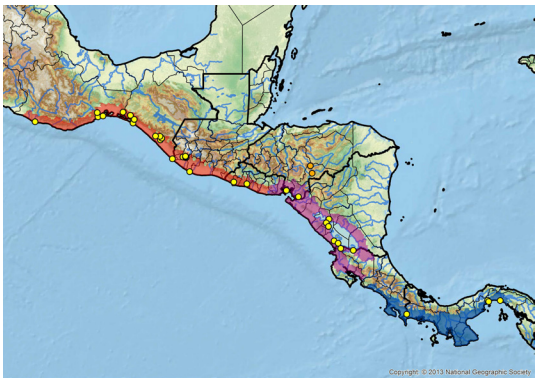


John B. Iverson / CBFTT / Río Nazas, Preza Francisco Zarco, Durango, Mexico

Mexico (Coahuila, Durango)

Pseudemys scripta hartwegi Legler 1990:89, *Chrysemys scripta hartwegi, Trachemys scripta hartwegi, Trachemys ornata hartwegi, Trachemys nebulosa hartwegi, Trachemys gaigeae hartwegi*
Type locality: "Río Nazas, 1.2 km east of Presa Lázaro Cardenas, Durango, Mexico."

Trachemys grayi (Bocourt 1868) (07:18, 10:10, 12:6) **(26, 28)**
Western Meso-American Slider



(orange dots = possible misidentified)

Costa Rica, El Salvador, Guatemala, Honduras, Mexico (Chiapas, Oaxaca), Nicaragua, Panama

IUCN Red List: Not Evaluated

Trachemys grayi grayi (Bocourt 1868) (07:18, 10:10, 12:6) **(26, 28)**
Gray's Slider, Tehuantepec Slider



Shi Haitao / Mexico [captivity]

El Salvador, Guatemala, Mexico (Chiapas, Oaxaca)

Emys grayi Bocourt 1868:121 (senior homonym, not = *Emys grayi* Günther 1869 = *Mauremys caspica*), *Callichelys grayi, Chrysemys grayi, Pseudemys grayi, Pseudemys ornata grayi, Pseudemys scripta grayi, Chrysemys scripta grayi, Trachemys scripta grayi, Trachemys grayi, Trachemys ornata grayi, Trachemys venusta grayi; Trachemys grayi grayi*
Type locality: "l'embouchure du Nagualate, dans le Pacifique (Guatémala)."
Callichelys concinna Gray 1873a:148 [28]
Type locality: "San Mateo, Tehuantepec" [Oaxaca, Mexico].
Emys umbra Bocourt 1876b:26 (*nomen novum*), *Pseudemys umbra, Clemmys umbra, Chrysemys umbra, Pseudemys scripta umbra*

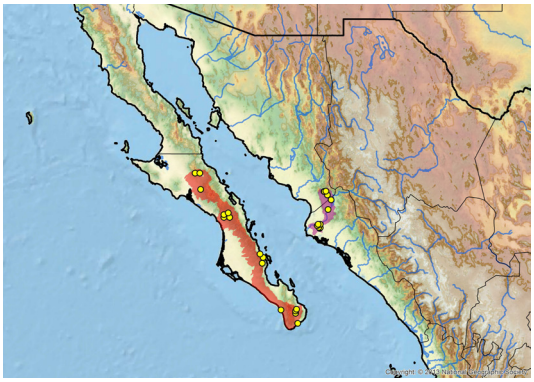
Trachemys grayi emolli (Legler 1990) [07:18, 11:6, 14:23] (**26**)
Nicaraguan Slider


Shi Haitao / No data [captivity]

Costa Rica, El Salvador, Honduras, Nicaragua
Pseudemys scripta emolli Legler 1990:91, *Trachemys scripta emolli, Trachemys ornata emolli, Trachemys emolli, Trachemys venusta emolli, Trachemys grayi emolli*
Type locality: "Río Tepetate, 2.5 km northeast of Granada, Granada Province, Nicaragua."

Trachemys grayi panamensis McCord, Joseph-Ouni, Hagen, and Blanck 2010 [10:10, 11:6] (**26**)
Panamanian Slider
Costa Rica, Panama
Trachemys venusta panamensis McCord, Joseph-Ouni, Hagen, and Blanck 2010:46, *Trachemys grayi panamensis*
Type locality: "Chiva-Chiva Road (trail), 1 km from Gaillané (Gaillard) Highway (Fort Clayton entrance), north of Miraflores Lake, Pacific-side Panama Canal Zone, Panamá Province, Panama."

Trachemys nebulosa (Van Denburgh 1895) [07:18]
Baja California Slider


(subspecies: *nebulosa* = red, *hiltoni* = purple)

Mexico (Baja California Sur, Sinaloa, Sonora)
IUCN Red List: Not Evaluated

Trachemys nebulosa nebulosa (Van Denburgh 1895) [07:18]
Baja California Slider


James R. Buskirk / Cadeje, Baja California Sur, Mexico

Mexico (Baja California Sur)
Chrysemys nebulosa Van Denburgh 1895:84, *Chrysemys ornata nebulosa, Pseudemys ornata nebulosa, Pseudemys nebulosa, Pseudemys scripta nebulosa, Chrysemys scripta nebulosa, Trachemys scripta nebulosa, Trachemys dorbigni nebulosa, Trachemys ornata nebulosa, Trachemys nebulosa, Trachemys nebulosa nebulosa*
Type locality: "Mainland abreast of San José Island, Lower California...Los Dolores, L.C." [Baja California Sur, Mexico].

Trachemys nebulosa hiltoni (Carr 1942) [07:18]
Fuerte Slider


Philip C. Rosen / San Miguel Zapotitlán, Rio Fuerte, Sinaloa, Mexico

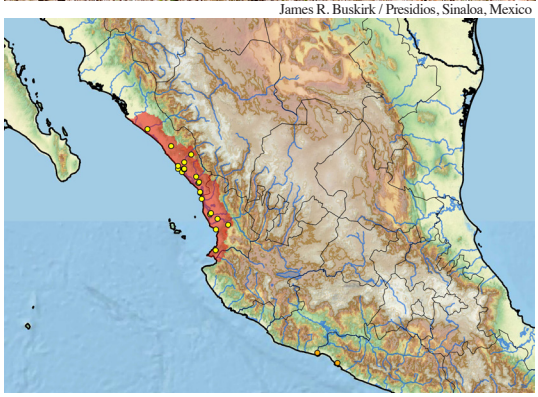
Mexico (Sinaloa, Sonora)
Pseudemys scripta hiltoni Carr 1942:1, *Pseudemys concinna hiltoni, Chrysemys scripta hiltoni, Chrysemys gaigeae hiltoni, Trachemys scripta hiltoni, Trachemys ornata hiltoni, Trachemys nebulosa hiltoni*
Type locality: "Guirocoba about 28 miles southeast of Alamos, Sonora, Mexico, at an elevation of approximately 1,485 feet."

Trachemys ornata (Gray *in* Griffith and Pidgeon 1830) (07:18, 07:19, 10:10, 11:6) (**26**)

Ornate Slider



James R. Buskirk / Presidios, Sinaloa, Mexico



(orange dots = possibly introduced)

Mexico (Jalisco, Nayarit, Sinaloa)

Possibly Introduced: Mexico (Guerrero?, Michoacán?)

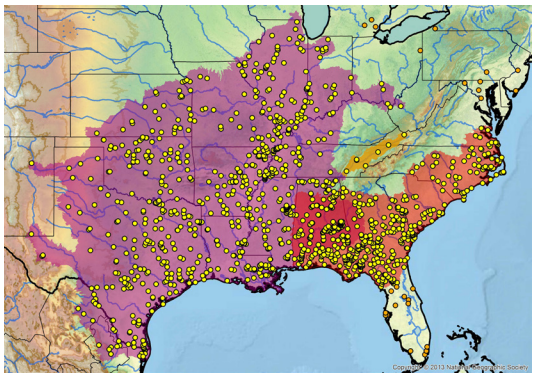
IUCN Red List: Vulnerable B1ab(iii)+2ab(iii) (2007)

Emys ornata Gray *in* Griffith and Pidgeon 1830:76 [Gray 1830c], *Clemmys (Clemmys) ornata, Callichelys ornata, Pseudemys ornata, Chrysemys ornata, Chrysemys ornata ornata, Pseudemys ornata ornata, Pseudemys scripta ornata, Chrysemys scripta ornata, Trachemys scripta ornata, Trachemys ornata, Trachemys ornata ornata*

Type locality: Not designated. Restricted to "South America" by Gray (1830e:12); and to "America Meridionali...Mazetland" [Mazatlán, Sinaloa, Mexico] by Gray (1831d:30).

Trachemys scripta (Thunberg *in* Schoepff 1792) (09:15)

Pond Slider, Common Slider



(subspecies: *scripta* = red, *elegans* = purple, *troostii* = orange; overlap = intergrades; orange dots = introduced *elegans*)

Mexico (Nuevo Leon, Tamaulipas), USA (Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Nebraska, New Mexico, North Carolina, Ohio, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia)

Introduced: Multiple global locations, most apparently *Trachemys scripta elegans* (see below)

IUCN Red List: Least Concern (2013); Previously: Near Threatened (1996)

Trachemys scripta scripta (Thunberg *in* Schoepff 1792) (09:15)

Yellow-bellied Slider



Kurt A. Buhlmann / Savannah River Site, Aiken Co., South Carolina

USA (Alabama, Florida, Georgia, North Carolina, South Carolina, Virginia)

Introduced: South Korea, USA (Florida)

Testudo scripta Thunberg *in* Schoepff 1792:16 (09:15) (*nomen conservandum*, ICZN 1985b), *Emys scripta, Trachemys scripta, Chrysemys scripta, Pseudemys scripta, Chrysemys scripta scripta, Chrysemys palustris scripta, Pseudemys scripta scripta, Trachemys scripta scripta*

Type locality: Not known. Restricted to "Charleston, South Carolina" [USA] by Schmidt (1953:102).

Testudo serrata Daudin 1801:148 (senior homonym, not = *Testudo serrata* Shaw 1802 = *Geoemyda spengleri*), *Emys serrata, Terrapene serrata, Clemmys (Clemmys) serrata, Pseudemys serrata*

Type locality: "la Caroline" [South Carolina, USA].

Emys occipitatis Gray *in* Griffith and Pidgeon 1830:75 [Gray 1830c]

Type locality: Not designated.

Emys vittata Gray 1830e:11 (10:7)

Type locality: "North America?"

Emys euglypha † Leidy 1889:97 (*nomen dubium*) [Pleistocene, USA (Florida)], *Trachemys euglypha, Pseudemys euglypha*

Type locality: "Florida...Arcadia, on Peace Creek" [USA].

Trachemys sculpta † Hay 1908b:351 (*nomen dubium*) [Pleistocene, USA (Florida)], *Pseudemys sculpta*

Type locality: "Hillsboro County, Florida...probably the Peace Creek beds" [USA].

Trachemys delicata † Hay 1916a:66 (*nomen dubium*) [Pleistocene, USA (Florida)], *Pseudemys delicata*

Type locality: "Near Labelle, Lee County, Florida" [USA].

Trachemys scripta elegans (Wied 1839) [25]
Red-eared Slider


Matthew Aresco / CRM 3 / Leon Co., Florida

Mexico (Nuevo Leon, Tamaulipas), USA (Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Nebraska, New Mexico [eastern], Ohio, Oklahoma, Tennessee, Texas, West Virginia)
Introduced: Argentina, Australia (New South Wales, Queensland, Victoria), Austria, Bahamas, Bahrain, Belgium, Bermuda, Bulgaria, Brazil, British Virgin Islands, Cambodia, Canada (Ontario), Cayman Islands, Chile, China (Hong Kong), Colombia, Cyprus, Czech Republic, Denmark, Dominican Republic, Ecuador, Egypt, Finland, France, French Polynesia, Germany, Great Britain, Greece, Guadeloupe, Guam, Guyana, Honduras, Hungary, Indonesia (Java, Kalimantan, Papua, Sulawesi, Sumatra), Iran (Mazandaran, Tehran), Ireland, Israel, Italy, Japan (mainland, Ryukyu Archipelago), Latvia, Malaysia (Peninsular, East), Martinique, Mexico, Micronesia, Myanmar, Netherlands, Netherlands Antilles, New Zealand, Nicaragua, Northern Mariana Islands [Saipan], Palau, Panama, Philippines (Cebu, Luzon, Mindanao), Poland, Portugal, Puerto Rico, Réunion, Russia, Saudi Arabia, Seychelles (Mahé), Singapore, Sint Maarten, Slovakia, Slovenia, South Africa, South Korea, Spain (Balearic Islands, Continental), Sri Lanka, Suriname, Sweden, Switzerland, Taiwan, Thailand, Trinidad, Turkey, USA (Arizona, California, Colorado, Connecticut, Delaware, Florida, Hawaii, Maine, Maryland, Massachusetts, Michigan, New Jersey, New Mexico [western], New York, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, Virginia, Washington), US Virgin Islands, Vietnam

Emys concinna Guérin 1829:pl.1,f.3 (*nomen oblitum* and senior homonym, not = *Emys concinna* Le Conte 1830 = *Pseudemys concinna concinna*) [25]
Type locality: Not designated.

Emys elegans Wied 1839:176,213, *Trachemys elegans, Clemmys elegans, Pseudemys elegans, Chrysemys elegans, Chrysemys scripta elegans, Chrysemys palustris elegans, Pseudemys troostii elegans, Pseudemys scripta elegans, Trachemys scripta elegans*
Type locality: "Gegend von Harmony...in dem Wabasch und Fox-River" [Indiana, USA]. Emended to "in Fox Rivers bei New-Harmony aus einem nebenflusse des Wabasch" [Indiana, USA] by Wied (1865:41).

Emys holbrookii Gray 1844:23, *Trachemys holbrookii*
Type locality: "N. America. Louisiana" [USA].

Emys sanguinolenta Gray 1856b:26,pl.15,f.1
Type locality: Not designated.

Emys petrolei † Leidy 1868:176 [Late Pleistocene, Rancholabrean, USA (Texas)], *Pseudemys petrolei, Chrysemys petrolei, Chrysemys scripta petrolei, Trachemys petrolei, Pseudemys scripta petrolei, Trachemys scripta petrolei*
Type locality: "Harden Co., Texas" [USA].

Trachemys lineata Gray 1873a:147
Type locality: "North America." Restricted to "New Harmony, Posey County, Indiana" [USA] by Schmidt (1953:103).

Pseudemys bisornatus † Cope 1878:228 [Pleistocene, USA (Texas)], *Pseudemys bisornata, Chrysemys scripta bisornata, Pseudemys scripta bisornata, Trachemys scripta bisornata, Trachemys bisornata*
Type locality: "South-western Texas" [USA]. Restricted to "Atascosa County, Texas" [USA] by Hay (1908b:354).

Trachemys trulla † Hay 1908b:355 (*nomen dubium*) [Pleistocene, USA (Texas)], *Pseudemys trulla*
Type locality: "Hardin County, Texas" [USA].

Trachemys scripta troostii (Holbrook 1836)
Cumberland Slider

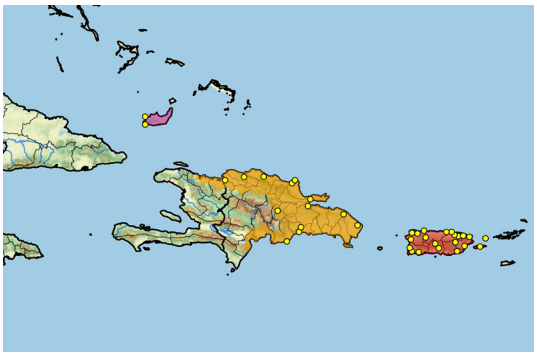

James H. Harding / Tennessee

USA (Tennessee, Virginia)
Introduced: Latvia

Emys troostii Holbrook 1836:55, *Trachemys troostii, Clemmys troostii, Pseudemys troostii, Chrysemys troostii, Pseudemys scripta troostii, Pseudemys troostii troostii, Chrysemys scripta troostii, Trachemys scripta troostii*
Type locality: "Cumberland river" [Tennessee, USA].

Emys cumberlandensis Holbrook 1840:55
Type locality: "Tennessee...Cumberland river" [USA].

Trachemys stejnegeri (Schmidt 1928) [14:22]
Central Antillean Slider


(subspecies: *stejnegeri* = red, *malonei* = purple, *vicina* = orange)
Bahamas (Inagua), Dominican Republic, Haiti, Puerto Rico
Introduced: Dominica, Guadeloupe
IUCN Red List: Near Threatened (1996)
TFTSG Draft Red List: Near Threatened (2011)

Trachemys stejnegeri stejnegeri (Schmidt 1928)
Puerto Rican Slider



Anders G.J. Rhodin / Fajardo, Puerto Rico

USA (Puerto Rico)

Emys olivacea Gray 1856b:30 (junior homonym, not = *Emys olivacea* Schweigger 1812 = *Pelomedusa olivacea*), *Clemmys olivacea, Redamia olivacea, Chrysemys olivacea*
Type locality: "N. America?"

Pseudemys stejnegeri Schmidt 1928:147, *Pseudemys palustris stejnegeri, Pseudemys stejnegeri stejnegeri, Pseudemys terrapen stejnegeri, Pseudemys decussata stejnegeri, Chrysemys decussata stejnegeri, Chrysemys stejnegeri, Chrysemys terrapen stejnegeri, Trachemys stejnegeri, Trachemys stejnegeri stejnegeri*
Type locality: "San Juan, Porto Rico" [Puerto Rico, USA].

Trachemys stejnegeri malonei (Barbour and Carr 1938)
Inagua Slider
Bahamas (Inagua)

Pseudemys malonei Barbour and Carr 1938:76, *Pseudemys palustris malonei, Pseudemys terrapen malonei, Chrysemys malonei, Chrysemys terrapen malonei, Trachemys stejnegeri malonei, Trachemys malonei*
Type locality: "ponds near Northwest Point, Great Inagua Island, B.W.I." [Bahamas].

Trachemys stejnegeri vicina (Barbour and Carr 1940)
Dominican Slider



Peter Paul van Dijk / Vuelta Larga, Dominican Republic

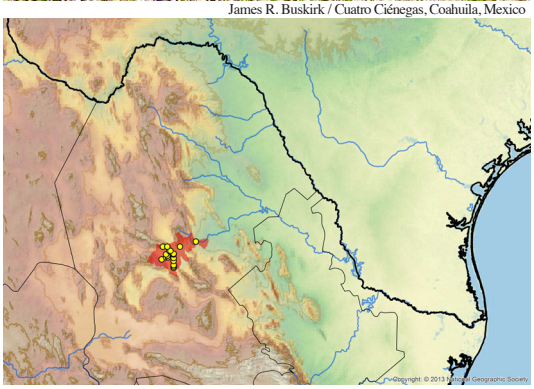
Dominican Republic, Haiti

Pseudemys stejnegeri vicina Barbour and Carr 1940:408, *Pseudemys terrapen vicina, Pseudemys decussata vicina, Chrysemys decussata vicina, Chrysemys stejnegeri vicina, Chrysemys terrapen vicina, Trachemys stejnegeri vicina*
Type locality: "Sanchez, San Domingo" [Dominican Republic].

Trachemys taylori (Legler 1960) (07:18, 12:17)
Cuatro Cienegas Slider



James R. Buskirk / Cuatro Ciénegas, Coahuila, Mexico



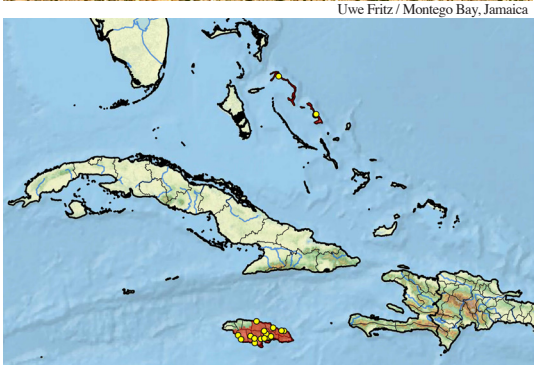
Mexico (Coahuila)
IUCN Red List: Endangered A4e, B1ab(iii,v)+2ab(iii,v) (2007)

Pseudemys scripta taylori Legler 1960:75, *Chrysemys scripta taylori, Chrysemys gaigeae taylori, Chrysemys taylori, Trachemys scripta taylori, Trachemys nebulosa taylori, Trachemys ornata taylori, Trachemys taylori*
Type locality: "16 km. S Cuatro Ciénegas, Coahuila, México."

Trachemys terrapen (Bonnaterre 1789) (09:6, 14:22)
Jamaican Slider



Uwe Fritz / Montego Bay, Jamaica



Bahamas (Cat Island, Eleuthera [prehistoric introduction?]), Jamaica

IUCN Red List: Vulnerable B1+2c (1996)

Testudo terrapen Lacepède 1788:129, synopsis[table] (09:6) (*nomen suppressum,* ICZN 2005a)
Type locality: "aux Antilles, & particulièrement à la Jamaïque" [Jamaica].

Testudo terrapen Bonnaterre 1789:30, *Pseudemys terrapen, Pseudemys terrapen terrapen, Chrysemys (Trachemys) terrapen, Chrysemys terrapen, Chrysemys terrapen terrapen, Trachemys terrapen, Trachemys terrapen terrapen*
Type locality: "la Jamaïque" [Jamaica].

Testudo palustris Gmelin 1789:1041 (senior homonym, not = *Testudo palustris* Le Conte 1830 = *Malaclemys terrapin terrapin*), *Trachemys palustris, Pseudemys palustris, Chrysemys scripta palustris, Pseudemys palustris palustris*
Type locality: "Jamaicae aquis stagnantibus" [Jamaica].

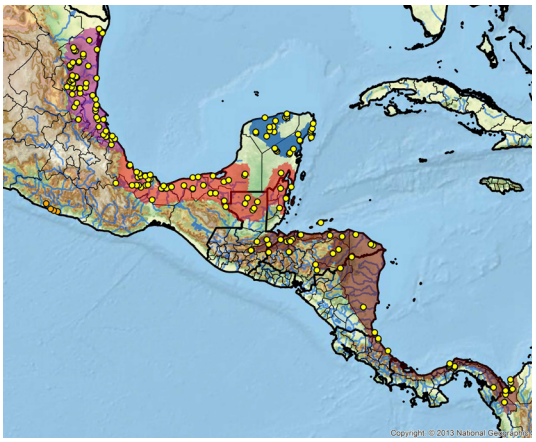
Testudo fasciata Suckow 1798:40 (senior homonym, not = *Testudo fasciata* Daudin 1801 = *Homopus areolatus*)
Type locality: "Amboina, und besonders in Nordamerika zu Carolina" [in error]. Restricted to "Jamaica" by Seidel (1988:23).

Testudo rugosa Shaw 1802:28 (*partim, nomen dubium* and junior homonym, not = *Testudo rugosa* Van-Ernest *in* Daudin 1801 = *Chelonia mydas*), *Emys rugosa, Clemmys rugosa, Chrysemys scripta rugosa, Pseudemys rugosa*
Type locality: Not designated. Restricted to "Rio Jobabo drainage in eastern Cuba" by Mittleman (1947:176).

Emys rugosa livida Gray 1831d:30
Type locality: "America septentrionali?"

Pseudemys felis Barbour 1935:205, *Pseudemys palustris felis, Pseudemys terrapen felis, Chrysemys decussata felis, Chrysemys felis, Chrysemys terrapen felis, Trachemys terrapen felis, Trachemys felis*
Type locality: "Tea Bay, Cat Island, Bahamas."

Trachemys venusta (Gray 1856b) (07:18, 10:6, 10:10, 11:6, 12:18, 14:23) **(26)**
Eastern Meso-American Slider



(subspecies: *venusta* = red, *cataspila* = purple, *iversoni* = blue, *uhrigi* = brown; orange dots = introduced)

Belize, Colombia (Antioquia, Chocó), Costa Rica, El Salvador, Guatemala, Honduras, Mexico (Campeche, Chiapas, Oaxaca, Quintana Roo, San Luis Potosi, Tabasco, Tamaulipas, Veracruz, Yucatán), Nicaragua, Panama

IUCN Red List: Not Evaluated

TFTSG Draft Red List: Data Deficient (South America regional) (2011)

Trachemys venusta venusta (Gray 1856b) (07:18, 10:10, 11:6, 12:18, 14:23) **(26)**
Meso-American Slider



Vincenzo Ferri / Mexico [captivity]

Belize, Guatemala, Mexico (Campeche, Chiapas, Oaxaca, Quintana Roo, Tabasco, Tamaulipas, Veracruz)

Emys venusta Gray 1856b:24 (12:18), *Callichelys venusta, Pseudemys scripta venusta, Chrysemys scripta venusta, Trachemys scripta venusta, Trachemys ornata venusta, Trachemys venusta, Trachemys venusta venusta*
Type locality: "Southern States of America; Honduras." Restricted to "Honduras" by lectotype designation by Smith and Smith (1980:495).

Emys valida Le Conte 1860:7, *Clemmys valida*
Type locality: "Honduras."

Emys (Clemmys) salvini Günther 1885:4, *Pseudemys salvini*
Type locality: "Guatemala."

Trachemys venusta cataspila (Günther 1885) (07:18, 10:10, 11:6) **(26)**



James R. Buskirk / Aldama, Tamaulipas, Mexico

Mexico (San Luis Potosi, Tamaulipas, Veracruz)

Emys ventricosa Gray 1856b:28 (*nomen suppressum,* ICZN 1985b), *Pseudemys ventricosa*
Type locality: Not known.

Emys (Clemmys) cataspila Günther 1885:4 (*nomen conservandum,* ICZN 1985b), *Pseudemys cataspila, Chrysemys ornata cataspila, Pseudemys scripta cataspila, Pseudemys ornata cataspila, Chrysemys scripta cataspila, Trachemys scripta cataspila, Trachemys ornata cataspila, Trachemys venusta cataspila*
Type locality: "Mexico." Restricted to "Alvarado, Veracruz, Mexico" [in error] by Smith and Taylor (1950a:346, 1950b:32); and to "Tampico, Tamaulipas" [Mexico] by Smith and Smith (1980:486).

Trachemys venusta iversoni McCord, Joseph-Ouni, Hagen, and Blanck 2010 (10:10, 11:6) **(26)**

Yucatan Slider



John B. Iverson / Cobá, Quintana Roo, Mexico

Mexico (Quintana Roo, Yucatán)

Trachemys venusta iversoni McCord, Joseph-Ouni, Hagen, and Blanck 2010:45

Type locality: "Cenote on the north side of the highway, 13.8 km east of Buctzotz, Yucatán, Mexico."

Trachemys venusta uhrigi McCord, Joseph-Ouni, Hagen, and Blanck 2010 (10:10, 11:6, 14:23) **(26)**

Uhrig's Slider

Colombia (Antioquia, Chocó), Costa Rica, Honduras, Nicaragua, Panama

Testudo panama Perry 1810:[unpaginated], pl.33 (12:18) (*nomen oblitum et dubium*)

Type locality: "countries of South America, adjoining to the Isthmus of Panama."

Trachemys venusta uhrigi McCord, Joseph-Ouni, Hagen, and Blanck 2010:43

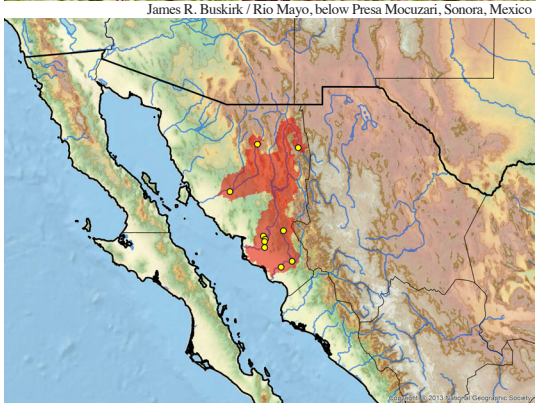
Type locality: "Río Chamelecón drainage 3 km south of San Pedro Sula, northwestern Caribbean coastal Honduras."

Trachemys yaquia (Legler and Webb 1970) (07:18)

Yaqui Slider



James R. Buskirk / Rio Mayo, below Presa Mocuzari, Sonora, Mexico



Mexico (Sonora)

IUCN Red List: Vulnerable B1ab(iii)+2ab(iii) (2007)

Pseudemys scripta yaquia Legler and Webb 1970:158, *Chrysemys scripta yaquia, Pseudemys ornata yaquia, Trachemys scripta yaquia, Trachemys dorbigni yaquia, Trachemys ornata yaquia, Trachemys yaquia*

Type locality: "Río Mayo, Conicarit, Sonora, México (27°14' N, 109°06' W)."

Emydinae Rafinesque 1815 (17)

Emidania Rafinesque 1815:75

Emydidae Bell 1825a:302

Emydinae Cope 1870b:123

Clemmys Ritgen 1828

Chelopus Rafinesque 1815:75 (*nomen nudum*)

Clemmys Ritgen 1828:270

Type species: *Clemmys punctata* [= *Testudo punctata* Schoepff 1792 = subjective synonym of *Testudo guttata* Schneider 1792], by subsequent designation by Baur (1892:43).

Chelopus Rafinesque 1832:64

Type species: *Chelopus punctatus* [= *Testudo punctata* Schoepff 1792 = subjective synonym of *Testudo guttata* Schneider 1792], by original monotypy.

Nanemys Agassiz 1857a:252,442

Type species: *Nanemys guttata* [= *Testudo guttata* Schneider 1792], by original monotypy.

Melanemys Shufeldt 1919:157

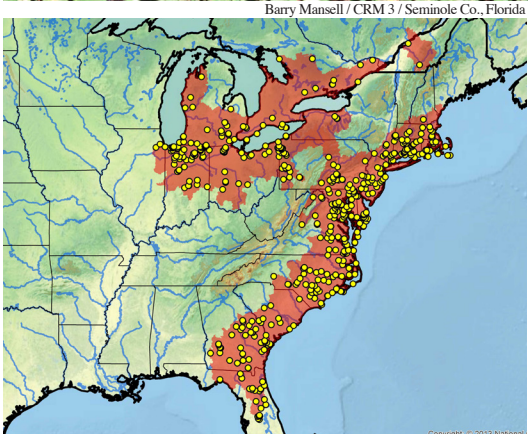
Type species: *Melanemys guttatus* [= *Testudo guttata* Schneider 1792], by subsequent designation by Dunn (1920:8).

Clemmys guttata (Schneider 1792) (29)

Spotted Turtle



Barry Mansell / CRM 3 / Seminole Co., Florida



Canada (Ontario), USA (Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, West Virginia)

IUCN Red List: Endangered A2cde+4ce (2013); Previously: Vulnerable (1996)

CITES: Appendix II

Testudo guttata Schneider 1792:264, *Emys guttata, Geoclemys guttata, Nanemys guttata, Clemmys guttata, Geoclemmys guttata, Chelopus guttatus, Melanemys guttatus*
Type locality: Not designated. Restricted to "Philadelphia, Pennsylvania" [USA] by Mittleman (1945:171); and to "vicinity of Philadelphia, Pennsylvania" [USA] by Schmidt (1953:91).

Testudo punctata Schoepff 1792:25 (junior homonym, not = *Testudo punctata* Lacepède 1788 or *Testudo punctata* Bonnaterre 1789 = *Lissemys punctata punctata*), *Emys punctata, Clemmys punctata, Terrapene punctata, Chelopus punctatus*
Type locality: "in paludosis Americae septentrionalis... Philadelphiam" [Pennsylvania, USA].

Testudo anonyma Schneider *in* Schoepff 1792:25 (*nomen nudum*)

Geoclemmys sebae Gray 1869a:188
Type locality: Not designated. Restricted to "vicinity of Philadelphia" [Pennsylvania, USA] by Schmidt (1953:91).

Emys Duméril 1805 (07:21, 09:16, 10:11, 10:12, 11:7, 14:24)

Emydes Brongniart 1805:27 (*nomen suppressum*, ICZN 1995b)

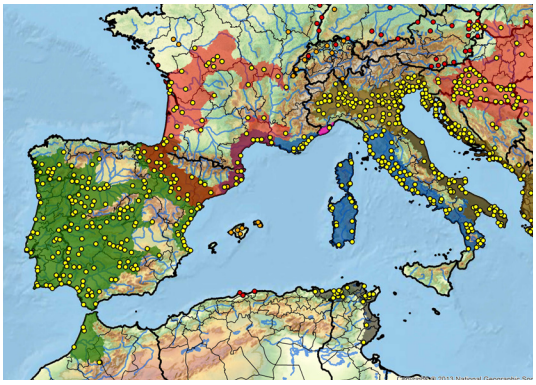
Emys Duméril 1805:76 (10:11) (*nomen conservandum*, ICZN 1995b)
Type species: *Emys europaea* Schweigger [= *Testudo europaea* Schneider 1783 = subjective synonym of *Testudo orbicularis* Linnaeus 1758], by subsequent designation by Fitzinger (1843:29).

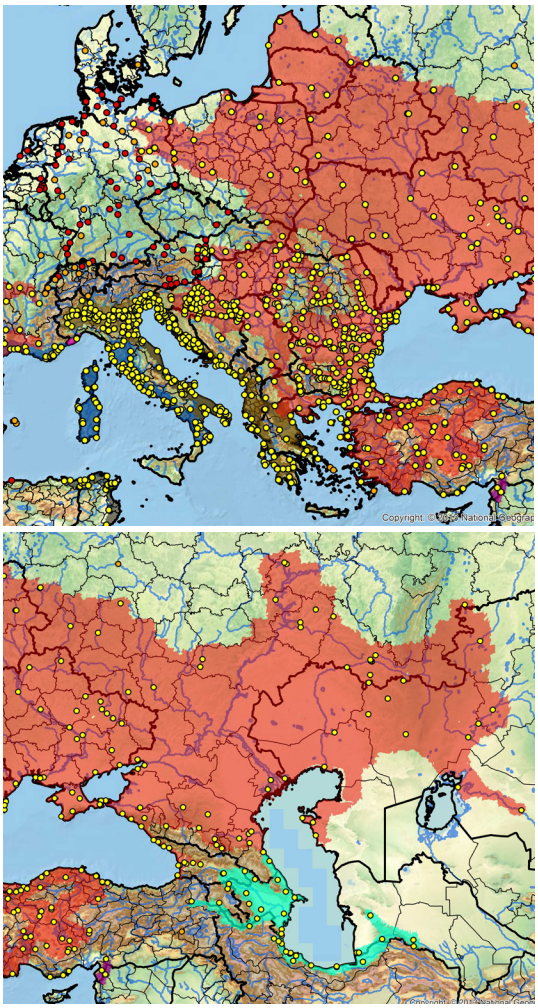
Hydrone Rafinesque 1814:66
Type species: *Hydrone orbicularis* [= *Testudo orbicularis* Linnaeus 1758], by subsequent designation by Loveridge and Williams (1957:201).

Emyda Rafinesque 1815:75 (*nomen novum* and senior homonym, not = *Emyda* Gray 1830e = *Lissemys*)

Lutremys Gray 1844:31
Type species: *Cistudo* (*Lutremys*) *europaea* [= *Testudo europaea* Schneider 1783 = subjective synonym of *Testudo orbicularis* Linnaeus 1758], by original monotypy.

Emys orbicularis (Linnaeus 1758)
European Pond Turtle





(subspecies: *orbicularis* = red, *eiselti* = purple, *galloitalica* = blue, *hellenica* = brown, *ingauna* = pink, *occidentalis* = green, *persica* = tourmaline; unassigned *E. orbicularis* sensu lato = gray (Algeria, Tunisia, southern Turkey); overlap = intergrades; orange dots = introduced; red dots = extirpated)

Albania, Algeria, Armenia, Austria, Azerbaijan, Belarus, Belgium (extirpated), Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic (extirpated, reintroduced), Denmark (extirpated, reintroduced), Estonia (extirpated), France (Continental, Corsica [prehistoric introduction?]), Georgia, Germany, Greece, Hungary, Iran, Italy (Continental, Sardinia [prehistoric introduction]), Kazakhstan, Kosovo, Latvia, Lithuania, Luxembourg (extirpated), Macedonia, Moldova, Montenegro, Morocco, Netherlands (extirpated), Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain (Continental), Switzerland (extirpated, reintroduced), Syria, Tunisia, Turkey, Turkmenistan, Ukraine

Introduced: Spain (Balearic Islands)

IUCN Red List: Global: Near Threatened (1996); Regional: Europe: Near Threatened (2004); European Union: Vulnerable A2bcde (2004)

Emys orbicularis orbicularis (Linnaeus 1758) [(09:17)] [(30,31)]
European Pond Turtle


Uwe Fritz / Dnieper R. Delta, Ukraine

Austria, Belarus, Belgium (extirpated), Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic (extirpated, reintroduced), Denmark (extirpated, reintroduced), Estonia (extirpated), France, Georgia, Germany, Hungary, Italy, Kazakhstan, Kosovo, Latvia, Lithuania, Luxembourg (extirpated), Moldova, Netherlands (extirpated), Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Switzerland (extirpated), Turkey, Ukraine

Introduced: Spain (Balearic Islands)

Testudo orbicularis Linnaeus 1758:198 (*nomen conservandum*, ICZN 1995b), *Hydrone orbicularis, Emys orbicularis, Emys orbicularis orbicularis*
Type locality: "meridionalibus Europae." Restricted to "Mecklenburgisch-Pommersche Seenplatte" [Germany] by Fritz (1992:67), and by neotype designation by Fritz (1994:65).

Testudo lutaria Linnaeus 1758:198, *Emydes lutaria, Hydrone lutaria, Emys lutaria, Clemmys (Clemmys) lutaria, Cistudo lutaria*
Type locality: "Italia, Oriente." Restricted to "Mecklenburgisch-Pommersche Seenplatte" [Germany] by Fritz (1992:67).

Testudo terrestris Garsault 1764:pl.675 [(10:13)] (*nomen oblitum* and senior homonym, not = *Testudo terrestris* Fermin 1765 = *Chelus fimbriata* or *Testudo terrestris* Forskål 1775 [*nomen conservandum*] = *Testudo (Testudo) graeca terrestris*)
Type locality: Not designated.

Testudo europaea Schneider 1783:323, *Emys europaea, Terrapene europaea, Cistuda europaea, Cistudo europaea, Cistudo (Lutremys) europaea, Lutremys europaea*
Type locality: "meisten Ländern von Europa bis in Preussen" [Germany]. Restricted to "Frankfurt an der Oder" [Germany] by Fritz (1992:67).

Testudo pulchella Schoepff 1801:113 (senior homonym, not = *Emys pulchella* sensu Schweigger 1812 = *Glyptemys insculpta*), *Emys pulchella*
Type locality: Not known. Restricted to "Mecklenburgisch-Pommersche Seenplatte" by Fritz (1992:67).

Terrapene europea Bell 1825a:308 (*nomen novum*)

Emys turfa † Meyer 1835:67 [Holocene, subfossil, Germany], *Cistudo lutaria turfa*
Type locality: "Enkheim unweit Frankfurt" [Germany].

Clemmys schlotheimii † Fitzinger 1835:127 [(30)] (*nomen nudum*) [Pleistocene, Germany]
Type locality: Not designated. Restricted to "Burgtonna" [Thuringia, Germany] by lectotype designation by Karl and Paust (2014:156).

Trionyx schlotheimii † Fitzinger 1835:128 [(30)] (*nomen nudum*) [Pleistocene, Germany]
Type locality: Not designated. Restricted to "Burgtonna" [Thuringia, Germany] by lectotype designation by Karl and Paust (2014:156).

Emys fossilis † Nilsson 1841:206 (*nomen nudum*), *Emys lutaria fossilis*

Emys lutaria borealis † Nilsson 1841:208 [Holocene, Boreal (Atlantic), subfossil, Sweden]
Type locality: "Gräfve af Brågarps pastorat...Skåne..[&]..Götha kanal, Östergöthland...vid Nordskogsvägen nära intill Svartjordshålan" [Gräfve in Brågarp's Parish...Scania..[&]..Göta Canal, East Götaland...along Nordskogs Road near Svartjordshålan] [Sweden]. Restricted to "Schonen, Südschweden" [Scania (Skåne), Sweden] by Fritz (1992:67).

Testudo (Emys) canstadiensis † Plieninger 1847:208 [(31)] [Pleistocene, Germany]
Type locality: "Württemberg...Cannstadt" [Germany].

Cistudo anhaltina † Giebel 1866a:1 [Holocene, subfossil, Germany], *Emys anhaltina*
Type locality: "Latdorf...Nord-deutschland" [Germany]. Emended to "Lattorf vid Bernberg a. d. Saale" [Germany] by Kurck (1917:23); and to "Latdorf bei Bernburg an der Saale, Deutschland" [Germany] by Fritz (1995:227).

Emys lutaria taurica Mehnert 1890:537
Type locality: "Ufer des Dnjepr, einige Meilen von seiner Ausmündung" [Ukraine].

Emys europaea sparsa Dürigen 1897:14
Type locality: Not designated. Restricted to "Ungarn" [Hungary] by Fritz (1992:67).

Emys europaea punctata Dürigen 1897:15
Type locality: Not designated. Restricted to "Mecklenburg" [Germany] by Fritz (1992:67).

Emys europaea concolor Dürigen 1897:15
Type locality: Not designated. Restricted to "Mark Brandenburg" [Germany] by Fritz (1992:67).

Emys orbicularis aralensis Nikolsky 1915:24
Type locality: "Lac. Aral" [Kazakhstan].

Emys orbicularis luteofusca Fritz 1989:145 [(09:17)]
Type locality: "See-Ebene westlich von Ereğli, Provinz Konya, Türkei" [Turkey].

Emys orbicularis colchica Fritz 1994:61 [(09:17)]
Type locality: "Batumi (Batum)" [Georgia].

Emys orbicularis eiselti Fritz, Baran, Budak, and Amthauer 1998
Eiselt's Pond Turtle, Turkish Pond Turtle


Dinçer Ayaz / Samandağ Distr., Antakya, Turkey

Syria, Turkey

Emys orbicularis eiselti Fritz, Baran, Budak, and Amthauer 1998b:113
Type locality: "14 km NE of Fevzipaşa (about 450 m above sea level), Vilayet Gaziantep" [Turkey].

Emys orbicularis galloitalica Fritz 1995 (10:14)
Franco-Italian Pond Turtle


Uwe Fritz / Plaine des Maures, France

France (Continental, Corsica [prehistoric introduction?]), Italy (Continental, Sardinia [prehistoric introduction]), Spain (Continental)
Introduced: Spain (Balearic Islands)
Emys orbicularis (galloitalica) capolongoi Fritz 1995:204 (10:14), *Emys orbicularis capolongoi*
Type locality: "Olbia (Sardinien)" [Italy].
Emys orbicularis (galloitalica) lanzai Fritz 1995:211 (10:14), *Emys orbicularis lanzai*
Type locality: "Conca-Mündung bei Fontea, unweit Santa Lucia di Porto-Vecchio (Korsika)" [France].
Emys orbicularis (galloitalica) galloitalica Fritz 1995:217, *Emys orbicularis galloitalica*
Type locality: "5 km östlich Collobrières, Département Var, Südfrankreich" [France].

Emys orbicularis hellenica Valenciennes *in* Bory de Saint-Vincent 1833 (12:19, 14:25)
Hellenic Pond Turtle


Uwe Fritz / Kefalinia, Greece / male

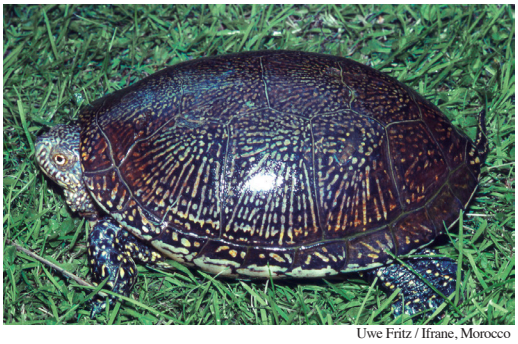
Albania, Bosnia and Herzegovina, Croatia, Greece, Italy, Kosovo, Macedonia, Montenegro, Serbia, Slovenia
Emys hellenica Valenciennes *in* Bory de Saint-Vincent 1833:planches, pl.8 (14:25), *Cistuda hellenica, Emys orbicularis hellenica*
Type locality: Not designated. Restricted to "plaine de Nisi que baigne le Pamisus au coeur de la Messénie" [Peloponnes, Greece] by Bibron and Bory de Saint-Vincent (1833:61).
Emys iberica Valenciennes *in* Bory de Saint-Vincent 1833:planches, pl.9 (14:25)
Type locality: Not designated. Restricted to "Morée, où l'embouchure de l'Eurotas en est remplie, ainsi que le principal ruisseau de l'île de Tine" [Greece] by Bibron and Bory de Saint-Vincent (1833:61).
Emys antiquorum Bory de Saint-Vincent 1835:Atlas, pl.9 [corrigenda] (14:25) (*nomen novum et nomen nudum*)
Type locality: Not designated.
Emys (Emys) hofmanni Fitzinger 1835:123 (12:19) (*nomen novum*), *Emys orbicularis hoffmanni, Cistudo hoffmanni*
Emys orbicularis atra Werner 1897:15
Type locality: "Dalmatien und Cephallonia" [Croatia and Greece].
Emys europaea maculosa Dürigen 1897:15
Type locality: Not designated. Restricted to "Dalmatien" [Croatia] by Fritz (1992:68).

Emys orbicularis ingauna Jesu, Piombo, Salvidio, Lamagni, Ortale, and Genta 2004 (10:14)
Ligurian Pond Turtle


Pino Piccardo / Albenga, Italy

Italy (Continental)
Emys orbicularis ingauna Jesu, Piombo, Salvidio, Lamagni, Ortale, and Genta 2004:139, *Emys (Emys) orbicularis ingauna*
Type locality: "Peagna (Comune di Ceriale), Provincia di Savona (Regione Liguria, Italia)" [Italy].

Emys orbicularis occidentalis Fritz 1993 (32)
Western Pond Turtle, Spanish Pond Turtle, Magreb Pond Turtle


Uwe Fritz / Ifrane, Morocco

Morocco, Portugal, Spain
Emys orbicularis occidentalis Fritz 1993:136 (32)
Type locality: "Lagune von Medhiya unweit Kenitra, Marokko" [Morocco].
Emys orbicularis fritzjuergenobsti Fritz 1993:132 (09:18) (32)
Type locality: "Castellón de la Plana, Spanien" [Spain].
Emys orbicularis hispanica Fritz, Keller, and Budde 1996:132 (09:18)
Type locality: "Doñana, Huelva" [Spain].

Emys orbicularis persica Eichwald 1831 (07:23, 07:24, 09:19) (**33**)
Eastern Pond Turtle, Persian Pond Turtle


James F. Parham / CRM 4 / Shahrbijar, Gilan Prov., Iran

Armenia, Azerbaijan, Georgia, Iran (Ardabil, Gilan, Golestan, Mazandaran), Russia (Dagestan), Turkmenistan
Introduced: Iran (Alborz, Teheran)

Emys europaea persica Eichwald 1831:196 (**33**), *Emys europaea persicae*, *Emys orbicularis persica*
Type locality: "provincia Masanderan" [Mazandaran Province, Caspian Sea, Iran].

Emys europaea iberica Eichwald 1831:196 (09:19) (**33**), *Emys europaea ibericae*, *Emys orbicularis iberica*
Type locality: Not designated. Restricted to "in Iberiae convallibus paludosis et fluviis, Cyrum amnem petentibus" [in marshy Iberian valleys and rivers, Kura River creeks] [Georgia and Azerbaijan] by Eichwald (1840:47).

Emys orbicularis orientalis Fritz 1994:72
Type locality: "Bandar-e-Anzali (Enzeli), Prov. Gilan, Iran."

Emys orbicularis kurae Fritz 1994:78 (09:19)
Type locality: "Bank (Bank Promisl) an der Kura-Mündung, Aserbaidshan" [Azerbaijan].

***Emys orbicularis* ssp. indet.** (14:26)

Testudo purgotii † Ceselli 1846:24 (*nomen oblitum*) [Late Pleistocene, Italy]
Type locality: "Viterbo...Viterbesi...acque Caje" [Italy].

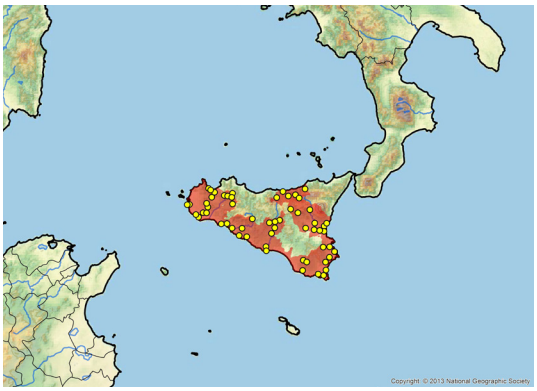
Emys maior † Portis 1890:16 (14:26) (*nomen dubium*) [Late Pliocene to Early Pleistocene, Villafranchian, Italy]
Type locality: "Poderaccio sotto Persignano nella Valle Superiore dell'Arno" [Italy].

Emys latens † Portis 1890:16 (14:26) (*nomen dubium*) [Late Pliocene to Early Pleistocene, Villafranchian, Italy]
Type locality: "Colombajolo presso S. Giovanni" [Italy].

Emys tigris Salvator 1897:280 (*nomen nudum*)
Type locality: "Mercadal, Insel Menorca" [Balearic Islands, Spain].

Emys trinacris Fritz, Fattizzo, Guicking, Tripepi, Pennisi, Lenk, Joger, and Wink 2005 (**34**)
Sicilian Pond Turtle


Melita Vamberger / Laghetto Gorgo, Sicily, Italy


Copyright © 2013 National Geographic Society

Italy (Sicily)
IUCN Red List: Data Deficient (2009)

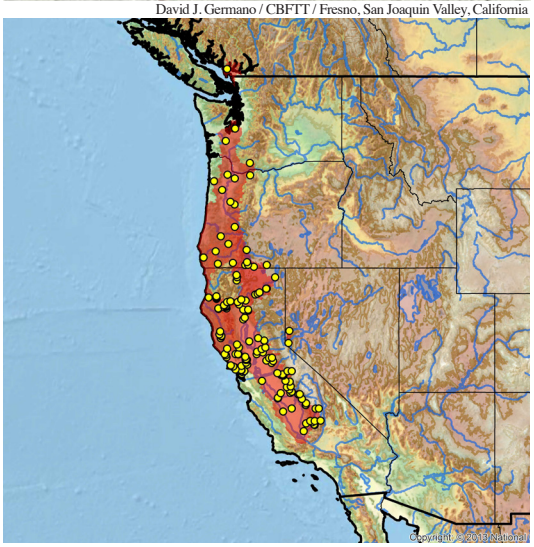
Emys trinacris Fritz, Fattizzo, Guicking, Tripepi, Pennisi, Lenk, Joger, and Wink 2005a:364
Type locality: "Lago Gian Fenaro, below the pass of Pizzo Laminaria approximately 1400 m above sea level, Monte Nebrodi, Sicily" [Italy]. Emended to "Laghetto Gianferraro...14.497241 E, 37.951625 N; Elevation: 1007 m a.s.l." by Marrone et al. (2016:60).

Emys Duméril 1805 **or**
Actinemys Agassiz 1857a (07:22, 09:16, 10:12, 11:7, 14:24) (**35**)

Actinemys Agassiz 1857a:252,444
Type species: *Actinemys marmorata* [= *Emys marmorata* Baird and Girard 1852], by original designation.

Emys marmorata (Baird and Girard 1852) (07:22, 10:15) (**35**) **or**
Actinemys marmorata
Northern Pacific Pond Turtle, Northern Western Pond Turtle


David J. Germano / CBFTT / Fresno, San Joaquin Valley, California


Copyright © 2013 National

Canada (?) (British Columbia), USA (California, Nevada,

Oregon, Washington)
Introduced: Australia (New South Wales)
CBFTT Account: Bury and Germano (2008)
IUCN Red List: Vulnerable A1cd (1996)
TFTSG Draft Red List: Vulnerable (2011)

Emys marmorata Baird and Girard 1852:177, *Actinemys marmorata, Clemmys marmorata, Geoclemmys marmorata, Chelopus marmoratus, Melanemys marmorata, Clemmys marmorata marmorata, Actinemys marmorata marmorata, Emys marmorata, Emys marmorata marmorata*
Type locality: "Puget Sound" [Washington, USA].

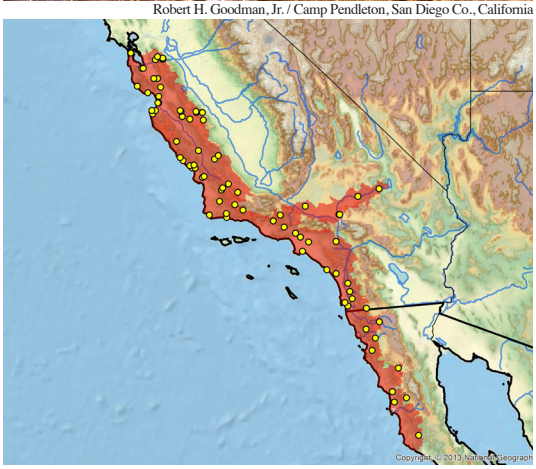
Emys nigra Hallowell 1854:91 (senior homonym, not = *Emys nigra* Blyth 1856 = *Siebenrockiella crassicollis*)
Type locality: "Posa Creek, Lower California" [Kern County, California, USA].

Clemmys wosnessenskyi Strauch 1862:114, *Geoclemmys wosnessenskyi*
Type locality: "Rio Sacramento in Californien" [USA].

Clemmys hesperia † Hay 1903:238 [Pliocene, USA (Oregon)]
Type locality: "Rattlesnake beds, Rattlesnake Creek, Oregon" [USA].

Emys pallida (Seeliger 1945) (07:22, 10:15) (35) **or**
Actinemys pallida
Southern Pacific Pond Turtle, Southern Western Pond Turtle


Robert H. Goodman, Jr. / Camp Pendleton, San Diego Co., California



Mexico (Baja California), USA (California)
CBFTT Account: Bury and Germano (2008) [as part of *A. marmorata*]
IUCN Red List: Vulnerable A1cd (1996), as part of *A. marmorata*
TFTSG Draft Red List: Vulnerable (2011), as part of *A. marmorata*

Clemmys marmorata pallida Seeliger 1945:158, *Actinemys marmorata pallida, Emys marmorata pallida, Emys pallida, Actinemys pallida*
Type locality: "Lower Coyote Creek, near Alamitos, Orange County, California" [USA].

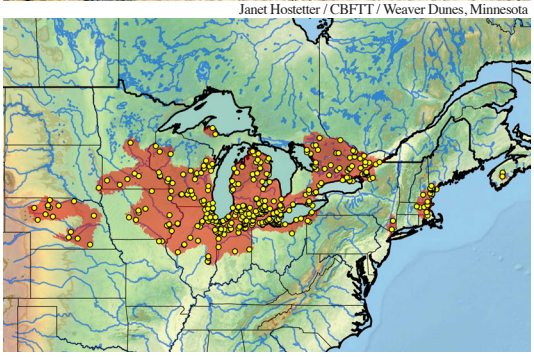
Emys Duméril 1805 **or** *Emydoidea* Gray 1870c (07:21, 09:16, 10:12, 11:7, 14:24) (36)

Emydoidea Gray 1870c:19
Type species: *Emydoidea blandingii* [= *Cistuda blandingii* Holbrook 1838b], by original monotypy.

Neoemys Lindholm 1929:282 (*nomen novum*)

Emys blandingii (Holbrook 1838b) (36) **or**
Emydoidea blandingii
Blanding's Turtle


Janet Hostetter / CBFTT / Weaver Dunes, Minnesota



Canada (Nova Scotia, Ontario, Québec), USA (Illinois, Indiana, Iowa, Maine, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, New York, Ohio, Pennsylvania, South Dakota, Wisconsin)
CBFTT Account: Congdon, Graham, Herman, Lang, Pappas, and Brecke (2008)
IUCN Red List: Endangered A2cde+4ce (2013); Previously: Near Threatened (1996)
CITES: Appendix II

Testudo flava Lacepède 1788:135, synopsis[table] (09:6) (*nomen suppressum*, ICZN 1963)
Type locality: "Amérique..[&]..l'isle de l'Ascension." Restricted to "Amerika" by Wermuth (1956:407).

Testudo flava Bonnaterre 1789:26 (*nomen oblitum*)
Type locality: "Amérique, l'ile de l'Ascension."

Testudo meleagris Shaw 1793:147 (*nomen suppressum*, ICZN 1963), *Lutremys meleagris, Emys meleagris*
Type locality: "America" [USA].

Cistuda blandingii Holbrook 1838b:35 (*nomen conservandum*, ICZN 1963), *Cistudo blandingii, Emys blandingii, Emydoidea blandingii, Neoemys blandingii*
Type locality: "Fox river, a tributary of the Illinois" [Illinois, USA].

Emys twentei † Taylor 1943:250 [Pleistocene, USA (Kansas)]

Type locality: "north side of the Cimarron river, 13 miles southwest of Meade, Meade County, Kansas (Loc. No. 7, XI Ranch)" [USA].

Glyptemys Agassiz 1857a (07:21)

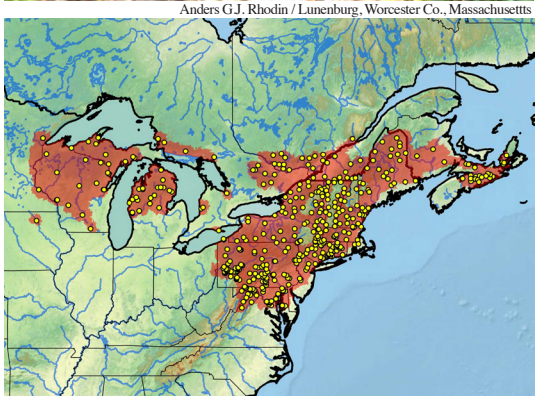
Calemys Agassiz 1857a:252,443
Type species: *Calemys muhlenbergii* [= *Testudo muhlenbergii* Schoepff 1801], by original designation.
Glyptemys Agassiz 1857a:252,443
Type species: *Glyptemys inculpta* [= *Testudo insculpta* Le Conte 1830], by original designation.

Glyptemys insculpta (Le Conte 1830)

Wood Turtle



Anders G.J. Rhodin / Lunenburg, Worcester Co., Massachusettts



Canada (New Brunswick, Nova Scotia, Ontario, Québec), USA (Connecticut, Delaware, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, Wisconsin)
IUCN Red List: Endangered A2cd+4c (2013); Previously: Vulnerable (1996)
CITES: Appendix II

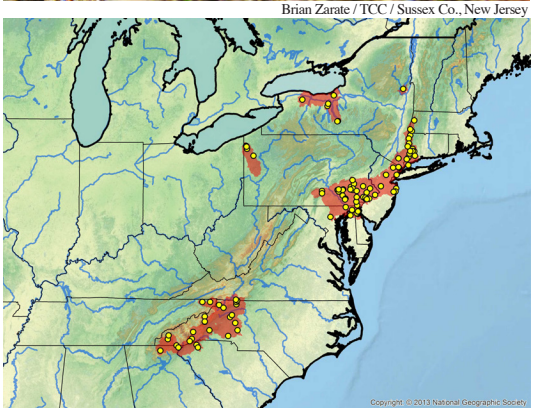
Emys pulchella sensu Schweigger 1812:303 (junior homonym, not = *Testudo pulchella* Schoepff 1801 [= *Emys pulchella*] = *Emys orbicularis orbicularis*), *Geoclemys pulchella, Glyptemys pulchella*
Testudo insculpta Le Conte 1830:112, *Clemmys (Clemmys) insculpta, Clemmys insculpta, Emys insculpta, Glyptemys insculpta, Chelopus insculptus, Calemys insculpta*
Type locality: "the northern states" [USA]. Restricted to "vicinity of New York City" [New York, USA] by Schmidt (1953:92).
Emys speciosa Gray 1830e:10 (10:7)
Type locality: "North America?" Restricted to "America Boreali, New Jersey" [USA] by Gray (1831d:26).
Emys inscripta Gray 1831d:26 (*nomen novum*)
Emys speciosa levigata Gray 1831d:26
Type locality: "America Boreali, New Jersey" [USA].

Glyptemys muhlenbergii (Schoepff 1801)

Bog Turtle



Brian Zarate / TCC / Sussex Co., New Jersey



USA (Connecticut, Delaware, Georgia, Maryland, Massachusetts, New Jersey, New York, North Carolina, Pennsylvania, South Carolina, Tennessee, Virginia)
IUCN Red List: Critically Endangered A2cd+4ce (2013); Previously: Endangered (1996)
CITES: Appendix I

Testudo muhlenbergii Schoepff 1801:132, *Emys muhlenbergii, Emys mühlenbergii, Chersine muhlenbergii, Terrapene muhlenbergii, Clemmys (Clemmys) muhlenbergii, Clemmys muhlenbergii, Geoclemys muhlenbergii, Calemys mühlenbergii, Calemys muhlenbergii, Geoclemys muhlenbergii, Chelopus muhlenbergii, Melanemys muhlenbergii, Glyptemys muhlenbergii*
Type locality: "Pensylvaniae rivulis" [USA]. Restricted to "Lancaster, Pennsylvania" [USA] by Stejneger and Barbour (1917:114).
Emys biguttata Say 1825:212 (10:16)
Type locality: "United States." Restricted to "vicinity of Philadelphia" [Pennsylvania, USA] by Schmidt (1953:92).
Emys bipunctata Say *in* Gray 1830e:10 (*nomen novum*)
Emys fusca LeSueur *in* Gray 1831d:25 (*nomen nudum*)
Clemmys nuchalis Dunn 1917:624
Type locality: "side of Yonahlossee Road, about 3 miles from Linville, North Carolina...altitude, 4200 feet" [USA].

Terrapene Merrem 1820 (14:27)

Didicla Rafinesque 1815:75 (*nomen nudum*)
Terrapene Merrem 1820:27
Type species: *Terrapene clausa* [= *Testudo clausa* Gmelin 1789 = subjective synonym of *Testudo carolina* Linnaeus 1758], by subsequent designation by Bell (1828c:514).
Cistuda Fleming 1822:270
Type species: "Box tortoise", by original designation.
Didicla Rafinesque 1832:64
Type species: *Didicla clausa* [= *Testudo clausa* Gmelin 1789 =

subjective synonym of *Testudo carolina* Linnaeus 1758], by original designation.

Cistudo Duméril and Bibron 1835:207 (*nomen novum*) (10:17)

Pyxidemys Fitzinger 1835:123

Type species: *Pyxidemys clausa* [= *Testudo clausa* Gmelin 1789 = subjective synonym of *Testudo carolina* Linnaeus 1758], by subsequent designation by Fitzinger (1843:29).

Emyoides Gray 1844:27

Type species: *Emys (Emyoides) kinosternoides* [= *Emys kinosternoides* Gray 1830e = subjective synonym of *Testudo carolina* Linnaeus 1758], by original monotypy.

Onychotria Gray 1849:17

Type species: *Cistudo (Onychotria) mexicana* Gray 1849, by original monotypy.

Pariemys Cope 1895:757

Type species: *Pariemys bauri* [= *Terrapene bauri* Taylor 1895], by original monotypy.

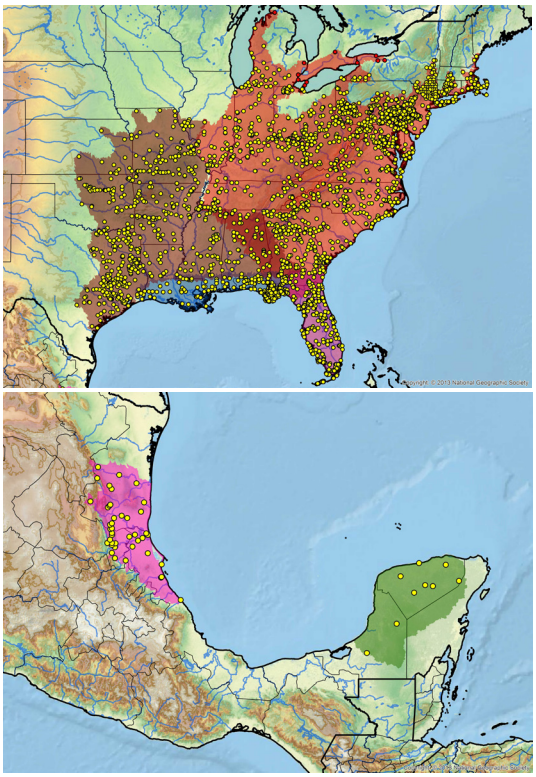
Toxaspis Cope 1895:757

Type species: *Toxaspis major* [= *Cistudo major* Agassiz 1857a], by original monotypy.

Cistudos Herrera 1901:36 (*nomen novum et suppressum,* ICZN 1922)

Terrapene carolina (Linnaeus 1758) (11:8, 14:27) (**37**)

Eastern Box Turtle, Common Box Turtle



(subspecies: *carolina* = red, *bauri* = purple, *major* = blue, *mexicana* = pink, *triunguis* = brown, *yucatana* = green; overlap = intergrades, red dots = extirpated)

Canada (Ontario [extirpated]), Mexico (Campeche, Nuevo León, Quintana Roo, San Luis Potosi, Tamaulipas, Veracruz, Yucatán), USA (Alabama, Arkansas, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Virginia, West Virginia)

CBFTT Account: Kiester and Willey (2015)

IUCN Red List: Vulnerable A2bcde+4bcde (2013); Previously: Near Threatened (1996)

CITES: Appendix II, as *Terrapene* spp.

Terrapene carolina carolina (Linnaeus 1758) (11:8, 14:27) (**37**, **38**)

Eastern Box Turtle, Woodland Box Turtle



Peter Paul van Dijk / CBFTT / Colesville, Montgomery Co., Maryland

Canada (Ontario [extirpated]), USA (Alabama, Connecticut, Delaware, Georgia, Illinois, Indiana, Kentucky, Maine, Maryland, Massachusetts, Michigan, Mississippi, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Virginia, West Virginia)

Testudo carolina Linnaeus 1758:198 (senior homonym, not = *Testudo carolina* Le Conte 1830 = *Gopherus polyphemus*), *Terrapene carolina, Testudo carolinina, Terrapene carolinensis, Emys (Cistuda) carolinae, Terrapene carolinae, Cistuda carolina, Cistudo carolina, Cistudo carolinensis, Terrapene carolina carolina*

Type locality: "Carolina" [USA]. Restricted to "vicinity of Charleston, South Carolina" [USA] by Schmidt (1953:93).

Testudo carinata Linnaeus 1758:198, *Terrapene carinata, Cistudo carinata*

Type locality: "Calidis regionibus." Restricted to "vicinity of Charleston, South Carolina" [USA] by Schmidt (1953:93).

Testudo brevicaudata Lacepède 1788:169, synopsis[table] (09:6) (*nomen suppressum,* ICZN 2005a), *Testudo brevicauda*

Type locality: "Caroline" [USA].

Testudo incarcerata Bonnaterre 1789:29

Type locality: "Philadelphie...L'Amérique septentrionale" [Pennsylvania, USA].

Testudo incarceratostriata Bonnaterre 1789:29

Type locality: "L'Amérique septentrionale." Restricted to "vicinity of Philadelphia" [Pennsylvania, USA] by Schmidt (1953:93).

Testudo clausa Gmelin 1789:1042, *Emydes clausa, Emys clausa, Didicla clausa, Terrapene clausa, Cistudo clausa, Cinosternon clausum, Emys (Pyxidemys) clausa, Pyxidemys clausa, Cinosternum clausum*

Type locality: "America septentrionali." Restricted to "vicinity of Philadelphia" [Pennsylvania, USA] by Schmidt (1953:94).

Testudo virgulata Latreille *in* Sonnini and Latreille 1801:100, *Emys virgulata, Terrapene virgulata*

Type locality: "les grands bois de la Caroline" [USA]. Restricted to "Charleston, South Carolina" [USA] by Schmidt (1953:94).

Emys schneideri Schweigger 1812:317, *Emys (Pyxidemys) schneideri*

Type locality: Not known. Restricted to "vicinity of Philadelphia" [Pennsylvania, USA] by Schmidt (1953:94).

Monoclida kentukensis Rafinesque 1822:5 (*nomen suppressum,* ICZN 1984)

Type locality: "United States...Kentucky."

Didicla erythrops Rafinesque 1822:5 (*nomen nudum*)
Type locality: "United States."
Terrapene maculata Bell 1825a:309, *Terrapene carolina maculata*
Type locality: Not known. Restricted to "vicinity of Philadelphia" [Pennsylvania, USA] by Schmidt (1953:94).
Terrapene nebulosa Bell 1825a:310, *Terrapene carolina nebulosa*
Type locality: Not known. Restricted to "vicinity of Philadelphia" [Pennsylvania, USA] by Schmidt (1953:94).
Testudo irregulata Daudin *in* Gray 1830e:7 (10:7) (*nomen nudum*)
Emys (Cistuda) carolinae fusca Gray 1830e:7 (10:7), *Emys carolinae fusca, Cistuda carolinae fusca*
Type locality: "North America."
Emys kinosternoides Gray 1830e:12 (10:7), *Emys (Emyoides) kinosternoides, Terrapene kinosternoides*
Type locality: Not known. Restricted to "vicinity of Philadelphia" [Pennsylvania, USA] by Schmidt (1953:94).
Emys cinosternoides Duméril and Bibron 1835:303 (*nomen novum*), *Cistudo carolina cinosternoides, Cistudo cinosternoides, Terrapene cinosternoides*
Cistudo pickeringi Duméril 1855:199 (*nomen nudum*)
Cistudo virginea Agassiz 1857a:260,445
Type locality: "New England, and westward as far as Michigan, and southward as far as the Carolinas" [USA]. Restricted to "vicinity of Cambridge, Massachusetts" [USA] by Schmidt (1953:94).
Cistudo eurypygia † Cope 1870b:124 [Pleistocene, USA (Maryland)], *Terrapene eurypygia*
Type locality: "Oxford Neck in Talbot Co., Maryland" [USA].
Toxaspis anguillulatus † Cope 1899:196 [Pleistocene, USA (Pennsylvania)], *Terrapene anguillulatus*
Type locality: "Port Kennedy, Upper Merion Township, Montgomery County, Pennsylvania" [USA].
Testudo munda † Hay 1920:86 [Pleistocene, USA (Tennessee)]
Type locality: "Whitesburg, Hamblen County, Tennessee" [USA].

Terrapene carolina bauri Taylor 1895 (11:8, 14:27) **(37) or**
Terrapene bauri
Florida Box Turtle


Michael T. Jones / CBFTT / peninsular Florida

USA (Florida)
Terrapene bauri Taylor 1895:576, *Pariemys bauri, Cistudo bauri, Terrapene carolina bauri*
Type locality: "Florida" [USA]. Restricted to "Orlando, Florida" [USA] by Schmidt (1953:94).
Terrapene innoxia † Hay 1916a:61 [Pleistocene, USA (Florida)]
Type locality: "Vero, St. Lucie County, Florida" [USA].
Trachemys nuchocarinata † Hay 1916a:70 (*nomen dubium*) [Pleistocene, USA (Florida)]
Type locality: "Florida Coast Line Canal, 20 miles north of St. Augustine" [Florida, USA].
Terrapene singletoni † Gilmore 1927:1 [Pleistocene, USA (Florida)]
Type locality: "Two miles west of Melbourne, Brevard County, Fla." [Florida, USA].

Terrapene carolina major (Agassiz 1857a) (11:8, 14:27) **(37)**
Gulf Coast Box Turtle


Richard D. Bartlett / CRM 3 / Liberty Co., Florida

USA (Alabama, Florida, Georgia, Louisiana, Mississippi, Texas)
Cistudo major Agassiz 1857a:445, *Cistudo carolina major, Terrapene major, Toxaspis major, Terrapene carolina major*
Type locality: "Mobile..[&]..Florida. Restricted to "Mobile" [Alabama, USA] by Schmidt (1953:94).
Cistudo marnochii † Cope 1878:229 [Pliocene–Pleistocene, USA (Texas)], *Terrapene marnochii*
Type locality: "South-western Texas" [USA]. Restricted to "the Equus beds of Atascosa County, Texas" [USA] by Hay (1908b:362).
Terrapene putnami † Hay 1906:30 (11:8, 14:28) [Pliocene? to Late Pleistocene?, USA (Florida)], *Terrapene carolina putnami*
Type locality: "Alifia River, Florida, about a mile from its mouth... into Tampa Bay" [USA].
Terrapene canaliculata † Hay 1907:850 [Pliocene–Early Pleistocene, USA (Georgia)]
Type locality: "Whitemarsh Island or Skedaway Island, Georgia... southeast of Savannah" [USA].
Terrapene formosa † Hay 1916a:57 [Late Pleistocene, USA (Florida)]
Type locality: "Ocala, Florida" [USA].
Terrapene antipex † Hay 1916a:58 [Late Pleistocene, USA (Florida)]
Type locality: "Vero, St. Lucie County, Florida" [USA].

Terrapene carolina mexicana (Gray 1849) (07:25, 14:27) **(37) or**
***Terrapene mexicana mexicana* or**
Terrapene mexicana
Mexican Box Turtle


Collette Adams / CBFTT / Mexico

Mexico (Nuevo León, San Luis Potosi, Tamaulipas, Veracruz)
Cistudo (Onychotria) mexicana Gray 1849:17, *Onychotria*

mexicana, Cistudo mexicana, Cistudo carolina mexicana, Chelopus mexicanus, Terrapene mexicana, Terrapene mexicana mexicana, Terrapene carolina mexicana
Type locality: "Mexico." Restricted to "Tampico, Tamaulipas" [Mexico] by Müller (1936:112).

Terrapene goldmani Stejneger 1933:119
Type locality: "Chijol or Chijoles, southeastern corner of San Louis Potosi, Mexico."

Terrapene carolina triunguis (Agassiz 1857a) [(11:8, 14:27) (37)] **or**
Terrapene mexicana triunguis **or**
Terrapene triunguis
Three-toed Box Turtle


Michael T. Jones / CBFTT / Missouri

USA (Alabama, Arkansas, Illinois, Kansas, Louisiana, Mississippi, Missouri, Oklahoma, Texas)

Cistudo triunguis Agassiz 1857a:279,445, *Cistudo carolina triunguis, Terrapene triunguis, Onychotria triunguis, Terrapene carolina triunguis, Terrapene mexicana triunguis*
Type locality: "Louisiana...Mississippi...New Orleans...Osage River...Georgia" [USA]. Restricted to "New Orleans, Louisiana" [USA] by Schmidt (1953:94).

Terrapene whitneyi † Hay 1916b:8 [Pleistocene, USA (Texas)]
Type locality: "Austin, Texas" [USA].

Terrapene bulverda † Hay 1920:133 [Pleistocene, USA (Texas)]
Type locality: "near Bulverde, Bexar County, Texas" [USA].

Terrapene impressa † Hay 1924:245 [Pleistocene, USA (Texas)]
Type locality: "Munson's Shoals, 2 or 3 miles below Pittbridge... Texas" [USA].

Terrapene llanensis † Oelrich 1953:35 [Late Pleistocene, Sangamonian, USA (Kansas)]
Type locality: "tributary of Shorts Creek...Lone Tree Arroyo, Meade County, Kansas" [USA].

Terrapene carolina yucatana (Boulenger 1895b) [(07:25, 14:27) (37)] **or**
Terrapene mexicana yucatana **or**
Terrapene yucatana
Yucatan Box Turtle

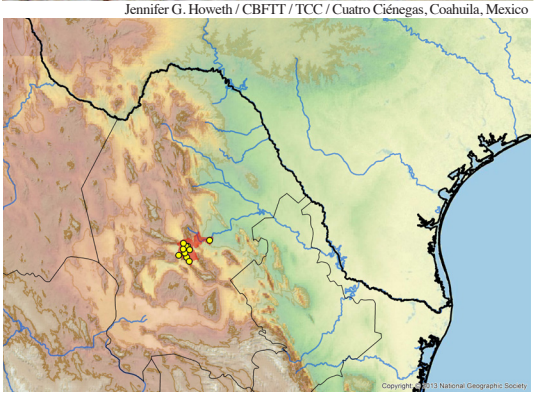

Michael T. Jones / CBFTT / Yucatán, Mexico

Mexico (Campeche, Quintana Roo, Yucatán)

Cistudo yucatana Boulenger 1895b:330, *Terrapene yucatana, Terrapene mexicana yucatana, Terrapene carolina yucatana*
Type locality: "Mexico...North Yucatan." Restricted to "Chichen Itzá, Yucatán, Mexico" by Smith and Taylor (1950a:351, 1950b:35).

Terrapene coahuila Schmidt and Owens 1944 [(14:27)]
Coahuilan Box Turtle

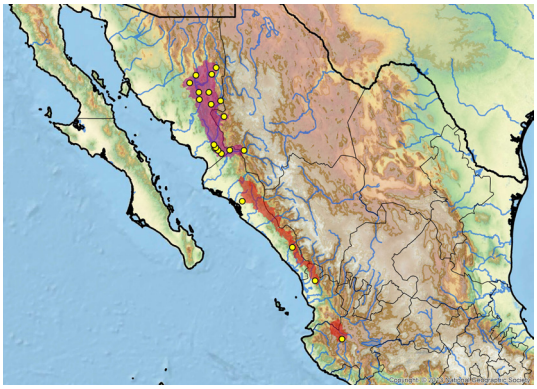

Jennifer G. Howeth / CBFTT / TCC / Cuatro Ciénegas, Coahuila, Mexico



Mexico (Coahuila)
CBFTT Account: Howeth and Brown (2011)
IUCN Red List: Endangered A2c+4c, B1ab(i,ii,iii,iv,v)+2b(i,ii, iii,iv,v) (2007); Previously: Endangered (1996)
CITES: Appendix I

Terrapene coahuila Schmidt and Owens 1944:101, *Terrapene ornata coahuila, Terrapene coahuilae*
Type locality: "Cuatro Cienegas, Coahuila" [Mexico].

Terrapene nelsoni Stejneger 1925 [(14:27)]
Spotted Box Turtle


(subspecies: *nelsoni* = red, *klauberi* = purple)

Mexico (Chihuahua, Jalisco, Nayarit, Sinaloa, Sonora)
CBFTT Account: Buskirk and Ponce-Campos (2011)

IUCN Red List: Data Deficient (1996)
TFTSG Draft Red List: Data Deficient (2011)
CITES: Appendix II, as *Terrapene* spp.

Terrapene nelsoni nelsoni Stejneger 1925
Southern Spotted Box Turtle



John B. Iverson / CBFTT / Nayarit, Mexico

Mexico (Jalisco, Nayarit, Sinaloa)
Terrapene nelsoni Stejneger 1925:463, *Terrapene nelsoni nelsoni*
Type locality: "Pedro Pablo, Tepic, Mexico; 2500 feet altitude."

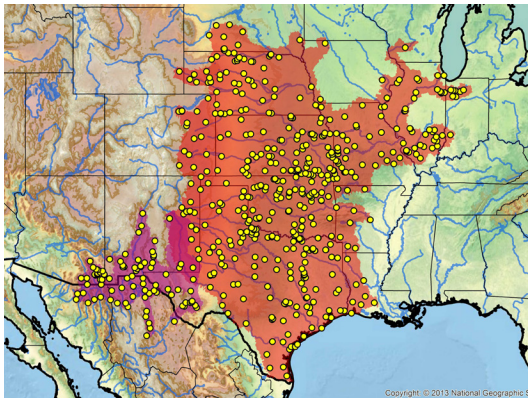
Terrapene nelsoni klauberi Bogert 1943
Northern Spotted Box Turtle



Matt Cage / CBFTT / nr. Yecora, Sonora, Mexico

Mexico (Chihuahua, Sinaloa, Sonora)
Terrapene klauberi Bogert 1943:2, *Terrapene nelsoni klauberi*
Type locality: "Rancho Guirocoba, approximately eighteen miles southeast of Alamos, Sonora, Mexico."

Terrapene ornata (Agassiz 1857a) (12:20, 14:27)
Ornate Box Turtle, Western Box Turtle



(subspecies: *ornata* = red, *luteola* = purple; overlap = intergrades)

Mexico (Chihuahua, Coahuila, Sonora), USA (Arizona, Arkansas, Colorado, Illinois, Indiana, Iowa, Kansas, Louisiana, Missouri, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, Wisconsin, Wyoming)
IUCN Red List: Near Threatened (2013); Previously: Near Threatened (1996)
CITES: Appendix II, as *Terrapene* spp.

Terrapene ornata ornata (Agassiz 1857a) (12:20, 14:27)
Ornate Box Turtle, Western Box Turtle



Jeffrey E. Dawson / Barton Co., Kansas

USA (Arkansas, Colorado, Illinois, Indiana, Iowa, Kansas, Louisiana, Missouri, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, Wisconsin, Wyoming)
Cistudo ornata Agassiz 1857a:392,445, *Terrapene ornata, Terrapene ornata ornata, Terrapene carolina ornata*
Type locality: "Upper Missouri...and...Iowa" [USA]. Restricted to "Council Bluffs, Pottawatomie County, Iowa, USA" [in error] by Smith and Taylor (1950a:358, 1950b:36); and to "junction of the Platte and Missouri River" [Nebraska, USA] [in error] by Schmidt (1953:95); and corrected to "Burlington, Des Moines County, Iowa" [USA] by lectotype designation by Smith and Smith (1980:587).
Terrapene ornata cimarronensis Cragin 1894:37
Type locality: "Red beds country of the Cimarron Basin" [Kansas, USA].
Terrapene longinsulae † Hay 1908c:166 (12:20) [Upper Miocene or Lower Pliocene to possibly Pleistocene, USA (Kansas)], *Terrapene ornata longinsulae*
Type locality: "Long Island, Phillips County, Kansas" [USA].

Terrapene ornata luteola Smith and Ramsey 1952 (14:27)
Desert Box Turtle



Peter Paul van Dijk / Portal, Arizona

Mexico (Chihuahua, Coahuila, Sonora), USA (Arizona, New Mexico, Texas)
Terrapene ornata luteola Smith and Ramsey 1952:45
Type locality: "17 miles south of Van Horn, Culberson County, Texas" [USA].

PLATYSTERNIDAE Gray 1869a (07:26)

Platysternidae Gray 1869a:208

Platysternon Gray 1831c

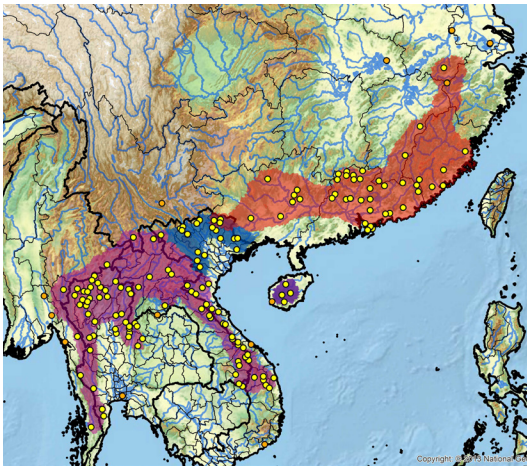
Platysternon Gray 1831c:106

Type species: *Platysternon megacephalum* Gray 1831c, by original monotypy.

Platysternum Agassiz 1846:297 (*nomen novum*)

Platysternon megacephalum Gray 1831c (39)

Big-headed Turtle



(subspecies: *megacephalum* = red, *peguense* = purple, *shiui* = blue; overlap = intergrades; orange dots = probable trade or introduced)

Cambodia, China (Anhui, Fujian, Guangdong, Guangxi, Hainan, Hong Kong, Hunan, Jiangxi, Yunnan, Zhejian), Laos, Myanmar, Thailand, Vietnam

IUCN Red List: Endangered A1d+2d (2000); Previously: Data Deficient (1996)

TFTSG Draft Red List: Critically Endangered (2011)

CITES: Appendix I, as Platysternidae spp.

Platysternon megacephalum megacephalum Gray 1831c (07:27) (39)

Chinese Big-headed Turtle



Yik-Hei Sung / Hong Kong, China

China (Anhui, Fujian, Guangdong, Guangxi, Hong Kong, Hunan, Jiangxi, Zhejian), Vietnam

Platysternon megacephalum Gray 1831c:107, *Emys megacephala, Platysternon megacephalus, Platysternon megacephalum megacephalum*

Type locality: "Chinâ." Restricted to "S. China" by Boulenger (1889:48).

Platysternon megacephalum peguense Gray 1870c (39)

Burmese Big-headed Turtle



Peter Paul van Dijk / CRM 2 / TCF / CCB / Phu Luang Wildlife Sanctuary, Loei Prov., Thailand

Cambodia, China (Hainan), Laos, Myanmar, Thailand, Vietnam

Platysternon peguense Gray 1870c:70, *Platysternon megacephalum peguense*

Type locality: "Pegu" [Myanmar].

Platysternon megacephalum vogeli Wermuth 1969:374

Type locality: "Provinz Chiang Mai, Nordwest-Thailand"

Platysternon megacephalum tristernalis Schleich and Gruber 1984:68 (39)

Type locality: "zwischen Mung Lun und Simao, Ostufer des Mekongflusses, südliches Yünnan (VR China)." [Menglun, Lancang Jiang, Yunnan].

Platysternon megacephalum shiui Ernst and McCord 1987 (39)

Vietnamese Big-headed Turtle



Torsten Blanck / Vietnam [captivity]

China (?) (Guangxi, Hainan), Vietnam

Platysternon megacephalum shiui Ernst and McCord 1987:626

Type locality: "vicinity of Langson, Langson Province, Vietnam (26°50' N, 106°45' E)." GPS coordinates in error, corrected here to 21°50' N, 106°45' E.

GEOEMYDIDAE Theobald 1868a (07:29, 09:20, 12:21)

Geoemydidae Theobald 1868a:vi
Batagurina Gray 1869a:185
Bataguridae Gray 1870c:17

GEOEMYDINAE Theobald 1868a (12:21)

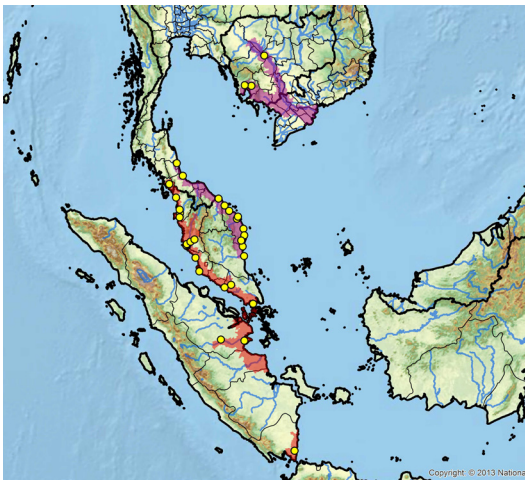
Geoemydidae Theobald 1868a:vi
Batagurina Gray 1869a:185
Bataguridae Gray 1870c:17

Batagur Gray 1856b (07:30, 08:9)

Trionyx (*Tetraonyx*) Gray 1830e:19 (10:7) (junior homonym, not = *Tetraonyx* Latreille 1809 [= Coleoptera])
Type species: *Trionyx (Tetraonyx) cuvieri* Gray 1830e [= subjective synonym of *Emys baska* Gray 1830d], by original monotypy.
Tetronyx Lesson 1832:pl.7 (*nomen novum et oblitum*)
Type species: *Tetronyx longicollis* [= *Tetraonyx longicollis* Lesson 1831b = subjective synonym of *Emys baska* Gray 1830d], by original monotypy.
Batagur Gray 1856b:35
Type species: *Batagur baska* [= *Emys baska* Gray 1830d], by subsequent designation by Smith (1931:134).
Batagur (*Kachuga*) Gray 1856b:35
Type species: *Batagur (Kachuga) lineata* [= *Emys kachuga* Gray 1831a], by tautonymy. Not *Kachuga trilineata* Gray 1869a [= subjective synonym of *Emys trivittata* Duméril and Bibron 1835], by subsequent erroneous designation by Smith (1931:124).
Kachuga (*Batagurella*) Gray 1869a:200
Type species: *Kachuga (Batagurella) peguensis* Gray 1869a [= subjective synonym of *Emys trivittata* Duméril and Bibron 1835], by original monotypy.
Dongoka Gray 1869a:202
Type species: *Dongoka hardwickii* [= *Kachuga (Dongoka) hardwickii* Gray 1869a = subjective synonym of *Emys dhongoka* Gray 1832b], by subsequent designation by Lindholm (1929:278).
Dhongoka Gray 1870c:57 (*nomen novum*)
Type species: *Dhongoka hardwickii* [= *Kachuga (Dongoka) hardwickii* Gray 1869a = subjective synonym of *Emys dhongoka* Gray 1832b], by subsequent monotypy.
Callagur Gray 1870c:53
Type species: *Callagur picta* [= *Batagur picta* Gray 1862b = subjective synonym of *Emys borneoensis* Schlegel and Müller 1845], by original monotypy.
Cantorella Gray 1870c:58
Type species: *Cantorella affinis* [= *Tetraonyx affinis* Cantor 1847], by original monotypy.
Dhougoka Gray 1873j:52 (*nomen novum*)
Cachuga Lydekker 1889:123 (*nomen novum*)

Batagur affinis (Cantor 1847) (08:9)

Southern River Terrapin



(subspecies: *affinis* = red, *edwardmolli* = purple)
Cambodia, Indonesia (Sumatra), Malaysia (Peninsular), Singapore (extirpated, reintroduced), Thailand, Vietnam (extirpated)
CBFTT Account: Moll, Platt, Chan, Horne, Platt, Praschag, Chen, and van Dijk (2015)
IUCN Red List: Critically Endangered A2bcd+4bcd (2016); Previously: Critically Endangered, as part of *Batagur baska* (2000).
CITES: Appendix I

Batagur affinis affinis (Cantor 1847) (08:9, 09:21)

Western Malay River Terrapin



Edward O. Moll / CBFTT / Perak R., Malaysia / female
Indonesia (Sumatra), Malaysia (Peninsular), Singapore (extirpated, reintroduced), Thailand
Tetraonyx affinis Cantor 1847:6, *Batagur affinis, Kachuga affinis, Kachuga (Dongoka) affinis, Cantorella affinis, Batagur affinis affinis*
Type locality: "sea off Pinang…along the sea-shore of Pinang..[&].. estuaries and rivers on the Peninsula" [Malaysia].
Batagur siebenrocki † Jaekel 1911:76 [Pleistocene, *Pithecanthropus* Trinil Beds, Indonesia (Java)]
Type locality: "Pithecanthropus-schichten...Java...Trinil" [Indonesia].

Batagur affinis edwardmolli Praschag, Holloway, Georges, Päckert, Hundsdörfer, and Fritz 2009 (09:21)
Eastern Malay River Terrapin

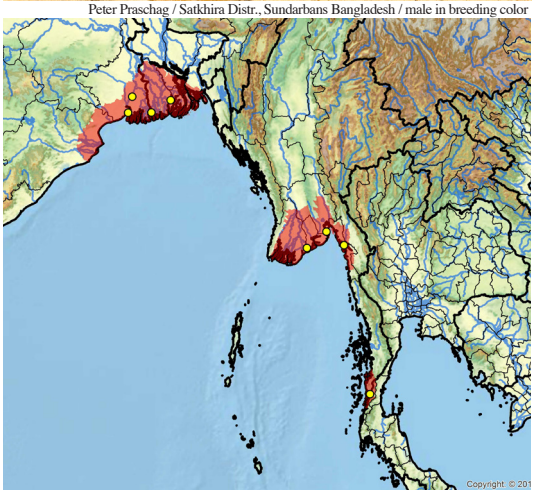

Eng Heng Chan / CBFTT / TCC / Setiu R., Terengganu, Malaysia / male in breeding color

Cambodia, Malaysia (Peninsular), Thailand (extirpated), Vietnam (extirpated)

Batagur affinis edwardmolli Praschag, Holloway, Georges, Päckert, Hundsdörfer, and Fritz 2009a:64 (09:21)
Type locality: "Sre Ambel River system, Koh Kong Province, Cambodia."

Batagur baska (Gray 1830d) (07:31, 08:9)
Northern River Terrapin


Peter Praschag / Satkhira Distr., Sundarbans Bangladesh / male in breeding color



Bangladesh, India (Odisha, West Bengal), Myanmar, Thailand (extirpated?)

CBFTT Account: Moll, Platt, Platt, Praschag, and van Dijk (2009)

IUCN Red List: Critically Endangered A1cd (2000); Previously: Endangered (1996)

TFTSG Draft Red List: Critically Endangered (2011)

CITES: Appendix I

Emys baska Gray 1830d:pl.75, *Testudo baska, Emys batagur baska, Tetronyx baska, Batagur (Batagur) baska, Batagur baska, Tetraonyx baska, Batagur baska baska*
Type locality: "India."

Emys batagur Gray 1830e:9 (10:7), *Clemmys (Clemmys) batagur, Tetraonyx batagur, Batagur batagur, Batagur batagur batagur*
Type locality: Not designated. Restricted to "India" by Gray (1831d:24).

Trionyx (Tetraonyx) cuvieri Gray 1830e:19 (10:7), *Trionyx cuvierii*
Type locality: Not designated. Restricted to "l'Irrawady, fleuve du royaume de Pégu" [Myanmar] by Temminck and Schlegel (1834:43).

Tetraonyx longicollis Lesson 1831b:297, *Clemmys longicollis, Tetronyx longicollis*
Type locality: "le fleuve de l'Irravaddy au Pégou" [Myanmar].

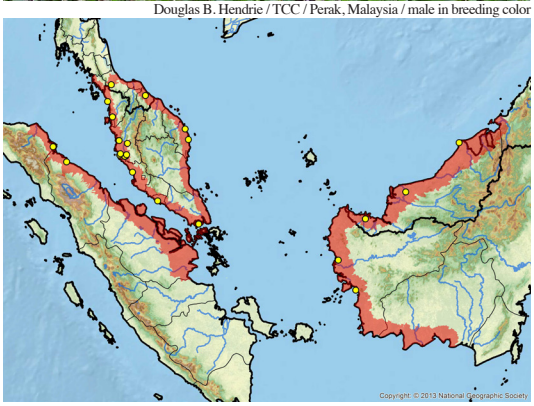
Emys tetraonyx Temminck and Schlegel 1834:43 (10:18) (*nomen novum*)

Tetraonyx lessonii Duméril and Bibron 1835:338 (*nomen novum*), *Hydraspis (Tetronyx) lessonii*

Batagur baska ranongensis Nutaphand 1979:181 (07:31), *Batagur ranongensis, Batagur batagur ranongensis*
Type locality: "mouth of rivers in Ranong Province" [Thailand].

Batagur borneoensis (Schlegel and Müller 1845) (07:30)
Painted Terrapin


Douglas B. Hendrie / TCC / Perak, Malaysia / male in breeding color



Brunei, Indonesia (Kalimantan, Sumatra), Malaysia (Peninsular, East), Thailand

IUCN Red List: Critically Endangered A1bcd (2000); Previously: Critically Endangered (1996)

TFTSG Draft Red List: Critically Endangered (2011)

CITES: Appendix II, as *Batagur* spp.

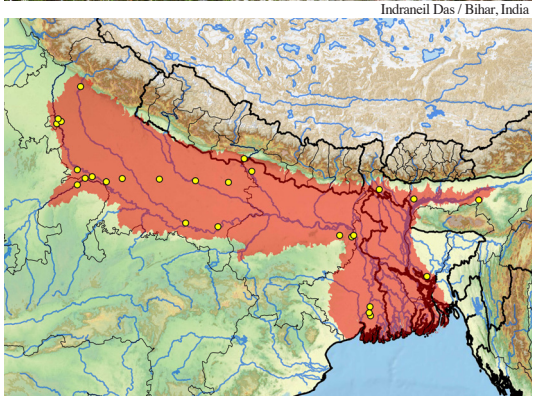
Emys borneoensis Schlegel and Müller 1845:30, *Clemmys borneoensis, Callagur borneoensis, Batagur borneoensis*
Type locality: "Borneo" [East Malaysia or Kalimantan, Indonesia].

Batagur picta Gray 1862b:204, *Callagur picta, Tetraonyx pictus, Callagur pictus*
Type locality: "Borneo, Sarawak" [East Malaysia].

Clemmys grayi Strauch 1865:88 (*nomen novum*)
Kachuga major Gray 1873c:300
Type locality: "India?" Emended to "India" by Gray (1873j:51).
Kachuga brookei Bartlett 1895a:29
Type locality: "Borneo" [East Malaysia or Kalimantan, Indonesia].

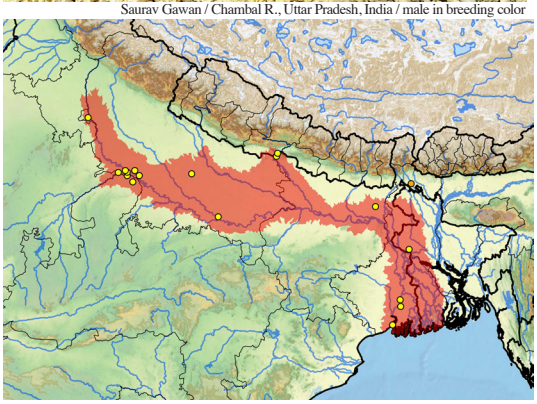
Batagur dhongoka (Gray 1832b) [(07:30)]
Three-striped Roofed Turtle


Indraneil Das / Bihar, India


Bangladesh, India (Assam, Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh, West Bengal), Nepal
IUCN Red List: Endangered A1cd+2cd (2000); Previously: Near Threatened (1996)
TFTSG Draft Red List: Endangered (2011)
CITES: Appendix II, as *Batagur* spp.
Emys dhongoka Gray 1832b:pl.60, *Batagur (Kachuga) dhongoka, Batagur dhongoka, Clemmys dhongoka, Kachuga dhongoka*
Type locality: "India." Restricted to "N. India" by Smith (1931:130).
Emys duvaucelii Duméril and Bibron 1835:334, *Batagur duvaucelii*
Type locality: "Bengale" [Bangladesh or India].
Kachuga (Dongoka) hardwickii Gray 1869a:202, *Kachuga hardwickii, Dhongoka hardwickii, Dhougoka hardwickii*
Type locality: "Nepal."
Batagur durandi † Lydekker 1885:192 [Late Pliocene (Pinjor) to Early Pleistocene (Tatrot), Siwaliks, India (Punjab)]
Type locality: "Siwalik Hills" [Punjab, India].

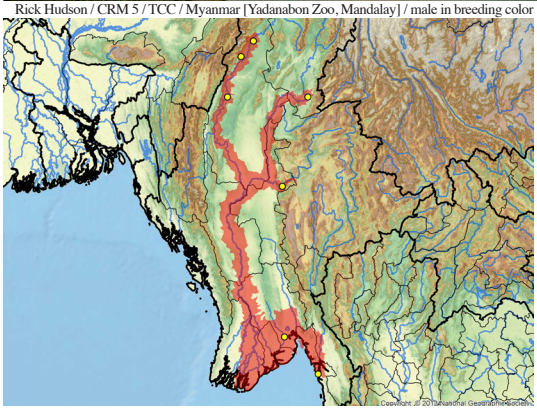
Batagur kachuga (Gray 1831a) [(07:30)]
Red-crowned Roofed Turtle


Saurav Gawan / Chambal R., Uttar Pradesh, India / male in breeding color


(orange dot = trade)
Bangladesh, India (Bihar, Madhya Pradesh, Punjab, Uttar Pradesh, West Bengal), Nepal
IUCN Red List: Critically Endangered A1cd (2000); Previously: Endangered (1996)
TFTSG Draft Red List: Critically Endangered (2011)
CITES: Appendix II, as *Batagur* spp.
Emys lineata Gray 1830e:9 [(10:7)] (*nomen oblitum*), *Clemmys (Clemmys) lineata, Batagur (Kachuga) lineata, Batagur lineatus, Kachuga lineata*
Type locality: "India."
Emys kachuga Gray 1831a:pl.74, *Batagur kachuga, Kachuga kachuga*
Type locality: "India." Restricted to "N. India" by Smith (1931:131).
Batagur ellioti Gray 1862b:264, *Batagur elliotti, Clemmys ellioti*
Type locality: "Southern India, River Kistna" [Krishna River, Andhra Pradesh, India] [in error].
Kachuga fusca Gray 1870c:56 (*partim*)
Type locality: "India."
Batagur bakeri † Lydekker 1885:190 [Late Pliocene (Pinjor) to Early Pleistocene (Tatrot), Siwaliks, India (Punjab)]
Type locality: "Siwalik Hills" [Punjab, India].

Batagur trivittata (Duméril and Bibron 1835) (07:30)
Burmese Roofed Turtle


Rick Hudson / CRM 5 / TCC / Myanmar [Yadanabon Zoo, Mandalay] / male in breeding color



Myanmar
IUCN Red List: Endangered A1c (2000); Previously: Endangered (1996)
TFTSG Draft Red List: Critically Endangered (2011)
CITES: Appendix II, as *Batagur* spp.

Emys trivittata Duméril and Bibron 1835:331, *Batagur trivittata, Kachuga trivittata*
Type locality: "Bengale." [India or Bangladesh]

Kachuga (Batagurella) peguensis Gray 1869a:200, *Kachuga peguensis*
Type locality: "India." Restricted to "Pegu" [Myanmar] by Gray (1873j:50).

Kachuga trilineata Gray 1869a:200, *Kachuga (Kachuga) trilineata*
Type locality: "India." Restricted to "Pegu" [Myanmar] by Boulenger (1889:56).

Kachuga fusca Gray 1870c:56 (*partim*)
Type locality: "India."

Batagur iravadica Anderson 1879:736, *Batagur iravadicus, Clemmys iravadica*
Type locality: "Pegu..[&]..Bhamô in Upper Burma..[&].. throughout the Irawady" [Myanmar].

Cuora Gray 1856a (07:32, 12:22) (**40**)

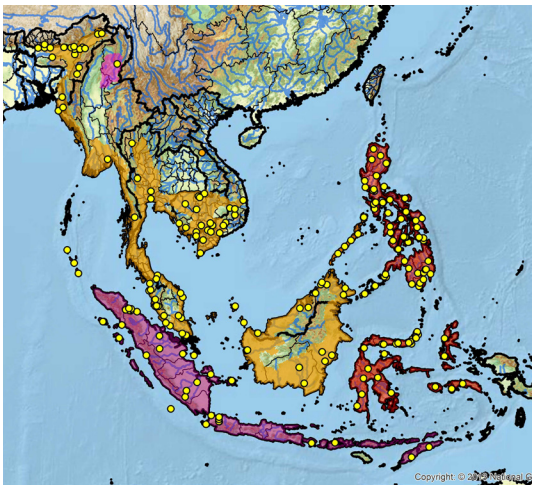
Cuora Gray 1856a:198
Type species: *Cuora amboinensis* [= *Testudo amboinensis* Riche *in* Daudin 1801], by subsequent designation by Stejneger (1907:503).

Cistoclemmys Gray 1863e:175
Type species: *Cistoclemmys flavomarginata* Gray 1863e, by original monotypy.

Pyxidea Gray 1863e:175
Type species: *Pyxidea mouhotii* [= *Cyclemys mouhotii* Gray 1862a], by original monotypy.

Cuora (*Pyxiclemmys*) Gray 1863e:176
Type species: *Cuora* (*Pyxiclemmys*) *trifasciata* [= *Sternothaerus trifasciatus* Bell 1825a], by original monotypy.

Cuora amboinensis (Riche *in* Daudin 1801) (12:23) (**41**)
Southeast Asian Box Turtle



(subspecies: *amboinensis* = red, *couro* = purple, *kamaroma* = orange, *lineata* = pink, overlap = intergrades (Palawan); orange dot = introduced or trade)

Bangladesh, Bhutan, Brunei, Cambodia, India (Arunachal Pradesh, Assam, Nagaland, Nicobar Islands), Indonesia (Java, Kalimantan, Lesser Sundas, Moluccas, Sulawesi, Sumatra, Timor), Laos, Malaysia (Peninsular, East), Myanmar, Philippines (Bohol, Cebu, Leyte, Luzon, Mindanao, Mindoro, Negros, Palawan, Panay, Samar, Sulu Archipelago), Thailand, Timor-Leste (?), Vietnam
CBFTT Account: Schoppe and Das (2011)
IUCN Red List: Vulnerable A1d+2d (2000); Previously: Near Threatened (1996)
TFTSG Draft Red List: Vulnerable (2011)
CITES: Appendix II, as *Cuora* spp.

Cuora amboinensis amboinensis (Riche *in* Daudin 1801) (12:23)
East Indian Box Turtle


Sabine Schoppe / CBFTT / Sulawesi, Indonesia

Indonesia (Moluccas, Sulawesi), Philippines (Bohol, Cebu, Leyte, Luzon, Mindanao, Mindoro, Negros, Palawan, Panay, Samar)

Testudo melanocephala Van-Ernest *in* Daudin 1801:128 (*nomen oblitum*), *Emys melanocephala, Clemmys (Clemmys) melanocephala*
Type locality: "une des îles Moluques ou Philippines" [Moluccas, Indonesia, or Philippines]. Restricted to "Moluccas" [Indonesia] by Fritz and Havaš (2007:214).

Testudo amboinensis Riche *in* Daudin 1801:309, *Emys amboinensis, Terrapene amboinensis, Kinosternon amboinense, Cistuda amboinensis, Cuora amboinensis, Cistudo amboinensis, Cyclemys amboinensis, Cuora amboinensis amboinensis*

Type locality: "Amboine" [Ambon, Moluccas, Indonesia].

Emys melanogaster Bleeker *in* Gray 1864a:12 (*nomen nudum*)
Type locality: "Batchian and Boero" [Bacan and Buru, Moluccas, Indonesia]. Restricted to "Borneo" [in error] by Gray (1873j:21).

Emys hypselonotus Bleeker *in* Gray 1864a:12 (*nomen nudum*), *Emys hypsilonotus*
Type locality: "Batchian and Boero" [Bacan and Buru, Moluccas, Indonesia]. Restricted to "Borneo" [in error] by Gray (1873j:22).

Emys gastrotaenia Bleeker *in* Gray 1873j:21 (*nomen nudum*)
Type locality: "Borneo." Locality likely in error, probably "Batchian and Boero" [Bacan and Buru, Moluccas, Indonesia].

Cuora amboinensis couro (Lechenault *in* Schweigger 1812)
Indonesian Box Turtle


Torsten Blanck / nr. Jakarta, Java, Indonesia

Indonesia (Java, Lesser Sundas, Sumatra, Timor), Timor-Leste (?)

Emys couro Lechenault *in* Schweigger 1812:315, *Terrapene couro, Cuora amboinensis couro*
Type locality: "Java" [Indonesia].

Terrapene bicolor Bell 1826:485
Type locality: "Americâ septentrionali" [in error].

Emys (Cistuda) amboinensis leveriana Gray 1830e:7 (10:7), *Cistuda amboinensis leveriana*
Type locality: "Java and Penang" [Indonesia and Peninsular Malaysia].

Cuora amboinensis kamaroma Rummler and Fritz 1991 (12:23)
Malayan Box Turtle


Indraneil Das / Malaysia (East) [Borneo]

Bangladesh, Bhutan, Brunei, Cambodia, India (Arunachal Pradesh, Assam, Nagaland, Nicobar Islands), Indonesia (Kalimantan), Malaysia (Peninsular, East), Laos, Myanmar (?), Philippines (Palawan [?], Sulu Archipelago [?]), Thailand, Vietnam

Cuora amboinensis kamaroma Rummler and Fritz 1991:39
Type locality: "circa 50 km nördlich von Bangkok, Thailand."

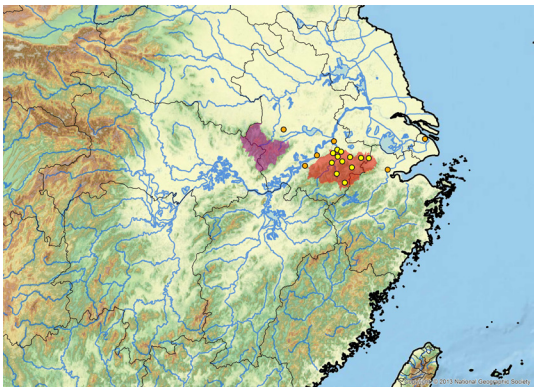
Cuora amboinensis lineata McCord and Philippen 1998
Burmese Box Turtle


Hans-Dieter Philippen / CBFTT / Myanmar

Myanmar

Cuora amboinensis lineata McCord and Philippen 1998:54
Type locality: "Myitkyina, Kachin Province, Myanmar (Burma)."

Cuora aurocapitata Luo and Zong 1988 (12:22) (**42**)
Yellow-headed Box Turtle


(subspecies: *aurocapitata* = red, *dabieshani* = purple; orange dots = probable trade)

China (Anhui, Henan, Hubei, Zhejiang)

IUCN Red List: Critically Endangered A1d+2d (2000); Previously: Data Deficient (1996)

TFTSG Draft Red List: Critically Endangered (2011)

CITES: Appendix II, as *Cuora* spp.

Cuora aurocapitata aurocapitata Luo and Zong 1988 (12:22) (**42**)
Eastern Yellow-headed Box Turtle


Torsten Blanck / Jing County, Anhui, China

China (Anhui, Zhejiang)

Cuora aurocapitata Luo and Zong 1988:13, *Cuora pani aurocapitata, Pyxiclemmys aurocapitata, Pyxiclemmys pani aurocapitata, Cuora aurocapitata aurocapitata*
Type locality: "Nanling County, Anhui" [China].

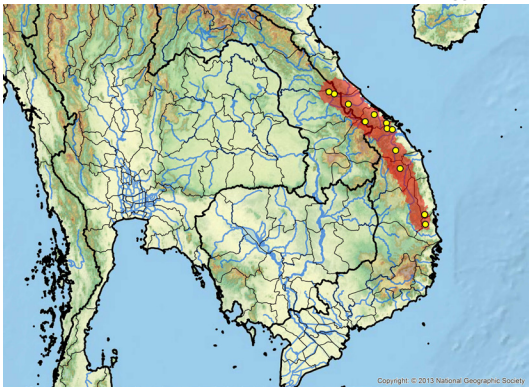
Cuora aurocapitata dabieshani Blanck, Protiva, Zhou, Li, Crow, and Tiedemann 2017 (42)
Western Yellow-headed Box Turtle


Torsten Blanck / Anhui, China [captivity]

China (Anhui, Henan, Hubei)
Cuora aurocapitata dabieshani Blanck, Protiva, Zhou, Li, Crow, and Tiedemann 2017:382
Type locality: "Anhui province, China."

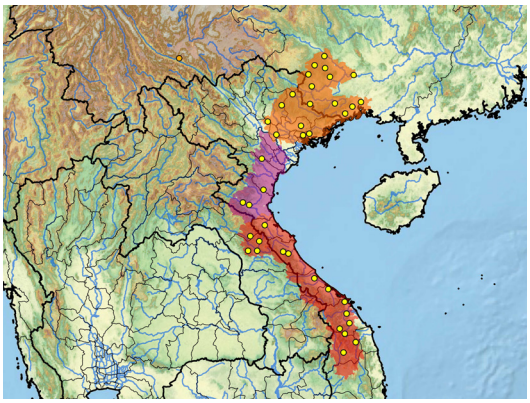
Cuora bourreti Obst and Reimann 1994 (07:35, 09:22, 12:22)
Bourret's Box Turtle


Torsten Blanck / TCC / Vietnam



Laos, Vietnam
IUCN Red List: Critically Endangered A2bd+4bd (2016); Previously: Critically Endangered, as part of *Cuora galbinifrons* (2000)
CITES: Appendix II, as *Cuora* spp.
Cuora galbinifrons serrata Iverson and McCord 1992b:434 (07:33) (*partim*, hybrid)
Cuora galbinifrons bourreti Obst and Reimann 1994:135, *Cistoclemmys galbinifrons bourreti, Cuora bourreti, Cistoclemmys bourreti*
Type locality: "Linh-Cam (heute Ha-Tinh), in Mittel-Vietnam". Emended to "Bach Ma, Thua Thien Hue Province, Central Vietnam" by Fritz et al. (2002:71).

Cuora cyclornata Blanck, McCord, and Le 2006a:133 (07:36, 09:23, 12:22) **(40, 42)**
Vietnamese Three-striped Box Turtle


(subspecies: *cyclornata* = red, *annamitica* = purple, *meieri* = orange; orange dot = trade)

China (Guangxi), Laos, Vietnam
IUCN Red List: Critically Endangered A1d+2d (2000) (as part of *Cuora trifasciata*); Previously: Endangered (1996) (as part of *C. trifasciata*)
TFTSG Draft Red List: Critically Endangered (2016)
CITES: Appendix II, as *Cuora* spp.

Cuora cyclornata cyclornata Blanck, McCord, and Le 2006a:133 (07:36, 09:23, 12:22) **(40, 42)**
Southern Vietnamese Three-striped Box Turtle


Torsten Blanck / Vietnam [captivity]

Laos, Vietnam
Cuora cyclornata cyclornata Blanck, McCord, and Le 2006a:133 (07:36, 09:23, 12:22)
Type locality: "Phong Nha Ke Bang Nat. Res., Quang Binh Province, central Vietnam."

Cuora cyclornata annamitica Blanck, Protiva, Zhou, Li, Crow, and Tiedemann 2017 (42)
Central Vietnamese Three-striped Box Turtle


Torsten Blanck / Vietnam [captivity]

Laos (?), Vietnam

Cuora cyclornata annamitica Blanck, Protiva, Zhou, Li, Crow, and Tiedemann 2017:378
Type locality: "Vietnam, Nghe An Province, Tan Ky district, near Ky Son Village."

Cuora cyclornata meieri Blanck, McCord, and Le 2006a:142 (07:36, 09:23, 12:22) **(40, 42)**

Northern Vietnamese Three-striped Box Turtle



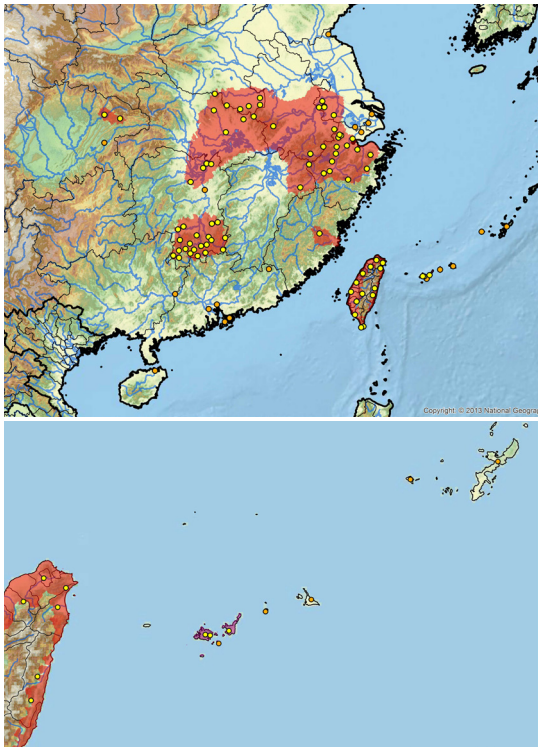
Torsten Blanck / Vietnam [captivity]

China (Guangxi), Vietnam

Cuora cyclornata meieri Blanck, McCord, and Le 2006a:142 (07:36, 09:23, 12:22)
Type locality: "Tam Dao, Provinz Vinh Phuc, Nord-Vietnam."

Cuora flavomarginata (Gray 1863e) (08:21, 11:9, 12:22) **(43)**

Yellow-margined Box Turtle



(subspecies: *flavomarginata* = red, *evelynae* = purple; orange dots = introduced or trade)

China (Anhui, Fujian, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Sichuan, Zhejiang), Japan (Ryukyu Archipelago), Taiwan

CBFTT Account: Ota, Yasukawa, Fu, and Chen (2009)

IUCN Red List: Endangered A1cd+2cd (2000); Previously: Vulnerable (1996)

TFTSG Draft Red List: Critically Endangered (2011)

CITES: Appendix II, as *Cuora* spp.

Cuora flavomarginata flavomarginata (Gray 1863e)

Yellow-margined Box Turtle



Tien-Hsi Chen / CBFTT / Nantou, Taiwan

China (Anhui, Fujian, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Zhejiang), Taiwan

Cistoclemmys flavomarginata Gray 1863e:175, *Cuora flavomarginata, Terrapene flavomarginata, Cyclemys flavomarginata, Cyclemys flavomarginata flavomarginata, Cuora flavomarginata flavomarginata, Geoemyda flavomarginata, Cistoclemmys flavomarginatus, Cistoclemmys flavomarginata flavomarginata*
Type locality: "China; Formosa...district of Tamsuy, N.W. Formosa" [Taiwan]. Restricted to "Tamsui, Formosa" [Taiwan] by Stejneger (1907:503).

Cyclemys flavomarginata sinensis Hsü 1930:3 (07:34, 08:21), *Cuora flavomarginata sinensis, Cistoclemmys flavomarginata sinensis*
Type locality: "Künshan Island, Tungting Lake, Central China." [Junshan Dao, Dongting Lake, Hunan, China].

Terrapene culturalia † Yeh 1961:59 [Holocene, Neolithic, subfossil, Lung-shan Period (Ying Dynasty), China (Shandong)], *Emydoidea culturalia*
Type locality: "Dawenkou, Taian, Shantung" [Shandong, China].

Cuora flavomarginata evelynae Ernst and Lovich 1990 (08:21, 11:9)

Ryukyu Yellow-margined Box Turtle



Iriomote Wildlife Conservation Center / CBFTT / Iriomotejima, Japan

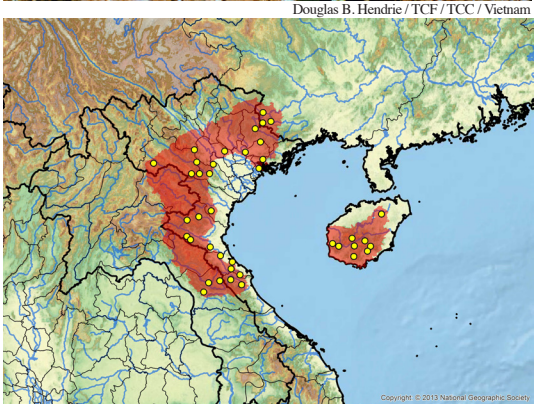
Japan (Ryukyu Archipelago)

Cuora evelynae Ernst and Lovich 1990:31, *Cuora flavomarginata evelynae, Cistoclemmys flavomarginata evelynae*
Type locality: "Ishigaki Shima, Ryukyu Islands, Japan."

Cuora galbinifrons Bourret 1940 (07:35, 09:22, 12:22, 12:24)
Indochinese Box Turtle



Douglas B. Hendrie / TCF / TCC / Vietnam



China (Guangxi, Hainan), Laos, Vietnam

IUCN Red List: Critically Endangered A2bd+4bd (2016); Previously: Critically Endangered (2000), Near Threatened (1996)

CITES: Appendix II, as *Cuora* spp.

Cuora galbinifrons Bourret 1940:11, *Cistoclemmys galbinifrons, Cuora galbinifrons galbinifrons, Cistoclemmys galbinifrons galbinifrons*
Type locality: "Tam-Dao..[&]..Bach-Ma (Annam)..[&]..Linh-Cam (Ha-Tinh, Nord Annam)" [Tonkin..[&]..Annam..[&]..Ha-Tinh] [Vietnam]. Restricted to "Tam-Dao, Nord-Vietnam" by Obst and Reimann (1994:136).

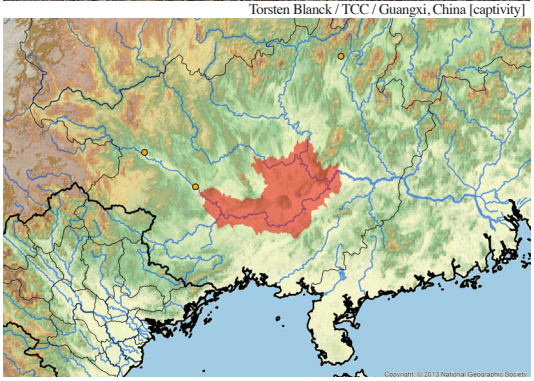
Cyclemus flavomarginata hainanensis Li 1958:234, *Cuora hainanensis, Cyclemys flavomarginata hainanensis, Cistoclemmys hainanensis, Cuora flavomarginata hainanensis, Cistoclemmys flavomarginata hainanensis, Cuora galbinifrons hainanensis, Cyclemys flavomarginatus hainanensis, Cistoclemmys galbinifrons hainanensis*
Type locality: In Chinese ["Dali village, Mt. Diaoluo, Linshui County, Hainan Island, China"].

Cuora galbinifrons serrata Iverson and McCord 1992b:434 (07:33) (*partim*, hybrid)
Type locality: "100 km east of Tungfang at Tainhfien in central Hainan Island, China."

Cuora mccordi Ernst 1988 (12:22)
McCord's Box Turtle



Torsten Blanck / TCC / Guangxi, China [captivity]



(red = possible range; orange dots = trade)

China (Guangxi)

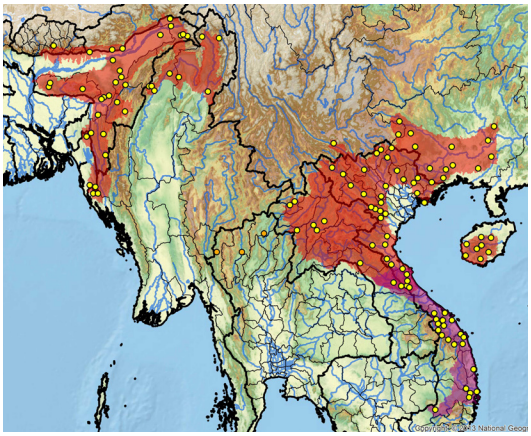
IUCN Red List: Critically Endangered A1d+2d (2000); Previously: Data Deficient (1996)

TFTSG Draft Red List: Critically Endangered (2011)

CITES: Appendix II, as *Cuora* spp.

Cuora mccordi Ernst 1988:466, *Cistoclemmys mccordi*
Type locality: "highland near Paise, Guangxi Province, China (23°54'N, 106°37'E)" [in error]. Restricted to "Yunnan Province, west of Paise, Guangxi Province, China" by McCord and Iverson (1991:414).

Cuora mouhotii (Gray 1862a) (07:32, 12:22)
Keeled Box Turtle



(subspecies: *mouhotii* = red, *obsti* = purple; overlap = intergrades; orange dots = trade)

Bangladesh, Bhutan, China (Guangxi, Hainan, Yunnan), India (Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland), Laos, Myanmar, Thailand (?), Vietnam

CBFTT Account: Das, McCormack, van Dijk, Hoang, and Struijk (2016)
IUCN Red List: Endangered A1d+2d (2000); Previously: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Critically Endangered (2011)
CITES: Appendix II, as *Cuora* spp.

Cuora mouhotii mouhotii (Gray 1862a)
Northern Keeled Box Turtle


Indraneil Das / CBFTT / China [captivity]

Bangladesh, Bhutan, China (Guangxi, Hainan, Yunnan), India (Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland), Laos, Myanmar, Thailand (?), Vietnam

Cyclemys mouhotii Gray 1862a:157, *Pyxidea mouhotii, Cyclemys mohouti, Pyxidea mouboti, Emys mouhotii, Geoemyda mouhotii, Pyxidea mouhotii mouhotii, Cuora mouhotii, Cuora mouhotii mouhotii*
Type locality: "Lao Mountains, in Siam." Restricted to "Luang Prabang, Laos (19°54' N, 102°8' O)" by lectotype designation by Fritz et al. (1998:40).

Cuora galbinifrons serrata Iverson and McCord 1992b:434 (07:33) (*partim*, hybrid)
Type locality: "100 km east of Tungfang at Tainhfien in central Hainan Island, China."

Cuora mouhotii obsti (Fritz, Andreas, and Lehr 1998)
Southern Keeled Box Turtle

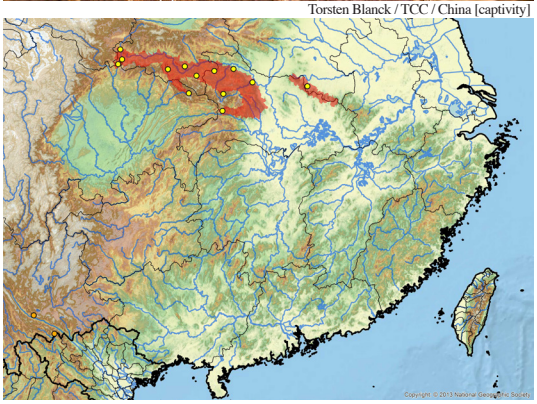

Torsten Blanck / Phu Yen Prov., Vietnam / male

Laos, Vietnam

Pyxidea mouhotii obsti Fritz, Andreas, and Lehr 1998a:35, *Cuora mouhotii obsti*
Type locality: "Umgebung von Phú Lôc, Annam (Vietnam), 16°16' N, 107°56' O)."

Cuora pani Song 1984 (12:22)
Pan's Box Turtle


Torsten Blanck / TCC / China [captivity]


(orange dots = trade)

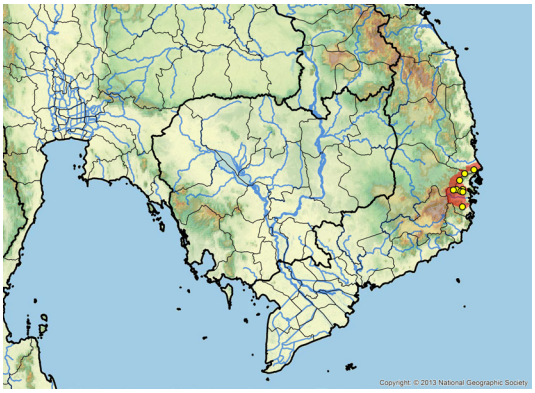
China (Henan, Hubei, Shaanxi, Sichuan)
IUCN Red List: Critically Endangered A1d+2d (2000); Previously: Data Deficient (1996)
TFTSG Draft Red List: Critically Endangered (2011)
CITES: Appendix II, as *Cuora* spp.

Cuora pani Song 1984:330, *Cuora pani pani, Pyxiclemmys pani pani*
Type locality: "Xujiaba (alt. 420 m) of Pingli County in Shaanxi Province" [China].

Cuora chriskarannarum Ernst and McCord 1987:624
Type locality: "Ta Lau Shan, Yunnan Province, China (23°30' N, 102°25' E)."

Cuora picturata Lehr, Fritz, and Obst 1998 (07:35, 09:22, 12:22)
Southern Vietnam Box Turtle


Torsten Blanck / TCC / Vietnam



Vietnam

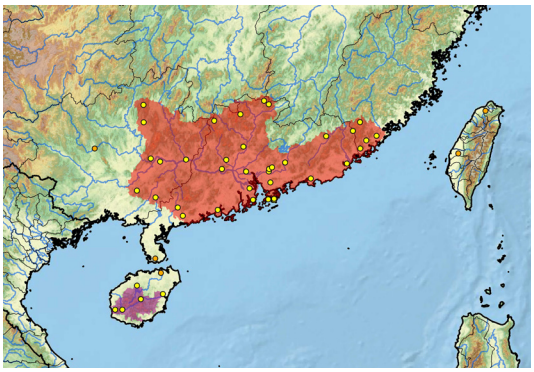
IUCN Red List: Critically Endangered A2bd+4bd (2016); Previously: Critically Endangered, as part of *Cuora galbinifrons* (2000)

CITES: Appendix II, as *Cuora* spp.

Cuora galbinifrons picturata Lehr, Fritz, and Obst 1998:7, *Cistoclemmys galbinifrons picturata, Cuora picturata, Cistoclemmys picturata*
Type locality: "südliches Annam (Vietnam)."

Cuora trifasciata (Bell 1825a) (07:36, 09:23, 12:22) (**40, 42**)

Chinese Three-striped Box Turtle, Golden Coin Turtle



(subspecies: *trifasciata* = red, *luteocephala* = purple; orange dots = trade)

China (Fujian, Guangdong, Guangxi, Hainan, Hong Kong)

IUCN Red List: Critically Endangered A1d+2d (2000); Previously: Endangered (1996)

TFTSG Draft Red List: Critically Endangered (2011)

CITES: Appendix II, as *Cuora* spp.

Cuora trifasciata trifasciata (Bell 1825a) (07:36, 09:23, 12:22) (**40, 42**)

Chinese Three-striped Box Turtle



Paul Crow / TCF / TCC / Hong Kong, China

China (Fujian, Guangdong, Guangxi, Hong Kong)

Sternothaerus trifasciatus Bell 1825a:305, *Emys (Cistuda) trifasciata, Emys trifasciata, Cistuda trifasciata, Cistudo trifasciata, Cuora trifasciata, Pyxidemys trifasciata, Terrapene trifasciata, Cyclemys trifasciata, Cuora (Pyxiclemmys) trifasciata, Pyxiclemmys trifasciata, Cuora trifasciata trifasciata*
Type locality: Not known. Restricted to "Luofo Shan Mountains, Guangdong, China" by Blanck et al. (2006:40).

Mauremys iversoni Pritchard and McCord 1991:140 (07:33) (*partim*, hybrid)
Type locality: "People's Republic of China: Fujian Province: vicinity of Nanping (26º38' N, 118º10' E)."

Clemmys guangxiensis Qin 1992:60 (14:29) (*partim*, hybrid)
Type locality: "Nanning, Guangxi" [China].

Cuora trifasciata luteocephala Blanck, Protiva, Zhou, Li, Crow, and Tiedemann 2017 (**42**)

Hainan Three-striped Box Turtle



Torsten Blanck / Hainan, China [captivity]

China (Hainan)

Sacalia pseudocellata Iverson and McCord 1992a:426 (07:33) (*partim*, hybrid)
Type locality: "between Tungfang [19º03' N, 108º56' E] and Kancheng [18º51' N, 108º37' E; ca. 48 km from Tungfang], western Hainan Island, China."

Ocadia philippeni McCord and Iverson 1992:13 (07:33) (*partim*, hybrid)
Type locality: "near Kancheng [18º51' N, 108º37' E; = 48 km from Tungfang (19º03' N, 108º56' E)], western Hainan Island, China."

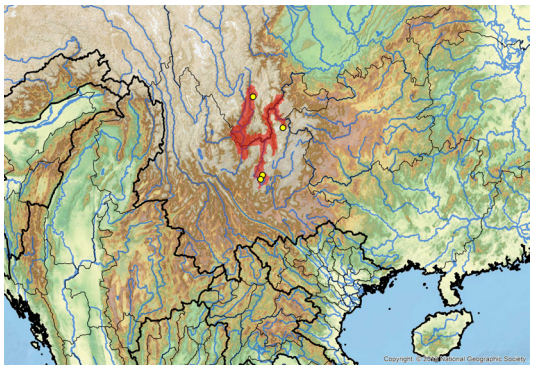
Cuora trifasciata luteocephala Blanck, Protiva, Zhou, Li, Crow, and Tiedemann 2017:379
Type locality: "China, Hainan Province, Dan County, 300m elevation."

Cuora yunnanensis (Boulenger 1906) (07:37, 12:22)

Yunnan Box Turtle



Zhou Ting, William P. McCord, Torsten Blanck / TCC / Yunnan, China [captivity]



(red = possible range; dots = possible native or trade)

China (Sichuan, Yunnan)

IUCN Red List: Critically Endangered B2ab(ii,iii,v), D (2010); Previously: Extinct (2000), Data Deficient (1996)

CITES: Appendix II, as *Cuora* spp.

Cyclemys yunnanensis Boulenger 1906a:567, *Cuora yunnanensis*, *Pyxiclemmys yunnanensis*

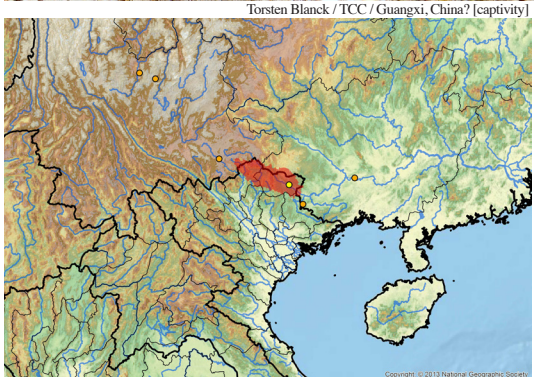
Type locality: "Yunnan fu..[&].. Tongchuan fu" [Kunming Shi.. [&].. Dongchuan Shi, Yunnan, China]; restricted to "vicinity of Zhongping (Huize) City (26°42'N, 103°30'E) in Huize County, northeastern Yunnan Province, China (= Tongchuan Fu)" by Blanck et al. (2006b:31).

Cuora zhoui Zhao *in* Zhao, Zhou, and Ye 1990 (12:22)

Zhou's Box Turtle



Torsten Blanck / TCC / Guangxi, China? [captivity]



(red = possible range; yellow dot = possible native; orange dots = trade)

China (Guangxi?, Yunnan?), Vietnam

IUCN Red List: Critically Endangered A1d+2d (2000); Previously: Data Deficient (1996)

TFTSG Draft Red List: Critically Endangered (2011)

CITES: Appendix II, as *Cuora* spp.

Cuora zhoui Zhao *in* Zhao, Zhou, and Ye 1990:213, *Pyxiclemmys zhoui*

Type locality: "market at Nanning, Guangxi Zhuang Autonomous Region" [China].

Cuora pallidicephala McCord and Iverson 1991:414

Type locality: "Wuting [= Wuding: 25°26'N, 102°21'W] or Yuanmow [25°41'N, 101°54'W], Yunnan Province, China."

Cyclemys Bell 1834 (07:38, 08:6, 09:24)

Cyclemys Bell 1834:17

Type species: *Cyclemys orbiculata* Bell 1834 [= subjective synonym of *Emys dentata* Gray 1831d], by original designation.

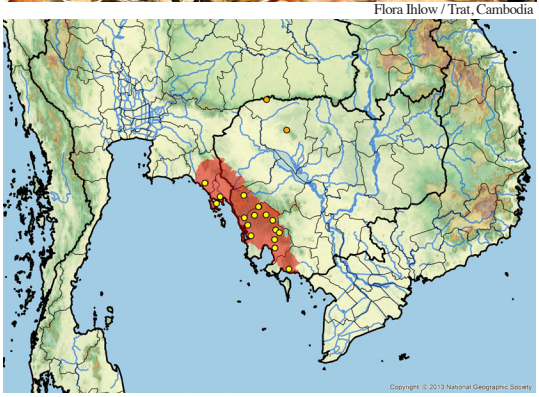
Cyclemis Tirant 1884:156 (*nomen novum*)

Cyclemys atripons Iverson and McCord 1997 (44)

Western Black-bridged Leaf Turtle



Flora Ihlow / Trat, Cambodia



(orange dots = uncertain identification or possible hybrids)

Cambodia, Thailand

IUCN Red List: Not Evaluated

TFTSG Draft Red List: Near Threatened (2011)

CITES: Appendix II, as *Cyclemys* spp.

Cyclemys atripons Iverson and McCord 1997:632, *Cyclemys atripons atripons*, *Cyclemys pulchristriata atripons*

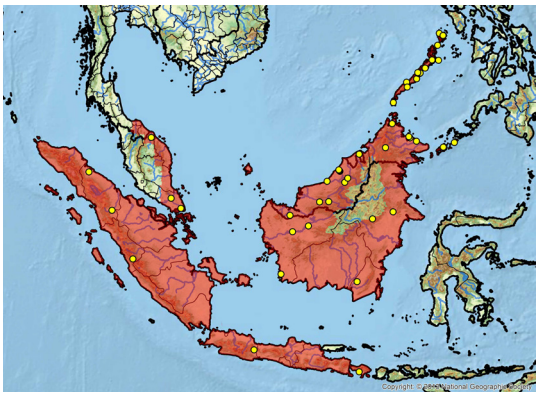
Type locality: "Thailand, Krat [= Trat], Kao [= Mt.] Kuap (= Khao Kuap)."

Cyclemys dentata (Gray 1831d) (08:7)

Asian Leaf Turtle



Maren Gaulke / Kota Pinang, Sumatra, Indonesia



Brunei, Indonesia (Bali, Java, Kalimantan, Sumatra), Malaysia (Peninsular, East), Philippines (Palawan, Sulu Archipelago), Singapore, Thailand
IUCN Red List: Near Threatened (2000); Previously: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Data Deficient (2011)
CITES: Appendix II, as *Cyclemys* spp.

Emys hasseltii Boie *in* Fitzinger 1826:45 (*nomen nudum*), *Clemmys (Clemmys) hasseltii*
Type locality: "Asia, Insula Java" [Indonesia].

Emys dhor Gray 1830e:8 [(10:7)] (*nomen oblitum*), *Cyclemys dhor*
Type locality: "India." Restricted to "Bengal..[and]..Java" by Gray (1831d:20); and to "Java" [Indonesia] by lectotype designation by Fritz et al. (1997:188).

Emys dentata Gray 1831d:errata[btw 78-79] (*nomen novum*), *Cistudo (Cyclemys) dentata, Cistudo dentata, Cyclemys dentata, Cyclemys dentata dentata*
Type locality: "Bengal..[and]..Java." Restricted to "Java" [Indonesia] by Smith (1931:80), and by lectotype designation by Fritz et al. (1997:188).

Cyclemys orbiculata Bell 1834:17, *Emys orbiculata, Emys (Cyclemys) orbiculata, Cistudo orbiculata*
Type locality: "Indiâ." Restricted to "Java" [Indonesia] by neotype designation by Fritz et al. (1997:188).

Cistudo diardii Duméril and Bibron 1835:227 (*nomen novum*), *Emys diardii*
Type locality: "Bengale et l'ile de Java."

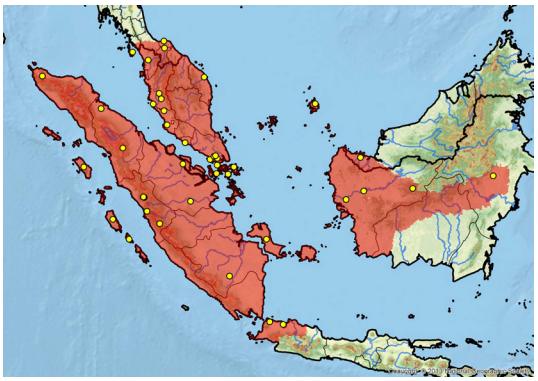
Cyclemys ovata Gray 1863e:178
Type locality: "Sarawak" [East Malaysia].

Cyclemys bellii Gray 1863e:179
Type locality: Not known.

Cyclemys enigmatica Fritz, Guicking, Auer, Sommer, Wink, and Hundsdörfer 2008 [(08:6)]
Enigmatic Leaf Turtle



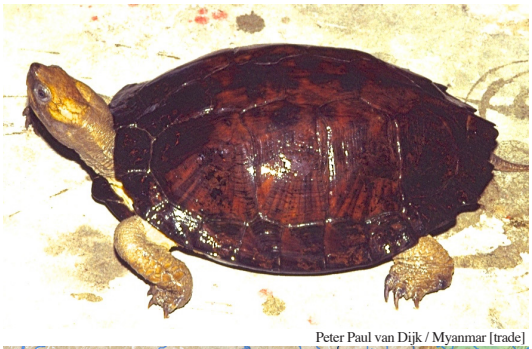
Maren Gaulke / Rantau Prapat, Sumatra, Indonesia



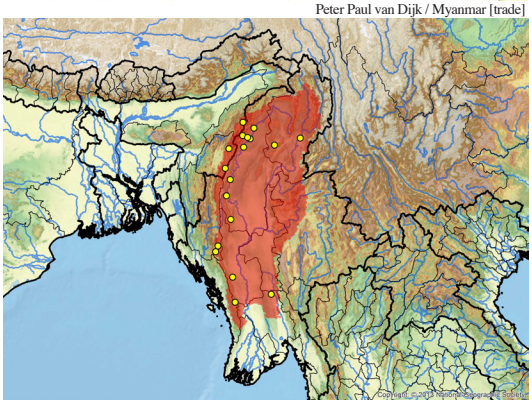
Malaysia (Peninsular, East), Singapore, Indonesia (Java, Kalimantan, Sumatra), Thailand
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Data Deficient (2011)
CITES: Appendix II, as *Cyclemys* spp.

Cyclemys enigmatica Fritz, Guicking, Auer, Sommer, Wink, and Hundsdörfer 2008b:381
Type locality: "Padang, Sumatra" [Indonesia].

Cyclemys fusca Fritz, Guicking, Auer, Sommer, Wink, and Hundsdörfer 2008 [(08:6)]
Myanmar Brown Leaf Turtle



Peter Paul van Dijk / Myanmar [trade]



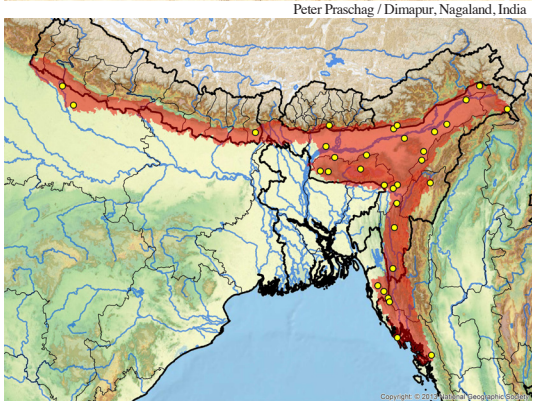
India (Nagaland, Manipur), Myanmar
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Data Deficient (2011)
CITES: Appendix II, as *Cyclemys* spp.

Cyclemys fusca Fritz, Guicking, Auer, Sommer, Wink, and Hundsdörfer 2008b:383
Type locality: "Kachin State, Myanmar."

Cyclemys gemeli Fritz, Guicking, Auer, Sommer, Wink, and Hundsdörfer 2008 (08:6)
Assam Leaf Turtle



Peter Praschag / Dimapur, Nagaland, India



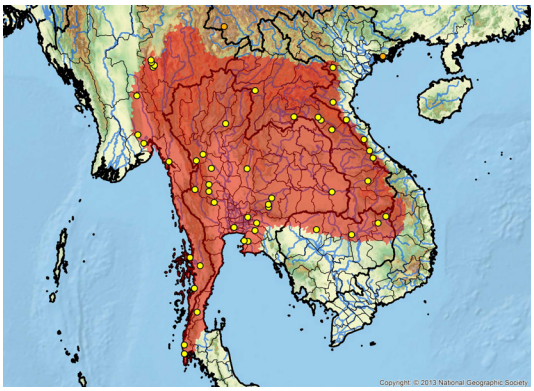
Bangladesh, Bhutan, India (Arunachal Pradesh, Assam, Bihar, Manipur, Meghalaya, Mizoram, Nagaland, Uttar Pradesh), Myanmar, Nepal
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Data Deficient (2011)
CITES: Appendix II, as *Cyclemys* spp.

Cyclemys gemeli Fritz, Guicking, Auer, Sommer, Wink, and Hundsdörfer 2008b:384
Type locality: "street from Tezpur to Arunachal Pradesh, 5 km to border of Arunachal Pradesh, Jia Bhoroli River Region, Assam, India."

Cyclemys oldhamii Gray 1863e (08:8) (**44**)
Southeast Asian Leaf Turtle



Thomas Ziegler / NW of Ky Thuong, Vietnam



Cambodia, China (?) (Yunnan [?]), Laos, Myanmar, Thailand, Vietnam
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Data Deficient (2011)
CITES: Appendix II, as *Cyclemys* spp.

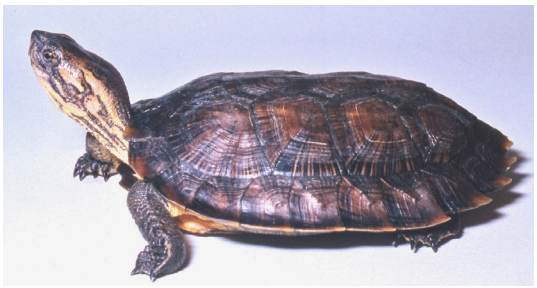
Cyclemys oldhamii Gray 1863e:178, *Cyclemis oldhami*
Type locality: "Mergui..[&]..Siam." Restricted to "Mergui" [Myanmar] by Smith (1931:81) and by lectotype designation by Fritz et al. (1997:196).

Cyclemys dhor shanensis Annandale 1918:67, *Cyclemys shanensis, Cyclemys shanensis shanensis*
Type locality: "Fort Stedman on the Inlé Lake, altitude 3,000 feet.. [&]..He-Ho plain 800 feet higher" [Myanmar].

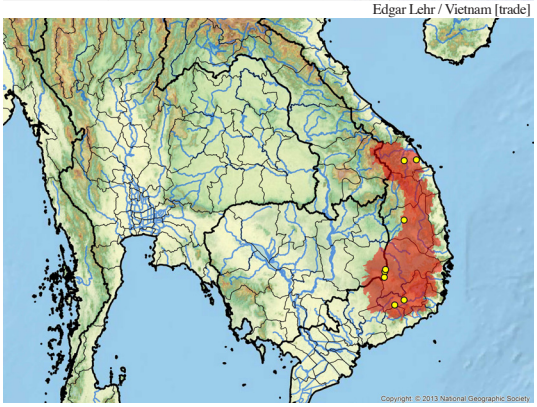
Geoemyda tcheponensis Bourret 1939:7, *Cyclemys tcheponensis, Cyclemys dentata tcheponensis, Cyclemys shanensis tcheponensis*
Type locality: "Haute Sé-Bang-Hien, (centre de la Chaîne annamitique)" [Laos].

Cyclemys tiannanensis Kou 1989:193
Type locality: "Nanliang, Mengla County, Xishuangbanna of Yunnan Province, alt. 620 m" [China]. Probable market specimen according to Fritz et al. (1997:209).

Cyclemys pulchristriata Fritz, Gaulke, and Lehr 1997 (**45**)
Eastern Black-bridged Leaf Turtle



Edgar Lehr / Vietnam [trade]



Cambodia, Vietnam

IUCN Red List: Not Evaluated
TFTSG Draft Red List: Data Deficient (2011)
CITES: Appendix II, as *Cyclemys* spp.

Cyclemys pulchristriata Fritz, Gaulke, and Lehr 1997:203, *Cyclemys atripons pulchristriata*
Type locality: "Phuc-Son, Annam" [Vietnam].

Geoclemys Gray 1856b

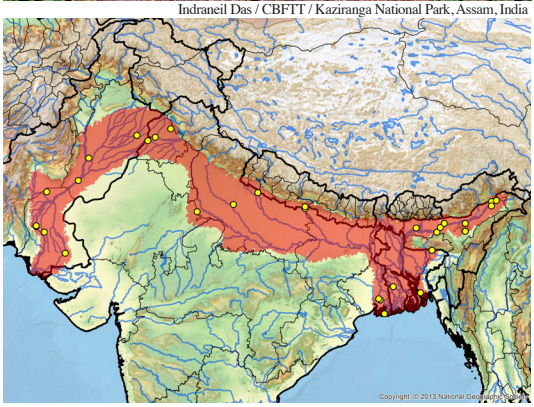
Geoclemys Gray 1856b:17
Type species: *Geoclemys hamiltonii* [= *Emys hamiltonii* Gray 1830e], by subsequent designation by Stejneger (1907:496).
Geoclemmys Cope 1865:186 (*nomen novum*)

Geoclemys hamiltonii (Gray 1830e) (10:7)

Spotted Pond Turtle, Black Pond Turtle



Indraneil Das / CBFTT / Kaziranga National Park, Assam, India



Bangladesh, India (Assam, Bihar, Jammu, Meghalaya, Punjab, Rajasthan, Uttar Pradesh, West Bengal), Nepal, Pakistan
CBFTT Account: Das and Bhupathy (2010)
IUCN Red List: Vulnerable A1d+2d (2000); Previously: Near Threatened (1996)
TFTSG Draft Red List: Endangered (2011)
CITES: Appendix I

Emys hamiltonii Gray 1830e:9 (10:7), *Clemmys (Clemmys) hamiltonii, Clemmys hamiltonii, Geoclemys hamiltonii, Damonia hamiltonii, Geoclemmys hamiltonii, Geoclemys hamoltoni*
Type locality: "India."

Emys guttata Gray 1831b:pl.76
Type locality: "India."

Emys piquotii Lesson 1831a:120
Type locality: "le Gange" [India].

Emys picquotii Lesson *in* Duméril and Bibron 1835:316 (*nomen novum*)

Emys hamiltonoides † Falconer and Cautley *in* Lydekker 1880:21 (*nomen nudum*) [Late Pliocene (Pinjor) to Early Pleistocene (Tatrot), Siwaliks, India (Punjab)], *Damonia hamiltonoides*

Melanochelys pictus Murray 1884:107
Type locality: "in the Sind "Doro," in the Kushmore Talooka, Upper Sind" [Pakistan].

Clemmys palaeindica † Lydekker 1885:178 (*nomen novum*) [Late Pliocene (Pinjor) to Early Pleistocene (Tatrot), Siwaliks, India (Punjab)], *Damonia palaeindica*
Type locality: "Siwalik Hills" [Punjab, India].

Geoclemys sivalensis † Tewari and Badam 1969:555 [Lower Pleistocene, Upper Siwaliks, India (Haryana)]
Type locality: "Upper Siwaliks...1 km south-east of Quranwalla...6 km northeast of Chandigarh Lake...Panjore, India." [Haryana, India].

Geoemyda Gray 1834b (07:39)

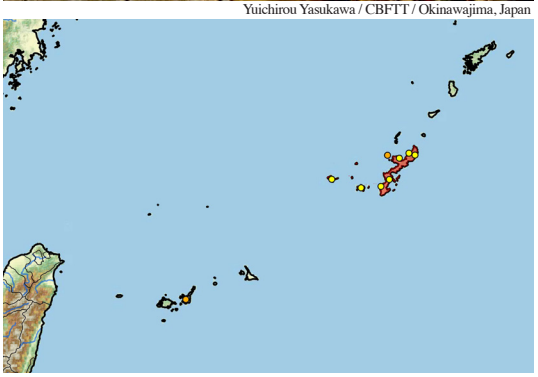
Geoemyda Gray 1834b:100 (*nomen conservandum*, ICZN 1985a)
Type species: *Geoemyda spengleri* [= *Testudo spengleri* Gmelin 1789], by original designation.
Geoemys Bonaparte 1836:6 (*nomen novum*)
Geomyda Blyth 1856:714 (*nomen novum*)
Nicoria Gray 1856b:17
Type species: *Nicoria spengleri* [= *Testudo spengleri* Gmelin 1789], by original monotypy.

Geoemyda japonica Fan 1931

Ryukyu Black-breasted Leaf Turtle



Yuichirou Yasukawa / CBFTT / Okinawajima, Japan



(orange dots = introduced)

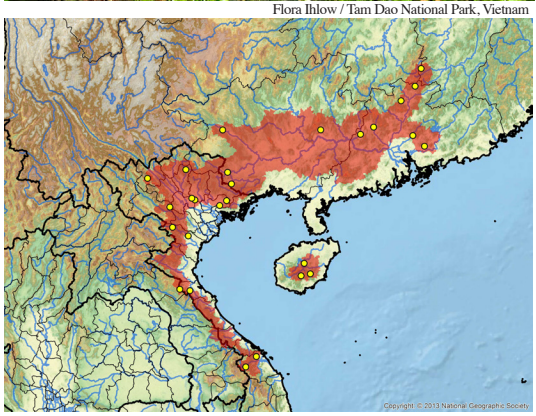
Japan (Ryukyu Archipelago)
CBFTT Account: Yasukawa and Ota (2008)
IUCN Red List: Endangered A1ce, B1+2c (2000); Previously: Endangered (1996)
CITES: Appendix II

Geoemyda spengleri japonica Fan 1931:148, *Geoemyda japonica, Geoemyda japonicus*
Type locality: "Japan and other Pacific Islands." Restricted to "Nawa (?Naha), Okinawajima Is., Japan" by Yasukawa et al. (1992:149).

Geoemyda spengleri (Gmelin 1789) [(09:25)]
Black-breasted Leaf Turtle



Flora Ihlow / Tam Dao National Park, Vietnam



China (Guangdong, Guangxi, Hainan, Hunan [?], Jiangxi), Laos, Vietnam

CBFTT Account: Yasukawa and Ota (2010)

IUCN Red List: Endangered A1cd+2cd (2000); Previously: Least Concern [Not Listed] (1996)

TFTSG Draft Red List: Endangered (2011)

CITES: Appendix II

Testudo spengleri Gmelin 1789:1043 (*nomen conservandum*, ICZN 1985a), *Emys spengleri, Geoemyda spengleri, Clemmys (Clemmys) spengleri, Clemmys spengleri, Nicoria spengleri, Geoemyda spengleri spengleri*
Type locality: Not designated. Originally indicated as coming from "vermuthlich...Ostindien" by Walbaum (1785:129); and restricted to "probably...from the East Indies" by Pope (1935:36).

Testudo serrata Shaw 1802:51 (junior homonym, not = *Testudo serrata* Daudin 1801 = *Trachemys scripta scripta*)
Type locality: Not designated.

Testudo tricarinata Bory de Saint-Vincent 1804:308 (junior homonym, not = *Testudo tricarinata* Retzius *in* Schoepff 1792 = *Kinosternon scorpioides scorpioides*)
Type locality: "Bourbon...mare d'Arzule" [Réunion] [in error].

Geoemyda spengleri sinensis Fan 1931:146
Type locality: "Loshiang and Kutchen" [Luoxiang and Guchen, Guangxi, China].

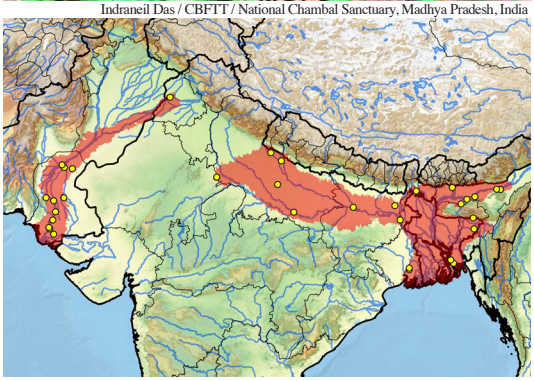
Hardella Gray 1870c

Hardella Gray 1870c:58
Type species: *Hardella thurjii* [= *Emys thurjii* Gray 1831d], by subsequent designation as *Hardella thurgi* by Günther (1871:70).

Hardella thurjii (Gray 1831d) [(07:40)]
Crowned River Turtle



Indraneil Das / CBFTT / National Chambal Sanctuary, Madhya Pradesh, India



Bangladesh, India (Assam, Bihar, Madhya Pradesh, Meghalaya, Punjab, Uttar Pradesh, West Bengal), Nepal, Pakistan

CBFTT Account: Das and Bhupathy (2009a)

IUCN Red List: Vulnerable A1cd+2cd (2000); Previously: Near Threatened (1996)

TFTSG Draft Red List: Endangered (2011)

CITES: Appendix II

Emys thuryi Gray 1830e:8 [(10:7)] (*nomen oblitum*)
Type locality: "Bengal" [Bangladesh or India].

Emys thurjii Gray 1831d:22 (*nomen novum*), *Testudo thurjii, Hardella thurjii, Hardella thurjii thurjii*
Type locality: "India." Restricted to "Ganges and Brahmaputra systems" [India] as *Hardella thurgii* by McDowell (1964:255).

Emys flavonigra Lesson 1831a:120
Type locality: "le Gange" [India].

Clemmys (Clemmys) thurgii Fitzinger 1835:123 (*nomen novum*), *Clemmys thurgii, Testudo thurgii, Emys thurgii, Emys thurgi, Batagur thurgii, Hardella thurgii, Batagur (Hardella) thurgii*

Kachuga oldhami Gray 1869a:200, *Kachuga (Kachuga) oldhami*
Type locality: "India."

Hardella indi Gray 1870c:58 [(07:40)], *Hardella thurjii indi*
Type locality: "Indus River" [Pakistan].

Batagur falconeri † Lydekker 1885:187 [Late Pliocene (Pinjor) to Early Pleistocene (Tatrot), Siwaliks, India (Punjab)], *Hardella falconeri*
Type locality: "Siwalik Hills" [Punjab, India].

Batagur cautleyi † Lydekker 1885:194 [Late Pliocene (Pinjor) to Early Pleistocene (Tatrot), Siwaliks, India (Punjab)],
Type locality: "Siwalik Hills" [Punjab, India].

Clemmys watsoni † Lydekker 1886:541 [Late Pliocene to Early

Pleistocene, Siwaliks, India (Gujarat)]
Type locality: "Siwaliks of Perim Island, Gulf of Cambay, India" [Gujarat, India].

Geoemyda pilgrimi † Prasad and Satsangi 1967 [Late Pliocene to Early Pleistocene, Siwaliks, Haritalyanagar, India (Himachal Pradesh)]
Type locality: "Tatrot beds east of Chakrana in Bilaspur District, Himachal Pradesh, India."

Heosemys Stejneger 1902

Heosemys Stejneger 1902:238
Type species: *Heosemys spinosa* [= *Emys spinosa* Gray 1831d], by original designation.

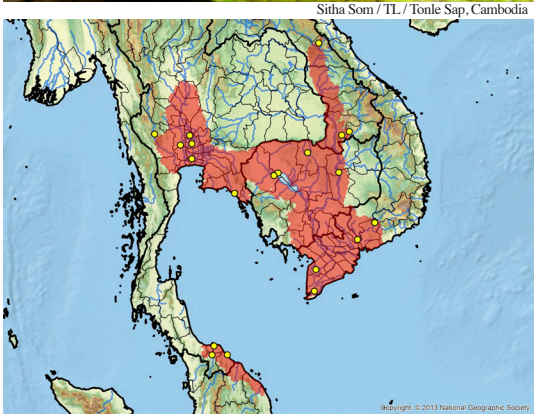
Hieremys Smith 1916:50
Type species: *Hieremys annandalii* [= *Cyclemys annandalii* Boulenger 1903a], by original monotypy.

Heosemys annandalii (Boulenger 1903a) (07:41)

Yellow-headed Temple Turtle



Sitha Som / TL / Tonle Sap, Cambodia



Cambodia, Laos, Malaysia (Peninsular), Thailand, Vietnam
IUCN Red List: Endangered A1cd+2d (2000); Previously: Vulnerable (1996)
TFTSG Draft Red List: Critically Endangered *or* Endangered (2011)
CITES: Appendix II

Cyclemys annandalii Boulenger 1903a:142 (07:41), *Hieremys annandalii*, *Heosemys annandalii*
Type locality: "Kampong Jalor" [= Yala, Yala Prov., Thailand].

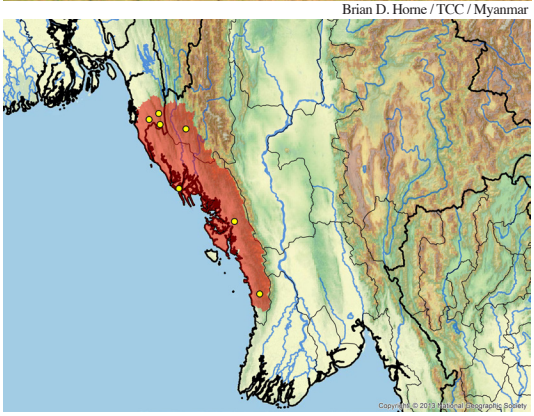
Hieremys annandalei Smith 1916:50 (*nomen novum*), *Cyclemys annandalei*

Heosemys depressa (Anderson 1875)

Arakan Forest Turtle



Brian D. Horne / TCC / Myanmar



Bangladesh, Myanmar
IUCN Red List: Critically Endangered A2cd, B1+2c (2000); Previously: Critically Endangered (1996)
TFTSG Draft Red List: Critically Endangered *or* Endangered (2011)
CITES: Appendix II

Geoëmyda depressa Anderson 1875:284, *Geoemyda depressa*, *Heosemys depressa*
Type locality: "Arakan" [Myanmar]. Restricted to "Akyab, near Arakan" [Myanmar] by Smith (1931:95).

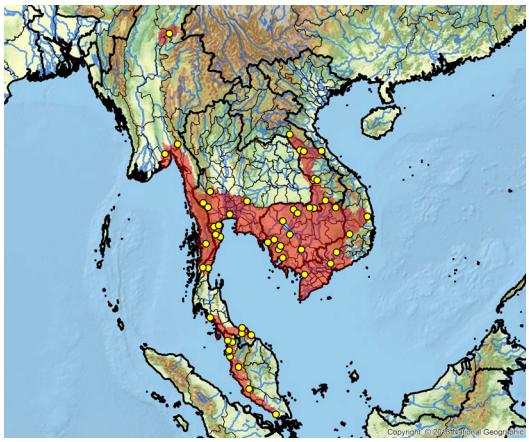
Geomyda arakana Theobald 1876:vii, *Geoemyda arakana*
Type locality: "Akyab" [Myanmar].

Heosemys grandis (Gray 1860d)

Giant Asian Pond Turtle



Jérôme Maran / Vietnam



Cambodia, Laos, Malaysia (Peninsular), Myanmar, Thailand, Vietnam

IUCN Red List: Vulnerable A1d+2cd (2000); Previously: Near Threatened (1996)

TFTSG Draft Red List: Endangered (2011)

CITES: Appendix II

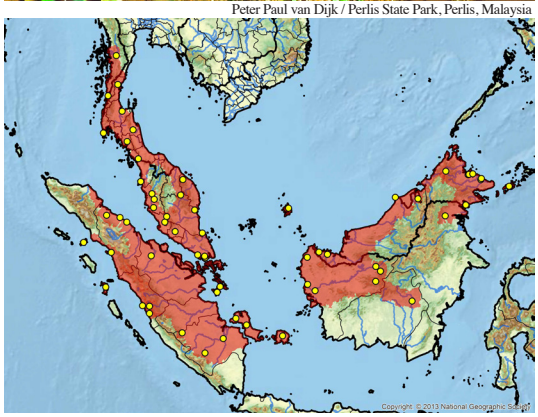
Emys siamensis Gray *in* Günther 1860:114 *(nomen nudum)*
Type locality: "Siam" [Thailand].

Geoemyda grandis Gray 1860d:218, *Geomyda grandis, Clemmys grandis, Heosemys grandis*
Type locality: "Cambodia" [Cambodia].

Heosemys spinosa (Bell *in* Gray 1830a) [12:25]
Spiny Turtle



Peter Paul van Dijk / Perlis State Park, Perlis, Malaysia



Brunei, Indonesia (Sumatra, Kalimantan), Malaysia (Peninsular, East), Myanmar, Philippines (Sulu Archipelago [Tawi-Tawi]), Singapore, Thailand

IUCN Red List: Endangered A1bcd (2000); Previously: Vulnerable (1996)

TFTSG Draft Red List: Endangered (2011)

CITES: Appendix II

Emys spinosae Bell *in* Gray 1830a:pl.77 *(nomen oblitum)*
Type locality: "Penang" [Peninsular Malaysia].

Emys spinosa Gray 1830e:8 (*nomen novum*), *Geoemyda spinosa, Geomyda spinosa, Clemmys (Clemmys) spinosa, Clemmys spinosa, Heosemys spinosa*
Type locality: "Penang" [Peninsular Malaysia].

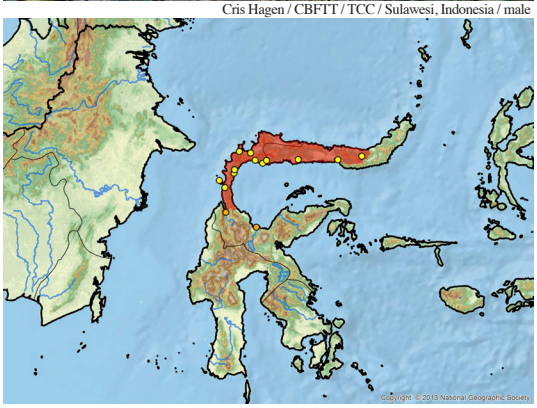
Leucocephalon McCord, Iverson, Spinks, and Shaffer 2000

Leucocephalon McCord, Iverson, Spinks, and Shaffer 2000:21
Type species: *Leucocephalon yuwonoi* McCord, Iverson, and Boeadi 1995, by original designation.

Leucocephalon yuwonoi (McCord, Iverson, and Boeadi 1995) [07:42]
Sulawesi Forest Turtle



Cris Hagen / CBFTT / TCC / Sulawesi, Indonesia / male



(orange dots = trade)

Indonesia (Sulawesi)

CBFTT Account: Hagen, Platt, and Innis (2009)

IUCN Red List: Critically Endangered A1cd+2cd, C1 (2000); Previously: Data Deficient (1996)

TFTSG Draft Red List: Critically Endangered (2011)

CITES: Appendix II

Geoemyda yuwonoi McCord, Iverson, and Boeadi 1995:311, *Heosemys yuwonoi, Leucocephalon yuwonoi*
Type locality: "near Gorontalo [0º33' N, 123º05' E] on the Minahassa Peninsula, northern Sulawesi [Celebes], Indonesia."

Malayemys Lindholm 1931 [46]

Damonia Gray 1869a:193 (junior homonym, not = *Damonia* Robineau-Desvoidy 1847 [= Diptera])

Type species: *Damonia macrocephala* [= *Geoclemmys macrocephala* Gray 1859], by subsequent designation by Stejneger (1907:496).

Malayemys Lindholm 1931:30 (*nomen novum*)

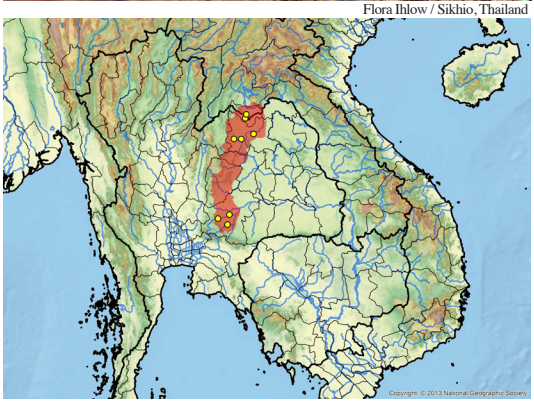
Type species: *Malayemys macrocephala* [= *Geoclemmys macrocephala* Gray 1859], in accordance with ICZN Article 67.8, not *Malayemys subtrijuga* [= *Emys subtrijuga* Schlegel and Müller 1845], as by original designation by Lindholm (1931:30).

Malayemys khoratensis Ihlow, Vamberger, Flecks, Hartmann, Cota, Makchai, Meewattana, Dawson, Kheng, Rödder, and Fritz 2016 [46,47]

Khorat Snail-eating Turtle



Flora Ihlow / Sikhio, Thailand



Laos, Thailand

IUCN Red List: Not Evaluated

TFTSG Draft Red List: Not Evaluated

Malayemys khoratensis Ihlow, Vamberger, Flecks, Hartmann, Cota, Makchai, Meewattana, Dawson, Kheng, Rödder, and Fritz 2016:16 [46,47]

Type locality: "Udon Thani, Udon Thani Province, Thailand (17.36555°N, 102.81427°E)"

Malayemys isan Sumontha, Brophy, Kunya, Wiboonatthapol, and Pauwels 2016:2 [46,47]

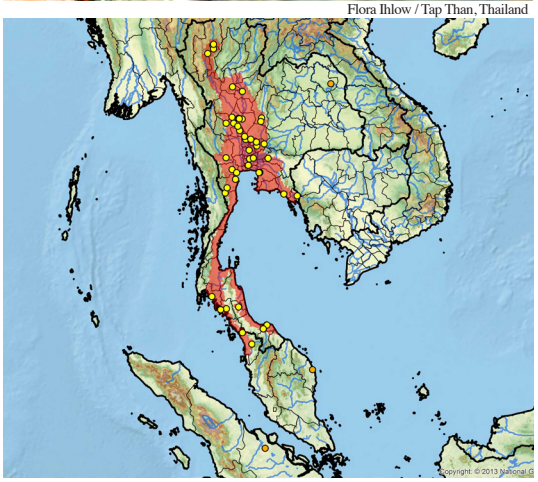
Type locality: "Ban Na Klang (17°14'48.728"N, 102°12'32.479"E), Na Klang Sub-district, Na Klang District, Nong Bua Lamphu Province, northeastern Thailand."

Malayemys macrocephala (Gray 1859) [07:43] [46]

Malayan Snail-eating Turtle



Flora Ihlow / Tap Than, Thailand



(orange dots = possible trade or introduced)

Malaysia (Peninsular), Thailand

Possibly Introduced or Native: Indonesia (Sumatra) (prehistoric or historic?)

IUCN Red List: Not Evaluated

TFTSG Draft Red List: Vulnerable (2011); Previously: Least Concern [Not Listed] (1996), as part of *Malayemys subtrijuga*

CITES: Appendix II

Geoclemmys macrocephala Gray 1859:479, *Clemmys macrocephala, Emys macrocephala, Damonia macrocephala, Geoclemys macrocephala, Malayemys macrocephala*

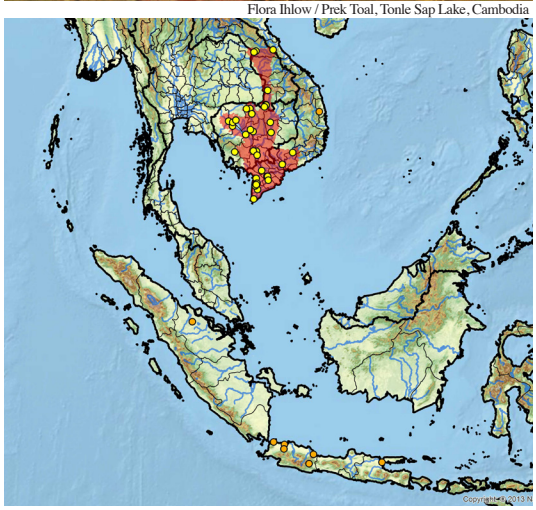
Type locality: "Siam" [Thailand]. Restricted to "Thanyaburi, Pathum Thani Province, Thailand (Chao Phraya River Basin; approx. 50 km NNE of Bangkok; 14.017 N, 100.733 E)" by Brophy (2004:75).

Emys megacephala Gray 1870c:44 (*nomen nudum*), *Damonia megacephala*

Malayemys subtrijuga (Schlegel and Müller 1845) [46]
Mekong Snail-eating Turtle



Flora Ihlow / Prek Toal, Tonle Sap Lake, Cambodia



(orange dots = possibly native or introduced or trade)

Cambodia, Laos, Thailand (?), Vietnam
Possibly Introduced or Native: Indonesia (Java, Sumatra?) (prehistoric or historic?)
IUCN Red List: Vulnerable A1d+2d (2000); Previously: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Vulnerable (2011)
CITES: Appendix II

Emys herrmanni Schweigger 1812:311 (*nomen dubium*), *Clemmys (Clemmys) hermanni*
Type locality: Not known.

Emys subtrijuga Schlegel and Müller 1845:30 [46], *Damonia subtrijuga, Geoclemys subtrijuga, Malayemys subtrijuga*
Type locality: "Java" [Indonesia]. Possibly introduced, but perhaps native [46].

Cistudo gibbosa Bleeker 1857b:239 (*nomen nudum*)
Type locality: "Batavia...Java" [Indonesia].

Emys nuchalis Blyth 1863:82, *Bellia nuchalis*
Type locality: "Java?" [Indonesia].

Damonia crassiceps Gray 1870c:43 [48]
Type locality: "China."

Damonia oblonga Gray 1871c:367
Type locality: "Batavia" [Java, Indonesia].

Mauremys Gray 1869b (07:44, 09:26)

Mauremys Gray 1869b:500
Type species: *Mauremys fuliginosa* [= *Emys fuliginosus* Gray 1860c = subjective synonym of *Emys leprosa* Schoepff *in* Schweigger 1812], by subsequent designation by Lindholm (1929:281).

Ocadia Gray 1870c:35
Type species: *Ocadia sinensis* [= *Emys sinensis* Gray 1834a], by original monotypy.

Emmenia Gray 1870c:38
Type species: *Emmenia grayi* [= *Emys grayi* Günther 1869 = subjective synonym of *Mauremys caspica siebenrocki* Wischuf and Fritz *in* Fritz and Wischuf 1997 = subjective synonym of *Testudo caspica* Gmelin 1774], by original monotypy.

Eryma Gray 1870c:44 (junior homonym, not = *Eryma* Meyer 1840 [= Crustacea †] or *Eryma* Albers 1854 [= Gastropoda] or *Eryma* Förster 1868 [= Hymenoptera])
Type species: *Eryma laticeps* [= *Emys laticeps* Gray 1854a = subjective synonym of *Emys leprosa* Schoepff *in* Schweigger 1812], by original monotypy.

Cathaiemys Lindholm 1931:29
Type species: *Cathaiemys mutica* [= *Emys mutica* Cantor 1842b], by original designation.

Pseudocadia Lindholm 1931:30
Type species: *Pseudocadia anyangensis* [= *Testudo anyangensis* † Ping 1930], by original designation.

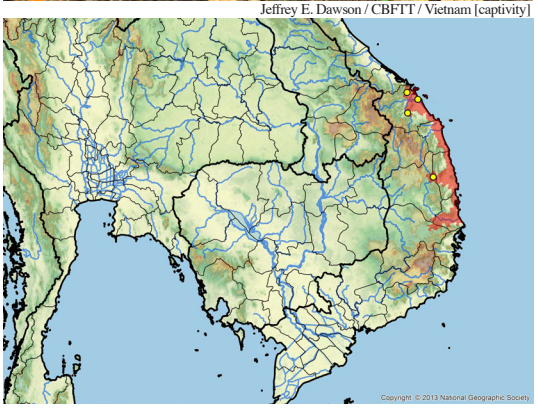
Chinemys Smith 1931:116
Type species: *Chinemys reevesi* [= *Emys reevesii* Gray 1831d)], by original monotypy.

Annamemys Bourret 1940:15
Type species: *Annamemys merkleni* Bourret 1940 [= subjective synonym of *Cyclemys annamensis* Siebenrock 1903a], by original monotypy.

Mauremys annamensis (Siebenrock 1903a) (07:44, 14:29) [49]
Vietnamese Pond Turtle, Annam Pond Turtle



Jeffrey E. Dawson / CBFTT / Vietnam [captivity]



Vietnam
CBFTT Account: McCormack, Dawson, Hendrie, Ewert, Iverson, Hatcher, and Goode (2014)
IUCN Red List: Critically Endangered A1d+2d (2000); Previously: Least Concern [Not Listed] (1996)

TFTSG Draft Red List: Critically Endangered (2011)
CITES: Appendix II

Cyclemys annamensis Siebenrock 1903a:341, *Cuora (Cyclemys) annamensis, Cuora annamensis, Annamemys annamensis, Mauremys annamensis, Cathaiemys annamensis*
Type locality: "Annam (Phuc-Son)" [Vietnam].

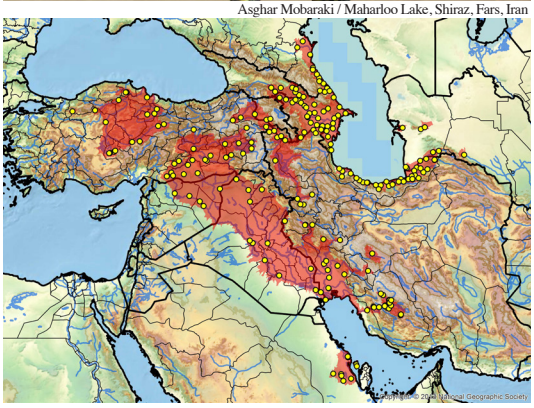
Annamemys merkleni Bourret 1940:15
Type locality: "Annam...Fai-Fo" [Vietnam]

Clemmys guangxiensis Qin 1992:60 (14:29) (*partim*, hybrid), *Mauremys guangxiensis*
Type locality: "Nanning, Guangxi" [China]. [in error?]

Ocadia glyphistoma McCord and Iverson 1994:53 (07:33) (*partim*, hybrid)
Type locality: "near the Vietnam border southwest of Nanning, Guangxi Province, China." [in error?]

Mauremys caspica (Gmelin 1774) (09:27, 12:26) **(50)**
Caspian Turtle, Caspian Terrapin


Asghar Mobaraki / Maharloo Lake, Shiraz, Fars, Iran



Armenia, Azerbaijan, Bahrain, Georgia, Iran (Ardabil, Bushehr, Chahar Mahal Va Bakhtiari, East Azarbaijan, Esfahan, Fars, Gilan, Golestan, Ilam, Kermanshah, Khuzestan, Kordestan, Lorestan, Mazandaran, West Azarbaijan), Iraq, Russia (Dagestan), Saudi Arabia (Eastern), Syria, Turkey, Turkmenistan
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2011)

Testudo caspica Gmelin 1774:59,pl.10, *Emys caspica, Clemmys caspica, Clemmys (Clemmys) caspica, Terrapene caspica, Clemmys caspica caspica, Mauremys caspica, Mauremys caspica caspica*
Type locality: "Schamachie...bei Bach Pusahat" [Pirsagat, Shemakha, Azerbaijan]. Emended to "Hircaniae aquis dulcibus" by Gmelin (1789:1042); and to "les bords de la mer Caspienne...dans les eaux douces de l'Hircanie" [Azerbaijan] by Daudin (1801:124).

Testudo ecaudata Daudin 1801:125 (*nomen novum* and senior homonym, not = *Testudo ecaudata* Pallas 1814 = *Testudo (Testudo) graeca buxtoni*)
Type locality: "les bords de la mer Caspienne...dans les eaux douces de l'Hircanie" [Azerbaijan].

Emys caspia Rüppell *in* Gray 1830e:9 (*nomen novum*), *Testudo caspia, Clemmys caspia, Clemmys caspia caspia*
Type locality: "Caspian Sea."

Emys grayi Günther 1869:504 (junior homonym, not = *Emys grayi* Bocourt 1868 = *Trachemys grayi grayi*), *Emmenia grayi*
Type locality: "Bussora" [Basrah, Iraq].

Mauremys caspica siebenrocki Wischuf *in* Maran 1996:17 (*nomen nudum*)

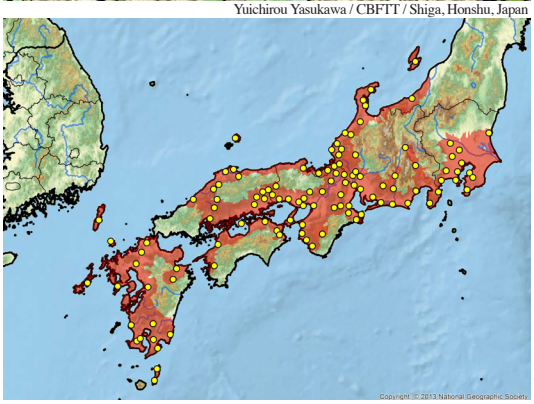
Mauremys caspica schiras Wischuf *in* Maran 1996:17 (*nomen nudum*)

Mauremys caspica ventrimaculata Wischuf and Fritz 1996:114
Type locality: "Tang-e Karam (Tang-i-Kerim), 70 Meilen östlich von Schiraz, Iran (29º 03' N, 53º 38' E)."

Mauremys caspica siebenrocki Wischuf and Fritz *in* Fritz and Wischuf 1997:240
Type locality: "Kerbela, Irak" [Iraq].

Mauremys japonica (Temminck and Schlegel 1838) (10:18, 14:30)
Japanese Pond Turtle


Yuichirou Yasukawa / CBFTT / Shiga, Honshu, Japan



Japan (Honshu, Kyoshu, Shikoku)
CBFTT Account: Yasukawa, Yabe, and Ota (2008)
IUCN Red List: Near Threatened (2000); Previously: Least Concern [Not Listed] (1996)
CITES: Appendix II

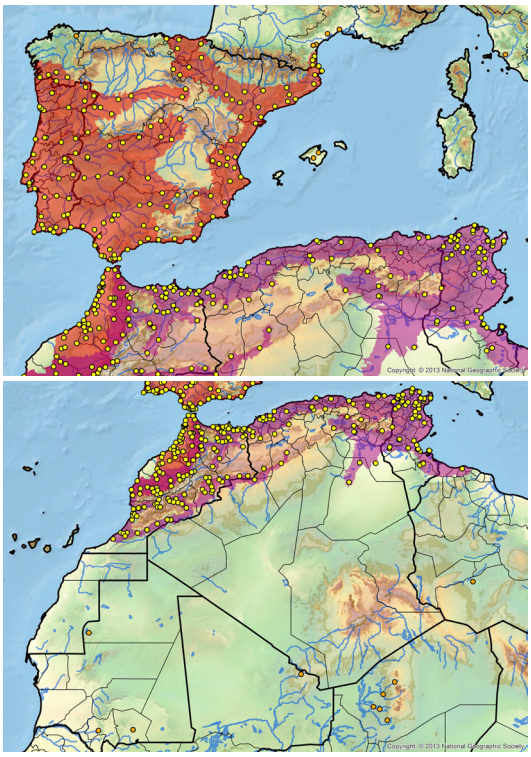
Emys palustris var. Japon Temminck and Schlegel 1834:pls.8-9 (14:30) (invalid vernacular name)

Emys vulgaris var. japonaise Temminck and Schlegel 1834:54 (14:30) (invalid vernacular name)

Emys vulgaris japonica Temminck and Schlegel 1838:139 (10:18, 14:30), *Emys japonica, Emys caspica japonica, Clemmys japonica, Mauremys japonica, Ocadia japonica*
Type locality: "Japon" [Japan].

Testudo margaritifera Schlegel *in* Gray 1856b:11 (*nomen nudum*)
Type locality: "Japon" [Japan].

Mauremys leprosa (Schoepff *in* Schweigger 1812) [51]
Mediterranean Pond Turtle, Spanish Terrapin



(subspecies: *leprosa* = red, *saharica* = purple, overlap = intergrades; orange dots = possibly introduced)

Algeria, France, Libya, Mauritania (prehistoric introduction?), Mali (prehistoric introduction?), Morocco, Niger (prehistoric introduction?), Portugal, Spain (Continental), Tunisia

IUCN Red List: Global: Least Concern [Not Listed] (1996); Regional: Europe: Vulnerable A2ac+3c (2004)

TFTSG Draft Red List: Vulnerable (2011)

Mauremys leprosa leprosa (Schoepff *in* Schweigger 1812) [07:45]
Mediterranean Pond Turtle



Albert Bertolero / Flix, Catalonia, Spain

Algeria, France, Morocco, Portugal, Spain (Continental)

Emys leprosa Schoepff *in* Schweigger 1812:298, *Clemmys (Clemmys) leprosa, Clemmys leprosa, Emys caspica leprosa, Clemmys caspica leprosa, Mauremys caspica leprosa, Mauremys leprosa, Mauremys leprosa leprosa*
Type locality: Not known. Restricted to "Südspanien" [Spain] by Mertens and Müller (1928:22).

Emys lutescens Schweigger 1812:302, *Clemmys (Clemmys) lutescens, Clemmys lutescens*
Type locality: Not known. Restricted to "southern Spain" by Fritz and Havaš (2007:230).

Emys marmorea Spix 1824:13, *Clemmys marmorea*
Type locality: "Brasil" [in error]. Restricted to "southern Spain" by Fritz and Havaš (2007:230).

Clemmys sigriz Michahelles 1829:1296, *Terrapene sigriz, Emys sigriz, Clemmys caspica sigriz*
Type locality: "paludibus Hispaniae meridionalis" [marshes of southern Spain].

Emys vulgaris Gray 1830e:9 [10:7]
Type locality: "South of Europe...Spain." Validated by lectotype designation by Fritz and Wischuf (1997:249).

Emys sigritzii Michahelles *in* Gray 1831d:24 (*nomen novum*)

Emys laticeps Gray 1854a:134, *Clemmys laticeps, Eryma laticeps*
Type locality: "West Africa, River Gambia" [Gambia]; possibly in error. Emended to "Tétouan, Morocco" by Fritz and Havaš (2007:230) without explanation.

Emys fuliginosus Gray 1860c:232, *Emys fuliginosa, Clemmys fuliginosa, Mauremys fuliginosa*
Type locality: "Egypt?...North Africa?" Emended to "southern Spain" by Fritz and Havaš (2007:230) without explanation.

Mauremys laniaria Gray 1869b:499
Type locality: Not known. Restricted to "southern Spain" by Fritz and Havaš (2007:230).

Emys flavipes Gray 1869c:643
Type locality: Not known. Restricted to "southern Spain" by Fritz and Havaš (2007:230).

Emys fraseri Gray 1869c:643 (*partim, nomen dubium*)
Type locality: "North Africa." Restricted to "Lake Tetzara, Algiers" [Algeria] by Gray (1873a:146).

Mauremys leprosa atlantica Schleich 1996a:32 [07:45]
Type locality: "Larache, Nord-Marokko" [Morocco].

Mauremys leprosa erhardi Schleich 1996a:36 [07:45]
Type locality: "NNE Taza, N 35º 25' 32.8, W 02º 52' 11.5, Nordost Marokko" [Morocco].

Mauremys leprosa marokkensis Schleich 1996a:40 [07:45]
Type locality: "ca. 2 km NE Tahanaoute / Kreuzung S 501, wenige km vor Aguelmouss; S-Marrakech, N 31º 24' 54.0, W 7º 49' 44.4, Zentral-Morokko" [Morocco].

Mauremys leprosa wernerkaestlei Schleich 1996a:44 [07:45]
Type locality: "Wasserlauf im Schnittpunkt von Oued Serou, Oued Oum de Oumbia. Oued Oum er Rbia, S-Khenifra, N 32º 44' 55.1, W 5º 41' 10.7, ca. 90 m NN, Zentral-Morokko" [Morocco].

Mauremys leprosa saharica Schleich 1996 [07:45]
Saharan Pond Turtle



Andreas Nöllert / Bou-Jerif, Morocco

Algeria, Libya, Mauritania (prehistoric introduction?), Mali (prehistoric introduction?), Morocco, Niger (prehistoric introduction?), Tunisia

Emys fraseri Gray 1869c:643 (*partim*, *nomen dubium*)
Type locality: "North Africa." Restricted to "Lake Tetzara, Algiers" [Algeria] by Gray (1873a:146).

Mauremys leprosa saharica Schleich 1996a:45 [07:45]
Type locality: "Fort Bou Jerif, Goulmime, Südwest-Marokko" [Morocco].

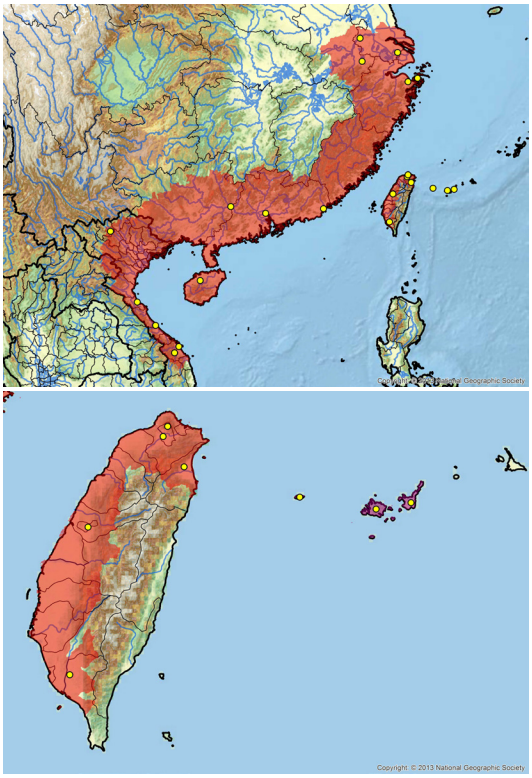
Mauremys leprosa zizi Schleich 1996a:48 [07:45]

Type locality: "Oued Ziz, Meski bis Erfoud, Süd-Marokko" [Morocco].

Mauremys leprosa vanmeerhaeghei Bour and Maran 1999:42 (07:45)

Type locality: "Mare amont dans l'oasis de Sidi El Mehdaoui (29°30 N, 8°00 W)...Province de Tata (ca. 30 km de Tata), Maroc... affluent de...l'oued Draa" [Morocco].

Mauremys mutica (Cantor 1842b) [49]
Yellow Pond Turtle


Copyright © 2013 National Geographic Society

(subspecies: *mutica* = red; *kami* = purple)

China (Anhui, Fujian, Guangdong, Guangxi, Hainan, Hubei, Hunan, Jiangsu, Jiangxi, Yunnan, Zhejiang), Japan (Ryukyu Archipelago), Taiwan, Vietnam

Introduced: Japan (mainland)

IUCN Red List: Endangered A1cd+2cd (2000); Previously: Least Concern [Not Listed] (1996)

TFTSG Draft Red List: Critically Endangered (2011)

CITES: Appendix II

Mauremys mutica mutica (Cantor 1842b)
Yellow Pond Turtle



Tien-Hsi Chen / Taiwan

China (Anhui, Fujian, Guangdong, Guangxi, Hainan, Hubei, Hunan, Jiangsu, Jiangxi, Yunnan, Zhejiang), Taiwan, Vietnam

Emys muticus Cantor 1842b:482, *Emys mutica, Clemmys mutica, Damonia mutica, Geoclemys mutica, Cathaiemys mutica, Mauremys mutica, Mauremys mutica mutica, Cathaiemys mutica mutica*
Type locality: "Chusan...Island" [Zhoushan Island, Zhejiang, China]. Cited as "Canton" [in error] by many authors, corrected by Iverson and McCord (1989:23).

Clemmys schmackeri Boettger 1894:129
Type locality: "China, wahrscheinlich Hainan."

Annamemys grochovskiae Dao 1957:1214, *Mauremys grochovskiae*
Type locality: In Russian ["forest near Vinh-Linh, Quang Tri Province, central Vietnam"].

Mauremys iversoni Pritchard and McCord 1991:140 [07:33] (*partim*, hybrid)
Type locality: "People's Republic of China: Fujian Province: vicinity of Nanping (26°38' N, 118°10' E)."

Clemmys guangxiensis Qin 1992:60 [14:29] (*partim*, hybrid), *Mauremys guangxiensis*
Type locality: "Nanning, Guangxi" [China].

Mauremys pritchardi McCord 1997:555 [07:33] (*partim*, hybrid)
Type locality: "Lashio, Myanmar (97°14' E, 22°56' N)."

Mauremys mutica kami Yasukawa, Ota, and Iverson 1996
Ryukyu Yellow Pond Turtle



John B. Iverson / Ryukyus, Japan

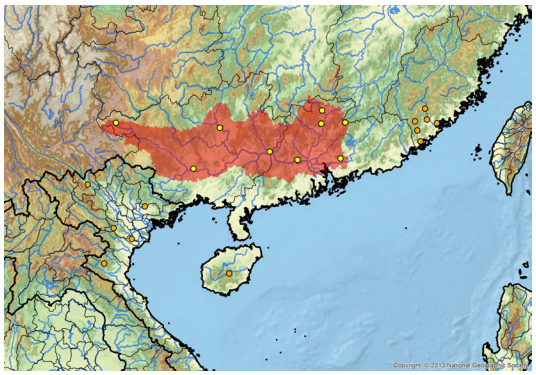
Japan (Ryukyu Archipelago)

Mauremys mutica kami Yasukawa, Ota, and Iverson 1996:311, *Cathaiemys mutica kami*
Type locality: "Okawa, Ishigakijima Is., the Yaeyama Group, Ryukyu Archipelago, Japan."

Mauremys nigricans (Gray 1834a)
Chinese Red-necked Turtle, Red-necked Pond Turtle



Ben Anders / CBFTT / China [trade]



China (Fujian [?], Guangdong, Guangxi, Hainan [?]), Vietnam (?)

CBFTT Account: Anders and Iverson (2012)

IUCN Red List: Endangered A1d+2d (2000); Previously: Data Deficient (1996)

TFTSG Draft Red List: Critically Endangered (2011)

CITES: Appendix II

Emys nigricans Gray 1834a:53, *Emys nigracans, Clemmys nigricans, Damonia nigricans, Chinemys nigricans, Mauremys nigricans*
Type locality: "Chinâ prope Canton" [Gangzhou, Guangdong].

Geoclemys kwangtungensis Pope 1934:1, *Clemmys kuangtungensis, Chinemys kwangtungensis*
Type locality: "Lofaoshan, Kwangtung, 300–400 m. altitude" [Mt. Luofu, Guangdong, China].

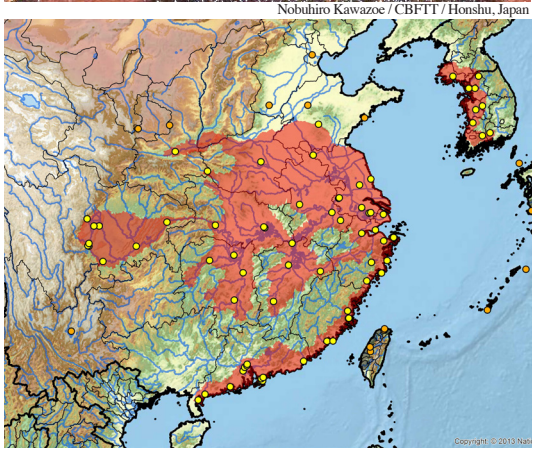
Geoclemys palaeannamitica † Bourret 1941a:10 [Holocene, Neolithic, subfossil, Vietnam], *Geoclemmys palaeannamitica, Chinemys palaeannamitica*
Type locality: "la grotte de Dong-Giao, appelée 'Thung Gianh'... à moins de 1 km de la voie ferrée, vers le N.W., au S.W. de la station de Dong-Giao, tout près de la frontière entre Annam et Tonkin" [Vietnam].

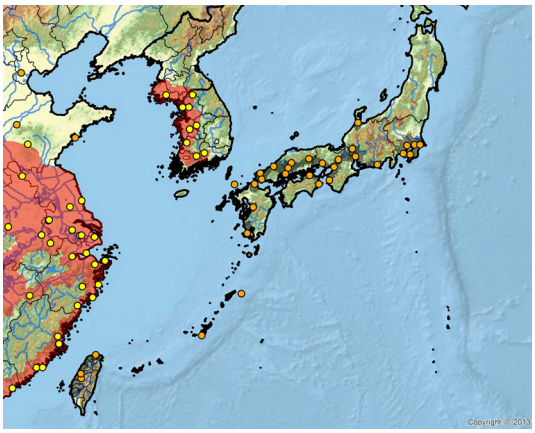
Mauremys reevesii (Gray1831d) (07:46) (**52**)

Reeves' Turtle, Chinese Three-keeled Pond Turtle



Nobuhiro Kawazoe / CBFTT / Honshu, Japan





(native populations = red, introduced populations = gray; orange dots = introduced and probable trade)

China (Anhui, Fujian, Gansu, Guangdong, Guizhou, Henan, Hong Kong, Hubei, Hunan, Jiangsu, Jiangxi, Shangdong, Shanxi, Shaanxi, Sichuan, Zhejiang), Japan (prehistoric introduction), North Korea, South Korea, Taiwan (prehistoric introduction)

Introduced: Indonesia (Timor), Japan, Palau, Philippines, Taiwan, Timor-Leste

CBFTT Account: Lovich, Yasukawa, and Ota (2011)

IUCN Red List: Endangered A2bcd+4bcd (2011); Previously: Endangered (2000), Least Concern [Not Listed] (1996)

CITES: Appendix III (China)

Emys reevesii Gray 1831d:73, *Clemmys (Clemmys) reevesii, Clemmys reevesii, Geoclemys reevesii, Geoclemmys reevesii, Damonia reevesii, Geoclemys reevesii reevesii, Chinemys reevesi, Chinemys reevesii, Mauremys reevesii*
Type locality: "China."

Emys vulgaris picta Schlegel 1844:127
Type locality: "Japan."

Emys japonica Duméril and Bibron *in* Duméril and Duméril 1851:8 (*nomen novum*)
Type locality: "Japon" [Japan].

Damonia unicolor Gray 1873e:78, *Clemmys unicolor, Damonia reevesii unicolor, Geoclemys reevesii unicolor*
Type locality: "China...Shanghai."

Geoclemys grangeri Schmidt 1925:1, *Geoclemys reevesii grangeri, Chinemys grangeri*
Type locality: "Yenchingkao, Wanhsien, Szechwan, 1500 feet altitude" [Yanjinggou, Sichuan, China].

Geoclemys paracaretta Chang 1929:1, *Geoclemys papacaretta*
Type locality: "Fuchow" [Fuzhou Shi, Fujian, China].

Chinemys megalocephala Fang 1934:158, *Mauremys megalocephala, Chinemys megacephala*
Type locality: "hill-sides of the vicinity of Nanking city" [Nanjing Shi, Jiangsu, China].

Chinemys macrocephala Bourret 1941c:140 (*nomen novum*)

Chinemys pani † Tao 1985:45 [Pleistocene, Chi-Ting, Taiwan]
Type locality: "Tsochen, Tsai-liao-chi, Tainan, Taiwan."

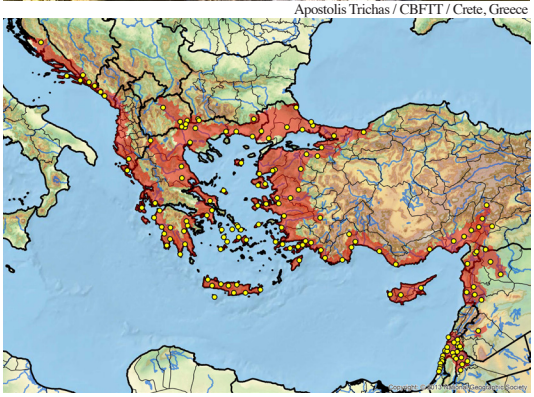
Mauremys pritchardi McCord 1997:555 (07:33) (*partim*, hybrid)
Type locality: "Lashio, Myanmar (97°14' E, 22°56' N)."

Mauremys rivulata (Valenciennes *in* Bory de Saint-Vincent 1833) (14:25) **(50, 53)**

Western Caspian Turtle, Balkan Terrapin



Apostolis Trichas / CBFTT / Crete, Greece



Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Greece, Israel, Jordan, Kosovo (?), Lebanon, Macedonia, Montenegro, Palestine (West Bank), Syria, Turkey

Introduced: Latvia

CBFTT Account: Mantziou and Rifai (2014)

IUCN Red List: Global: Not Evaluated; Regional: Europe: Least Concern (2004)

TFTSG Draft Red List: Least Concern (2011)

Emys pannonica Michahelles *in* Bonaparte 1831:87 (*nomen nudum*)

Emys rivulata Valenciennes *in* Bory de Saint-Vincent 1833:planches,pl.9 (14:25) (senior homonym, not = *Emys rivulata* Gray 1844 = *Pseudemys rubriventris*), *Clemmys caspica rivulata, Mauremys caspica rivulata, Mauremys rivulata, Mauremys rivulata rivulata, Emmenia rivulata*
Type locality: Not designated. Restricted to "Morée...Modon" [Greece] by Bory de Saint-Vincent (1836:110), and emended to "Umgebung von Modon, Morea, Griechenland" [Greece] by Mertens and Müller (1928:22).

Emys tristrami Gray 1869a:190, *Emys tristram, Mauremys rivulata tristrami*
Type locality: "Holy Land" [Israel or Jordan]. Restricted to "Jabook River" [Zarqa River, Jordan] by Gray (1873j:35); and to "Yarmuk River" [Israel or Jordan] by Boulenger (1889:104).

Emys caspica arabica Gray 1870c:36, *Emys arabica*
Type locality: "Arabia Petraea?" Restricted to "Mt. Carmel" [Israel] by Gray (1873j:34).

Emys pannonica Gray 1870c:36
Type locality: "Xantos" [Xanthos, Greece].

Clemmys caspica orientalis Bedriaga 1881:335
Type locality: "Umgebung von Athen und von Nauplia, ferner auf den Inseln Milo, Mykonos, Syra, Tinos, Siphnos und Seriphos" [Greece].

Clemmys caspica obsoleta Schreiber 1912:946
Type locality: "südlichen Dalmatien...Bocche di Cattaro..[&].. Halbinsel Sabbioncello..[&]..Menge" [Croatia]. Restricted to "Bocche di Cattaro, Süd-Dalmatien" [Croatia] by Wermuth and Mertens (1961:60).

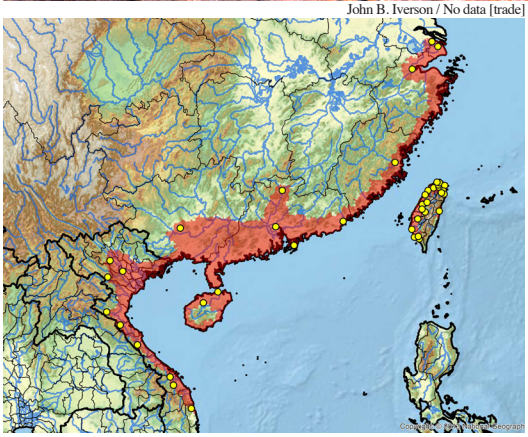
Clemmys caspica cretica Mertens 1946:115, *Mauremys caspica cretica, Mauremys rivulata cretica*
Type locality: "Rapaniana, Kreta" [Crete, Greece].

Mauremys sinensis (Gray 1834a) (07:44)

Chinese Stripe-necked Turtle



John B. Iverson / No data [trade]



China (Fujian, Guangdong, Guangxi, Hainan, Zhejiang), Taiwan, Vietnam

Introduced: South Korea, USA (Florida)

IUCN Red List: Endangered A1cd (2000); Previously: Near Threatened (1996)

TFTSG Draft Red List: Endangered (2011)

CITES: Appendix III (China)

Emys sinensis Gray 1834a:53, *Graptemys sinensis, Clemmys sinensis, Ocadia sinensis, Ocadia sinensis sinensis, Mauremys sinensis*
Type locality: "Chinâ." Restricted to "China; Canton" [Gangzhou, Guangdong] by Gray (1856b:21).

Emys bennettii Gray 1844:21, *Clemmys bennettii*
Type locality: "North America?" [in error]. Restricted to "China?" by Gray (1856b:22).

Testudo anyangensis † Ping 1930:217 [Holocene, Neolithic, subfossil, China (Henan)], *Ocadia anyangensis, Pseudocadia anyangensis, Mauremys anyangensis*
Type locality: "ancient ruins in Annyang Hsien, Honan Province" [Anyang Shi, Henan, China].

Ocadia sinensis changwui † Tao 1988:233 [Late Pleistocene, Taiwan]
Type locality: "Penghu Channel in the Taiwan Strait" [Taiwan].

Ocadia philippeni McCord and Iverson 1992:13 (07:33) (*partim*, hybrid)
Type locality: "near Kancheng [18°51'N, 108°37'E; = 48 km from Tungfang (19°03'N, 108°56'E)], western Hainan Island, China." [in error?]

Ocadia glyphistoma McCord and Iverson 1994:53 (07:33) (*partim*, hybrid)

Type locality: "near the Vietnam border southwest of Nanning, Guangxi Province, China." [in error?]

Melanochelys Gray 1869a

Melanochelys Gray 1869a:187

Type species: *Melanochelys trijuga* [= *Emys trijuga* Schweigger 1812], by original monotypy.

Geomyda (*Chaibassia*) Theobald 1876:6

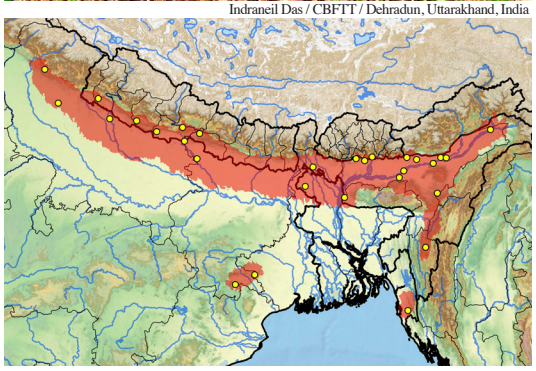
Type species: *Geomyda* (*Chaibassia*) *tricarinata* [= *Geomyda tricarinata* Blyth 1856], by original monotypy.

Melanochelys tricarinata (Blyth 1856)

Tricarinate Hill Turtle, Three-keeled Land Turtle



Indraneil Das / CBFTT / Dehradun, Uttarakhand, India



Bangladesh, Bhutan, India (Arunachal Pradesh, Assam, Bihar, Jharkhand, Uttar Pradesh, Uttarakhand, West Bengal), Nepal

CBFTT Account: Das (2009)

IUCN Red List: Vulnerable B1+2c (2000); Previously: Vulnerable (1996)

TFTSG Draft Red List: Vulnerable (2011)

CITES: Appendix I

Geomyda tricarinata Blyth 1856:714, *Geomyda (Chaibassia) tricarinata, Geoemyda tricarinata, Chaibassia tricarinata, Nicoria tricarinata, Melanochleys tricarinata*

Type locality: "Central India (Chaibása)." Restricted to "Chybassa, in the District of Singhbhum, Chota Nagpur, Bengal" [Jharkhand, India] by Anderson (1879:717).

Geoemyda carinata Blyth *in* Jerdon 1870:69 (*nomen novum*)

Chaibassia theobaldi Anderson 1879:718

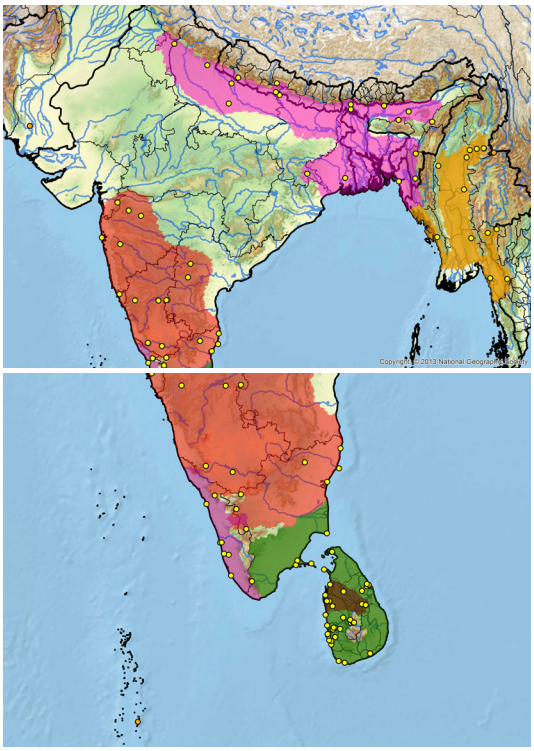
Type locality: "Bishnath Plain, near Tezpur, in Assam, close to the Brahmaputra" [Assam, India].

Nicoria tricarinata sivalensis † Lydekker 1889:100 [Late Pliocene (Pinjor) to Early Pleistocene (Tatrot), Siwaliks, India (Punjab)], *Nicoria sivalensis*

Type locality: "Siwalik Hills" [Punjab, India].

Melanochelys trijuga (Schweigger 1812)

Indian Black Turtle



(subspecies: *trijuga* = red, *coronata* = purple, *edeniana* = orange, *indopeninsularis* = pink, *parkeri* = brown, *thermalis* = green; overlap = intergrades; orange dots = introduced or trade)

Bangladesh, China (?) (Yunnan), India (Andhra Pradesh, Assam, Bihar, Gujarat, Karnataka, Kerala, Maharashtra, Meghalaya, Mizoram, Tamil Nadu, Uttar Pradesh, West Bengal), Myanmar, Nepal, Pakistan (?), Sri Lanka

Introduced: British Indian Ocean Territory (Chagos Archipelago), Maldives

CBFTT Account: Das and Bhupathy (2009b)

IUCN Red List: Near Threatened (2000); Previously: Data Deficient (1996)

TFTSG Draft Red List: Near Threatened (2011)

CITES: Appendix II

Melanochelys trijuga trijuga (Schweigger 1812)

Indian Black Turtle



S. Jayakumar / CBFTT / Anaikatti Hills, Coimbatore, Western Ghats, Tamil Nadu, India

India (Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Tamil Nadu), Pakistan (?)

Emys trijuga Schweigger 1812:310, *Clemmys (Clemmys) trijuga, Clemmys trijuga, Melanochelys trijuga, Nicoria trijuga, Geoemyda trijuga, Geoemyda trijuga trijuga, Melanochelys trijuga trijuga*

Type locality: "insula Java" [in error].

Emys belangeri Lesson 1831b:291
Type locality: "Bengale..[&]..Carnate" [India]. Restricted to "Bengal" [India] by Smith (1931:97).
Emys trijuga maderaspatana Anderson 1879:729, *Emys trijuga madraspatana*
Type locality: "Madras" [Chennai, Tamil Nadu, India].
Geoemyda trijuga plumbea Annandale 1915a:192
Type locality: "Coorg on the east side of the Western Ghats considerably east and a little south of the Madras district" [Karnataka, India].

Melanochelys trijuga coronata (Anderson 1879)
Cochin Black Turtle


S. Bhupathy / CBFTT / Kumarakom, Kerala, India

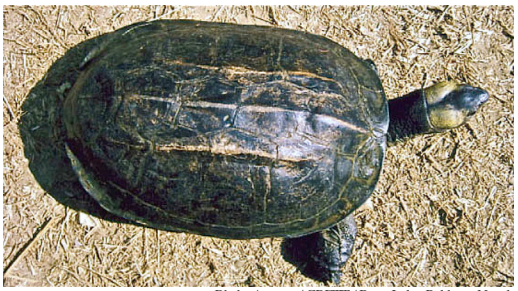
India (Kerala)
Emys trijuga coronata Anderson 1879:729, *Nicoria trijuga coronata, Geoemyda trijuga coronata, Melanochelys trijuga coronata*
Type locality: "Southern India...Travancore" [Kerala, India].

Melanochelys trijuga edeniana Theobald 1876 (07:47)
Burmese Black Turtle


Indraneil Das / CBFTT / Myanmar

China (?) (Yunnan), Myanmar
Melanochelys edeniana Theobald 1876:12, *Nicoria trijuga edeniana, Geoemyda trijuga edeniana, Melanochelys trijuga edeniana, Emys trijuga edeniana, Melanochelys edeniana edeniana*
Type locality: "Arakan, Pegu, and Tenasserim..[&]..near Tounghu" [Myanmar].
Emys trijuga burmana Anderson 1879:723
Type locality: "Bhamô..[&]..Moulmein..[&]..Khyouk-Phyoo in Arracan" [Myanmar]. Restricted to "Bhamo, Burma" [Myanmar] by Smith (1931:98).
Geoemyda trijuga wiroti Reimann *in* Nutaphand 1979:177, *Melanochelys trijuga wiroti, Melanochelys edeniana wiroti*
Type locality: "Thai-Burmese border area (Tak and Mae Hong Son Provinces)" [Thailand].

Melanochelys trijuga indopeninsularis (Annandale 1913)
Bengal Black Turtle


Bhaba Amatya / CBFTT / Rupa Lake, Pokhara, Nepal

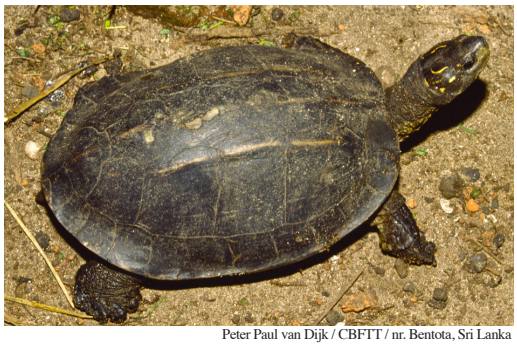
Bangladesh, India (Assam, Bihar, Jharkhand, Meghalaya, Mizoram, Uttar Pradesh, West Bengal), Nepal
Bellia sivalensis † Theobald 1877:44 (*nomen dubium*) [Late Pliocene to Early Pleistocene, Siwaliks, India (Punjab)], *Clemmys sivalensis*
Type locality: "Siwaliks in the Punjab...half a mile south of Jaba (a village 6 miles south-west from Jhand)" [Himachal Pradesh, India].
Clemmys hydaspica † Lydekker 1885:172 (*nomen dubium*) [Late Pliocene to Early Pleistocene, Siwaliks, India (Punjab)]
Type locality: "Siwaliks of the Jhelam district in the Punjab" [Uttarakhand, India].
Clemmys theobaldi † Lydekker 1885:173 (*nomen dubium*) [Late Pliocene to Early Pleistocene, Siwaliks, India (Punjab)], *Bellia theobaldi, Mauremys theobaldi*
Type locality: "Siwaliks of Jhand in the Punjab" [Himachal Pradesh, India].
Clemmys punjabiensis † Lydekker 1885:175 (*nomen dubium*) [Late Pliocene to Early Pleistocene, Siwaliks, India (Punjab)]
Type locality: "Siwaliks of the Punjab" [Punjab, India].
Geoemyda indopeninsularis Annandale 1913:71, *Geoemyda trijuga indopeninsularis, Melanochelys trijuga indopeninsularis, Melanochelys edeniana indopeninsularis*
Type locality: "Singhbhum district of Chota Nagpur..[&]..Dharwar district in...Bombay Presidency...at Devikop, 26 miles south of... Dharwar" [India]. Restricted to "Singhbhum District, Chota Nagpur" [Jharkhand, India] by Smith (1931:99).

Melanochelys trijuga parkeri Deraniyagala 1939 (54)
Parker's Black Turtle


Indraneil Das / CBFTT / Sri Lanka

Sri Lanka
Melanochelys trijuga parkeri Deraniyagala 1939:269, *Geoemyda trijuga parkeri*
Type locality: "Polonnaruva, N.-C.P., ...Ceylon" [Sri Lanka].

Melanochelys trijuga thermalis (Lesson 1830)
Sri Lanka Black Turtle


Peter Paul van Dijk / CBFTT / nr. Bentota, Sri Lanka

India (Tamil Nadu), Sri Lanka

Emys thermalis Lesson 1830:86, *Clemmys thermalis, Nicoria trijuga thermalis, Geoemyda trijuga thermalis, Melanochelys trijuga thermalis*
Type locality: "eaux thermales de Cannia, près Trinquemalé à Ceylan," [Sri Lanka].

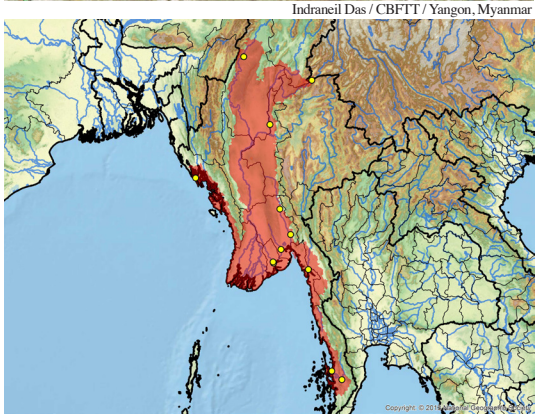
Emys sebae Gray 1831d:75, *Emys seba, Geoclemys seba, Geoclemys sebae, Melanochelys sebae, Emys trijuga sebae*
Type locality: Not designated. Restricted to "Ceylon" [Sri Lanka] by Gray (1844:19).

Morenia Gray 1870c

Morenia Gray 1870c:62
Type species: *Morenia berdmorei* [= *Emys berdmorei* Blyth 1859 = subjective synonym of *Emys ocellata* Duméril and Bibron 1835], by subsequent designation by Lindholm (1929:279).

Morenia ocellata (Duméril and Bibron 1835)
Burmese Eyed Turtle


Indraneil Das / CBFTT / Yangon, Myanmar



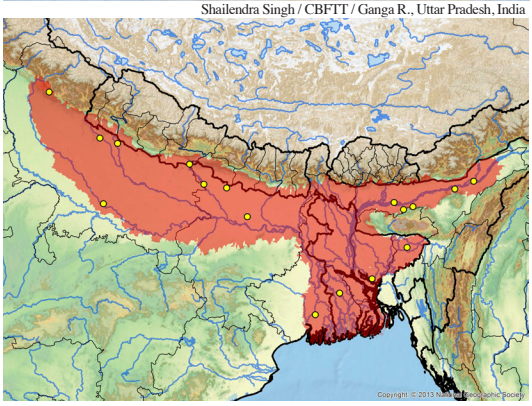
China (?) (Yunnan), Myanmar
CBFTT Account: Das (2010)
IUCN Red List: Vulnerable A1cd+2cd (2000); Previously: Near Threatened (1996)
TFTSG Draft Red List: Vulnerable (2011)
CITES: Appendix I

Emys ocellata Duméril and Bibron 1835:329, *Batagur (Kachuga) ocellata, Batagur ocellata, Clemmys ocellata, Morenia ocellata*
Type locality: "Bengale" [India or Bangladesh] [in error]. Restricted to "Irrawaddy (Ayeyarwady) river delta, Myanmar" by lectotype designation by Bour (2009:41).

Emys berdmorei Blyth 1859:281, *Emys berdmorii, Batagur berdmorii, Batagur berdmorei, Kachuga berdmorei, Kachuga berdmoorei, Kachuga (Dongoka) berdmoorei, Morenia berdmorei*
Type locality: "Arakan or Tenasserim" [Myanmar].

Morenia petersi Anderson 1879
Indian Eyed Turtle


Shailendra Singh / CBFTT / Ganga R., Uttar Pradesh, India



Bangladesh, India (Assam, Bihar, Uttarakhand, Uttar Pradesh, West Bengal), Nepal
CBFTT Account: Das and Sengupta (2010)
IUCN Red List: Vulnerable A1cd+2d (2000); Previously: Near Threatened (1996)
TFTSG Draft Red List: Vulnerable (2011)
CITES: Appendix II

Batagur (Morenia) petersi Anderson 1879:761, *Batagur petersi, Morenia petersi*
Type locality: "Huzurapur in the Jessore District..[&]..Furreedpore..[&]..Dacca" [Uttar Pradesh, India..[&]..Bangladesh].

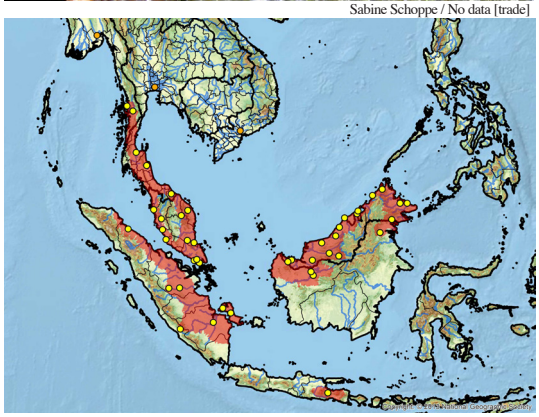
Notochelys Gray 1863e

Notochelys Gray 1863e:177 (senior homonym, not = *Notochelys* Owen 1882 [= Testudines: Protostegidae †])
Type species: *Notochelys platynota* [= *Emys platynota* Gray 1834a], by original monotypy.

Notochelys platynota (Gray 1834a)
Malayan Flat-shelled Turtle



Sabine Schoppe / No data [trade]



(orange dots = probable trade or misidentified)

Brunei, Indonesia (Java, Kalimantan, Sumatra), Malaysia (Peninsular, East), Myanmar, Singapore, Thailand
IUCN Red List: Vulnerable A1cd+2cd (2000); Previously: Data Deficient (1996)
TFTSG Draft Red List: Vulnerable (2011)
CITES: Appendix II

Emys platynota Gray 1834a:54, *Emys platynotha, Cyclemys platynota, Notochelys platynota*
Type locality: "Indiâ Orientali." Restricted to "Sumatra" [Indonesia] by Gray (1835:pl.57).

Cistudo bankanensis Bleeker *in* Gray 1864a:12
Type locality: "Banka Island" [Sumatra, Indonesia].

Cyclemys giebelii Hubrecht 1881:45
Type locality: "Borneo" [Kalimantan, Indonesia].

Orlitia Gray 1873b

Orlitia Gray 1873b:156
Type species: *Orlitia borneensis* Gray 1873b, by original monotypy.

Clemmys (*Heteroclemmys*) Peters 1875:622
Type species: *Clemmys (Heteroclemmys) gibbera* Peters 1875 [= subjective synonym of *Orlitia borneensis* Gray 1873b], by original monotypy.

Brookeia Bartlett 1896:113
Type species: *Brookeia baileyi* [= *Hardella baileyi* Bartlett 1895b = subjective synonym of *Orlitia borneensis* Gray 1873b], by original monotypy.

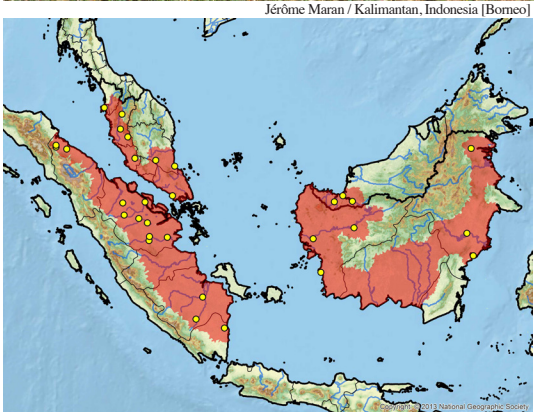
Adelochelys Baur 1896:319
Type species: *Adelochelys crassa* Baur 1896 [= subjective synonym of *Orlitia borneensis* Gray 1873b], by original monotypy.

Liemys Boulenger 1897a:468
Type species: *Liemys inornata* Boulenger 1897a [= subjective synonym of *Orlitia borneensis* Gray 1873b], by original monotypy.

Orlitia borneensis Gray 1873b [12:27]
Malaysian Giant Turtle



Jérôme Maran / Kalimantan, Indonesia [Borneo]



Indonesia (Kalimantan, Sumatra), Malaysia (Peninsular, East)
IUCN Red List: Endangered A1d+2d (2000); Previously: Near Threatened (1996)
TFTSG Draft Red List: Critically Endangered (2011)
CITES: Appendix II

Cistudo borneënsis Bleeker 1857a:473 (*nomen nudum*), *Cistudo borneensis*
Type locality: "Sintang aan de Kapoeas...Borneo" [Sintang, Kapuas River, Kalimantan, Indonesia].

Orlitia borneensis Gray 1873b:157, *Bellia borneensis*
Type locality: "Borneo" [Kalimantan, Indonesia].

Clemmys (Heteroclemmys) gibbera Peters 1875:622, *Clemmys gibbera, Heteroclemmys gibbera*
Type locality: "Pulo Matjan (Borneo)" [Kalimantan, Indonesia].

Hardella baileyi Bartlett 1895b:83, *Brookeia baileyi*
Type locality: "Batang Lupar" [Sarawak, East Malaysia].

Adelochelys crassa Baur 1896:319
Type locality: Not known.

Liemys inornata Boulenger 1897a:469
Type locality: "Lobuk Antu district, Borneo" [Sarawak, East Malaysia].

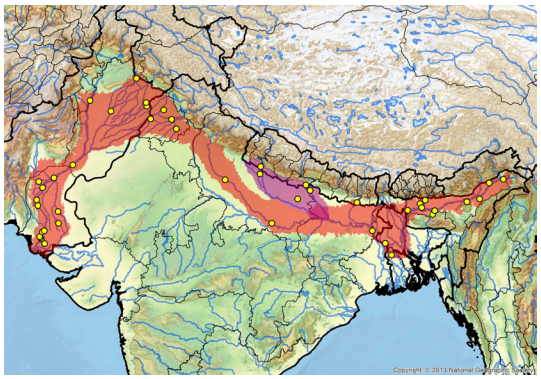
Batagur signatus † Jaekel 1911:77 [Pleistocene, *Pithecanthropus* Trinil Beds, Indonesia (Java)]
Type locality: "Pithecanthropus-schichten...Java...Trinil" [Indonesia].

Pangshura Gray 1856b (07:48)

Batagur (*Pangshura)* Gray 1856b:36
Type species: *Kachuga* (*Pangshura) tecta* [= *Emys tectum* Gray 1830b], by subsequent designation by Lindholm (1929:278).
Cuchoa Gray 1870c:61
Type species: *Cuchoa tentoria* [= *Emys tentoria* Gray 1834a], by subsequent designation by Lindholm (1929:278).
Jerdonella Gray 1870c:61
Type species: *Jerdonella sylhetensis* [= *Pangshura sylhetensis* Jerdon 1870], by original monotypy.
Emia Gray 1870c:61
Type species: *Emia smithii* [= *Batagur smithii* Gray 1863g], by original monotypy.

Pangshura smithii (Gray 1863g)

Brown Roofed Turtle



(subspecies: *smithii* = red, *pallidipes* = purple; overlap = intergrades)

Bangladesh, India (Assam, Bihar, Punjab, Uttar Pradesh), Nepal, Pakistan
IUCN Red List: Near Threatened (2000); Previously: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern *or* Near Threatened (2011)
CITES: Appendix II, as *Pangshura* spp.

Pangshura smithii smithii (Gray 1863g)

Brown Roofed Turtle



Hermann Schleich / Koshi R., Nepal

Bangladesh, India (Assam, Bihar, Punjab, Uttar Pradesh), Nepal, Pakistan
Batagur smithii Gray 1863g:253, *Pangshura smithii, Clemmys smithii, Emia smithii, Kachuga smithii, Kachuga smithii smithii, Pangshura smithii smithii*
Type locality: "North-western India: Punjab; River Chenab" [Punjab, India, or Pakistan].

Pangshura smithii pallidipes (Moll 1987)

Pale-footed Roofed Turtle



Paul Crow / India [trade]

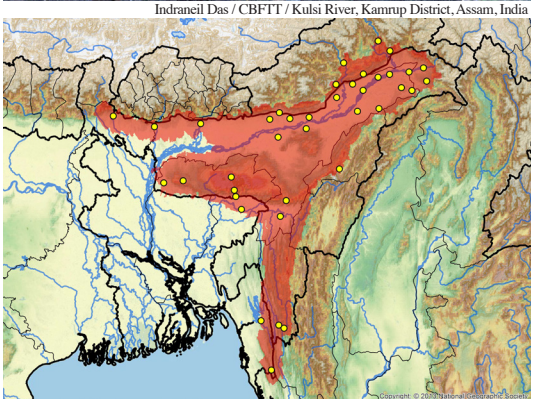
India (Bihar, Uttar Pradesh), Nepal
Kachuga smithii pallidipes Moll 1987:8, *Pangshura smithii pallidipes*
Type locality: "Gandak River, Bherihari Wildlife Sanctuary, Bettiah (West Champaran) District, Bihar" [India].

Pangshura sylhetensis Jerdon 1870

Assam Roofed Turtle, Sylhet Roofed Turtle



Indraneil Das / CBFTT / Kulsi River, Kamrup District, Assam, India

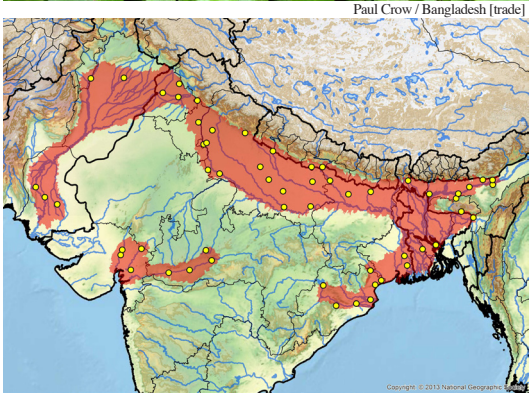


Bangladesh, Bhutan (?), India (Arunachal Pradesh, Assam, Meghalaya, Mizoram, Nagaland), Myanmar (?)
CBFTT Account: Das, Sengupta, and Praschag (2010)
IUCN Red List: Endangered B1+2c (2000); Previously: Data Deficient (1996)
TFTSG Draft Red List: Endangered (2011)
CITES: Appendix II, as *Pangshura* spp.
Pangshura sylhetensis Jerdon 1870:69, *Jerdonella sylhetensis, Kachuga sylhetensis*
Type locality: "the stream that runs from the Terria Ghat at the foot of the Khasi Hills" [India; now Bangladesh]. Emended to "Sylhet, a stream at the foot of the Khasi Hills" [originally Assam, India; now Sylhet, Bangladesh] by Boulenger (1889:58).

Pangshura tecta (Gray 1830b)
Indian Roofed Turtle



Paul Crow / Bangladesh [trade]



Bangladesh, India (Arunachal Pradesh, Assam, Bihar, Gujarat, Haryana, Madhya Pradesh, Meghalaya, Odisha, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand, West Bengal), Nepal, Pakistan
IUCN Red List: Least Concern (2000); Previously: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Near Threatened (2011)
CITES: Appendix I

Emys tectum Gray 1830b:pl.72, *Emys tecta, Clemmys (Clemmys) tecta, Clemmys tecta, Batagur (Pangshura) tecta, Batagur tecta, Clemmys tectum, Pangshura tecta, Pangshura tectum, Kachuga tectum, Kachuga (Pangshura) tecta, Kachuga tectum tectum, Kachuga tecta, Kachuga tecta tecta*
Type locality: "India."

Testudo dura Hamilton *in* Gray 1831d:23 (*nomen nudum*)
Type locality: "India."

Testudo katuya Hamilton *in* Gray 1831d:23 (*nomen nudum*)
Type locality: "India."

Testudo pangshure Hamilton *in* Gray 1831d:23 (*nomen nudum*), *Testudo pangshura*
Type locality: "India."

Testudo khagraskata Hamilton *in* Gray 1831d:23 (*nomen nudum*)
Type locality: "India."

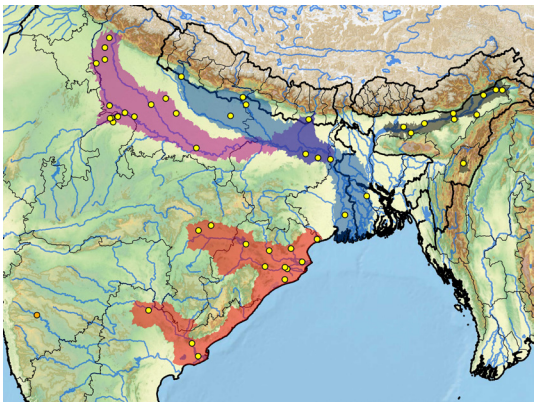
Emys trigibbosa Lesson 1831a:121
Type locality: "le Gange" [India].

Emys namadicus † Theobald 1860:295 (*nomen nudum*) [Tertiary, Nerbudda, India], *Emys nomadicus, Emys namadica*
Type locality: "near Moar Domur...Nerbudda Valley" [Madhya Pradesh, India].

Pangshura dura Gray 1869a:205
Type locality: Not designated.

Pangshura ventricosa Gray 1870c:60
Type locality: "India." Restricted to "Assam" [India] by Boulenger (1889:59).

Pangshura tentoria (Gray 1834a)
Indian Tent Turtle



(subspecies: *tentoria* = red, *circumdata* = purple, *flaviventer* = blue; unassigned *P. tentoria* sensu lato = gray; overlap = intergrades; orange dot = possibly erroneous *tentoria* restricted type locality)

Bangladesh, India (Andhra Pradesh, Assam, Bihar, Chhattisgarh, Maharashtra, Manipur, Odisha, Rajasthan, Uttar Pradesh, Uttarakhand, West Bengal), Nepal
IUCN Red List: Least Concern (2000); Previously: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2011)
CITES: Appendix II, as *Pangshura* spp.

Pangshura tentoria tentoria (Gray 1834a) (07:49)
Indian Tent Turtle



Peter Paul van Dijk / India [captivity, Madras Crocodile Bank Trust]

India (Andhra Pradesh, Chhattisgarh, Maharashtra, Odisha)

Emys tentoria Gray 1834a:54, *Batagur (Pangshura) tentoria, Batagur tentoria, Clemmys tentoria, Pangshura tentoria, Pangshura tentori, Cuchoa tentoria, Kachuga tectum tentoria, Kachuga tecta tentoria, Kachuga tentoria tentoria, Pangshura tentoria tentoria*
Type locality: "Indiae Orientalis regione Dukhun" [India]. Emended to "Deccan" [India] by Boulenger (1889:59); and restricted to "Dhond, Poona Dist." [Daund, Pune Dist., Maharashtra, India; in error?] by Smith (1931:128).

Pangshura tentorium Gray 1869a:205 (*nomen novum*)

Emys (Pangshura) tectum intermedia Blanford 1870:339, *Kachuga intermedia, Kachuga tectum intermedia*
Type locality: "Chappa and Korba in Biláspúr, on the Hasdo River, a tributary of the upper Mahanaddi...above Sambhalpúr" [Chhattisgarh, India].

Pangshura leithii Gray 1870c:60
Type locality: "River Poonah" [Maharashtra, India; in error, trade?].

Pangshura tentoria circumdata (Mertens 1969)
Pink-ringed Tent Turtle


Nikhil Whitaker / Uttar Pradesh, India

India (Bihar, Rajasthan, Uttar Pradesh, Uttarakhand), Nepal
Kachuga tecta circumdata Mertens 1969a:24, *Kachuga tentoria circumdata, Pangshura tentoria circumdata*
Type locality: "Meerut, Indien" [Uttar Pradesh, India].

Pangshura tentoria flaviventer Günther 1864 (07:49)
Yellow-bellied Tent Turtle


Hermann Schleich / Koshi R., Nepal

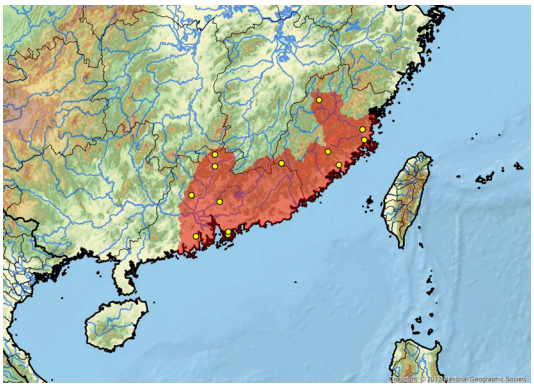
Bangladesh, India (Bihar, Uttar Pradesh, West Bengal), Nepal
Pangshura flaviventer Günther 1864:35, *Kachuga tecta flaviventer, Pangshura flaviventus, Kachuga tentoria flaviventer, Pangshura tentoria flaviventer*
Type locality: "Bengal" [India]. Emended to "India" by Boulenger (1889:59).
Cuchoa flaviventris Gray 1870c:61 (*nomen novum*)

Sacalia Gray 1870c

Sacalia Gray 1870c:35
Type species: *Sacalia bealii* [= *Emys bealii* Gray 1834a = *Cistuda bealei* Gray 1831d], by original monotypy.

Sacalia bealei (Gray 1831d)
Beale's Eyed Turtle

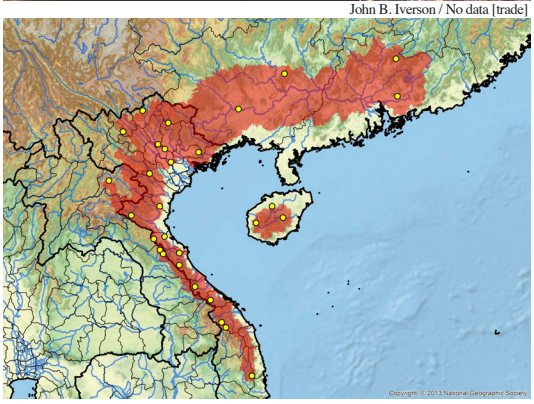

John B. Iverson / No data [trade]



China (Fujian, Guangdong, Hong Kong, Hunan, Jiangxi)
IUCN Red List: Endangered A1d+2d (2000); Previously: Vulnerable (1996)
TFTSG Draft Red List: Critically Endangered (2011)
CITES: Appendix II
Cistuda bealei Gray 1831d:71, *Emys (Pyxidemys) bealei, Emys bealei, Clemmys bealei, Cistudo bealei, Sacalia bealei, Mauremys bealei, Sacalia bealei bealei*
Type locality: "China."
Emys bealii Gray 1834a:54 (*nomen novum*), *Clemmys bealii, Sacalia bealii, Cistudo bealii, Clemmys bealii bealii*

Sacalia quadriocellata (Siebenrock 1903a) (08:24)
Four-eyed Turtle


John B. Iverson / No data [trade]



China (Guangdong, Guangxi, Hainan), Laos, Vietnam
IUCN Red List: Endangered A1d+2d (2000); Previously: Vulnerable (1996)
TFTSG Draft Red List: Endangered (2011)
CITES: Appendix II
Clemmys bealii quadriocellata Siebenrock 1903a:336 (senior homonym, not = *Clemmys bealii quadriocellata* Li 1958), *Clemmys quadriocellata, Clemmys quadriocellata, Clemmys bealei quadriocellata, Sacalia quadriocellata, Sacalia bealei quadriocellata, Sacalia quadriocellata*

quadriocellata
Type locality: "Annam" [Vietnam]. Restricted to "Annam, Phuc-Son" [Vietnam] by Siebenrock (1909a:482).

Clemmys bealii quadriocellata Li 1958:235 (junior homonym, not = *Clemmys bealii quadriocellata* Siebenrock 1903a)
Type locality: "small stream of Dali village of Mt. Diaoluo, Lingshui Co., Hainan Island, China" [in Chinese].

Clemmys beali insulensis Adler 1962:135 (*nomen novum*) (08:24)

Sacalia pseudocellata Iverson and McCord 1992a:426 (07:33) (*partim*, hybrid)
Type locality: "between Tungfang [19°03'N, 108°56'E] and Kancheng [18°51'N, 108°37'E; ca. 48 km from Tungfang], western Hainan Island, China." [in error?]

Sacalia quadriocellata insularis Artner 2003:xviii (*nomen novum*)

Siebenrockiella Lindholm 1929

Bellia Gray 1869a:197 (junior homonym, not = *Bellia* Milne-Edwards 1848 [= Crustacea] or *Bellia* Bate 1851 [= Crustacea] or *Bellia* Tutt 1902 [= Lepidoptera])
Type species: *Bellia crassicollis* [= *Emys crassicollis* Gray 1830e], by original monotypy.

Siebenrockiella Lindholm 1929:280 (*nomen novum*)
Type species: *Siebenrockiella crassicollis* [= *Emys crassicollis* Gray 1830e], by original designation.

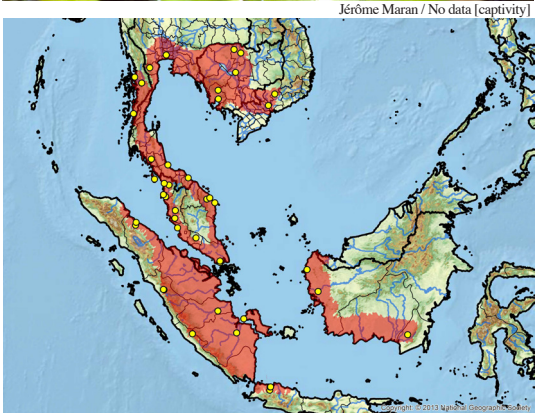
Siebenrockiella (*Panyaenemys*) Diesmos, Parham, Stuart, and Brown 2005:38
Type species: *Siebenrockiella (Panyaenemys) leytensis* [= *Heosemys leytensis* Taylor 1920], by original designation.

Siebenrockiella crassicollis (Gray 1830e) (10:7)

Black Marsh Turtle



Jérôme Maran / No data [captivity]



Cambodia, Indonesia (Java, Kalimantan, Sumatra), Laos, Malaysia (Peninsular, East [?]), Myanmar, Singapore, Thailand, Vietnam

IUCN Red List: Vulnerable A1cd+2cd (2000); Previously: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Endangered (2011)
CITES: Appendix II

Emys crassicollis Gray 1830e:8 (10:7), *Clemmys (Clemmys) crassicollis, Clemmys crassicollis, Bellia crassicollis, Orlitia crassicollis, Siebenrockiella crassicollis*
Type locality: "Sumatra" [Indonesia].

Emys nigra Blyth 1856:713 (junior homonym, not = *Emys nigra* Hallowell 1854 = *Emys* or *Actinemys marmorata*)
Type locality: "valley of the Tenasserim" [Myanmar].

Emys crassilabris Gray *in* Theobald 1876:10 (*nomen novum*), *Bellia crassilabris*

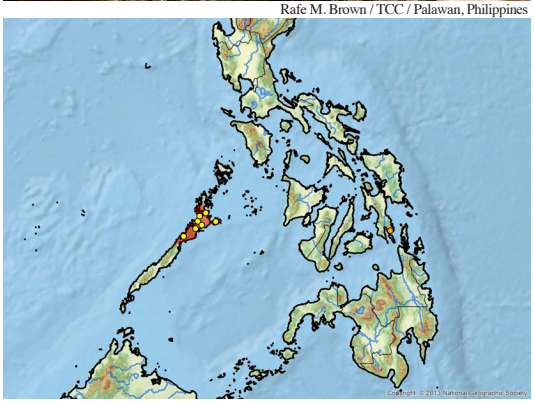
Pangshura cochinchinensis Tirant 1884:159, *Kachuga cochinchinensis*
Type locality: "Cochinchine" [Vietnam].

Siebenrockiella leytensis (Taylor 1920) (07:50)

Palawan Forest Turtle, Philippine Forest Turtle



Rafe M. Brown / TCC / Palawan, Philippines



(orange dot = erroneous type locality)

Philippines (Palawan [not Leyte])
CBFTT Account: Diesmos, Buskirk, Schoppe, Diesmos, Sy, and Brown (2012)
IUCN Red List: Critically Endangered A2d, B1+2c (2000); Previously: Endangered (1996)
TFTSG Draft Red List: Critically Endangered (2015)
CITES: Appendix II

Heosemys leytensis Taylor 1920:131, *Geoemyda leytensis, Siebenrockiella leytensis, Siebenrockiella (Panyaenemys) leytensis*
Type locality: "Cabalian, southern Leyte, P. I." [Philippines] [in error]. Restricted to "northern Palawan in the Province of Palawan, Philippines" by Diesmos et al. (2012:3).

Vijayachelys Praschag, Schmidt, Fritzsch, Müller, Gemel, and Fritz 2006 (07:51)

Vijayachelys Praschag, Schmidt, Fritzsch, Müller, Gemel, and Fritz 2006:156

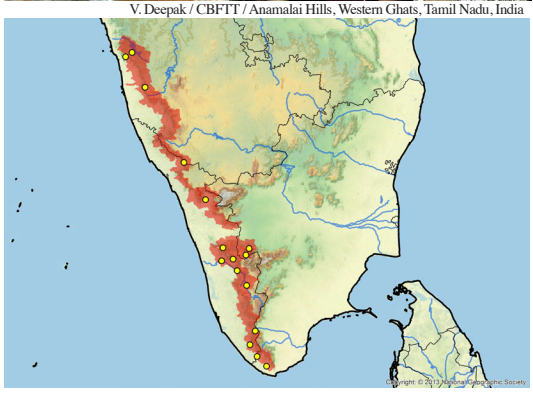
Type species: *Vijayachelys silvatica* [= *Geoemyda silvatica* Henderson 1912], by original designation.

Vijayachelys silvatica (Henderson 1912)

Cochin Forest Cane Turtle



V. Deepak / CBFTT / Anamalai Hills, Western Ghats, Tamil Nadu, India



India (Karnataka, Kerala, Tamil Nadu)

CBFTT Account: Deepak, Praschag, and Vasudevan (2014)

IUCN Red List: Endangered B1+2c (2000); Previously: Endangered (1996)

TFTSG Draft Red List: Endangered (2011)

CITES: Appendix II

Geoemyda silvatica Henderson 1912:217, *Heosemys silvatica, Vijayachelys silvatica*

Type locality: "South India...near Kavalai in the Cochin State Forests...an elevation of about 1500 feet" [Kerala, India].

RHINOCLEMMYDINAE Gray 1873j (12:21)

Rhinoclemmyina Gray 1873j:27

Rhinoclemminae Le and McCord 2008:763

Rhinoclemmydinae Turtle Taxonomy Working Group 2012:274

Rhinoclemmys Fitzinger 1835 (09:20, 12:21, 14:31)

Chemelys Rafinesque 1815:75 (*nomen nudum*)

Chemelys Rafinesque 1832:64 (*nomen suppressum*, ICZN 1985a)

Type species: *Chemelys verrucosa* [= *Testudo verrucosa* Suckow 1798 = subjective synonym of *Testudo punctularia* Daudin 1801], by original monotypy.

Clemmys (*Rhinoclemmys*) Fitzinger 1835:115 (*nomen conservandum*, ICZN 1985a)

Type species: *Geoemyda (Rhinoclemmys) dorsata* [= *Testudo dorsata* Schoepff 1801 = subjective synonym of *Testudo punctularia* Daudin 1801], by subsequent designation as *Emys dorsata* sensu Schweigger 1812 by Lindholm (1929:283).

Rhinoclemys Gray 1863c:182 (*nomen novum*)

Rhinoclemys (*Callopsis*) Gray 1863c:183

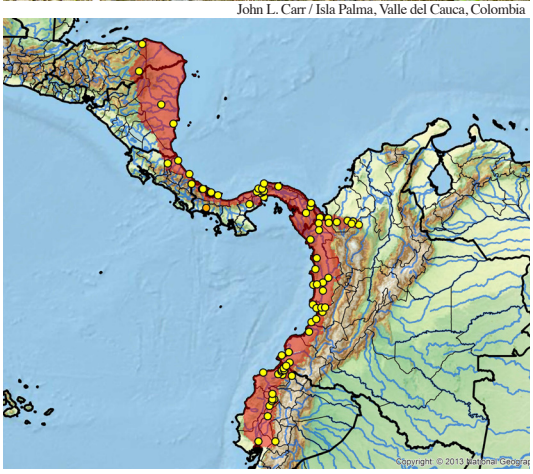
Type species: *Rhinoclemys* (*Callopsis*) *annulata* [= *Geoclemmys annulata* Gray 1860b], by original monotypy.

Rhinoclemmys annulata (Gray 1860b)

Brown Wood Turtle



John L. Carr / Isla Palma, Valle del Cauca, Colombia



(orange dot = possible trade)

Colombia (Antioquia, Cauca, Chocó, Córdoba, Nariño, Valle del Cauca), Costa Rica, Ecuador, Honduras, Nicaragua, Panama

IUCN Red List: Near Threatened (1996)

TFTSG Draft Red List: Data Deficient (South America regional) (2011)

Geoclemmys annulata Gray 1860b:231, *Clemmys annulata, Rhinoclemys annulata, Rhinoclemys (Callopsis) annulata, Chelopus annulatus, Rhinoclemmys annulata, Nicoria annulata, Geoemyda annulata, Callopsis annulata*

Type locality: "Esmeraldas, ...western coast of Ecuador."

Chelopus gabbii Cope 1876:153, *Emys gabbii, Nicoria gabbii, Geoemyda gabbii, Rhinoclemmys gabbii*

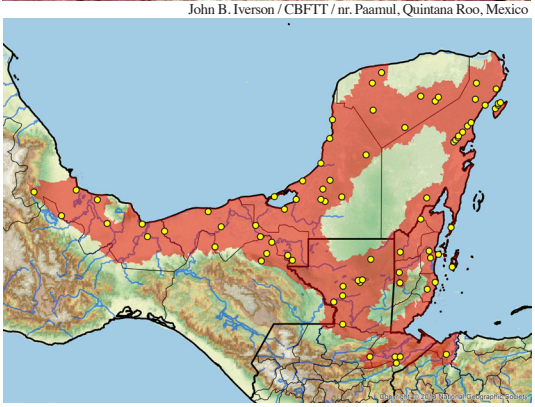
Type locality: "Costa Rica." Restricted to "Sipurio, Costa Rica" by Dunn (1930:32).

Testudo mercatoria Vaillant 1911:47 (*nomen nudum*)

Type locality: "Amérique centrale."

Rhinoclemmys areolata (Duméril and Bibron *in* Duméril and Duméril 1851)
Furrowed Wood Turtle

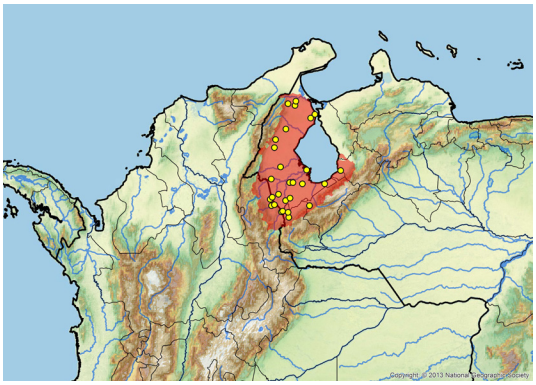

John B. Iverson / CBFTT / nr. Paamul, Quintana Roo, Mexico



Belize, Guatemala, Honduras, Mexico (Campeche, Chiapas, Quintana Roo, Tabasco, Veracruz, Yucatán)
CBFTT Account: Vogt, Platt, and Rainwater (2009)
IUCN Red List: Near Threatened (2007); Previously: Least Concern [Not Listed] (1996)
Emys areolata Duméril and Bibron *in* Duméril and Duméril 1851:10, *Malaclemmys concentrica areolata, Clemmys areolata, Malaclemys concentrica areolata, Chelopus areolatus, Nicoria punctularia areolata, Geoemyda punctularia areolata, Geoemyda areolata, Rhinoclemmys areolata, Callopsis areolata*
Type locality: "Province du Petén (Amér. centr.)." Restricted to "La Libertad, El Petén, Guatemala" by Smith and Taylor (1950a:318; 1950b:30); and to "Flores...El Petén, La Libertad...Guatemala" by Dunn and Stuart (1951:60).

Rhinoclemmys diademata (Mertens 1954)
Maracaibo Wood Turtle

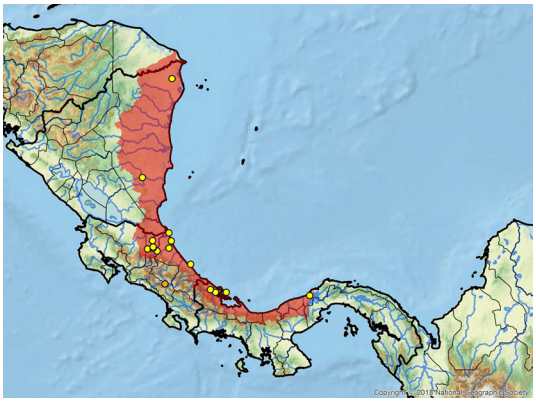

Carlos A. Galvis-Rizo / Colombia [captivity]



Colombia (Norte de Santander), Venezuela (Mérida, Táchira, Trujillo, Zulia)
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Vulnerable (2011)
Geoemyda punctularia diademata Mertens 1954:4, *Callopsis punctularia diademata, Rhinoclemmys punctularia diademata, Rhinoclemmys diademata*
Type locality: "Maracay, Venezuela." Considered in error by Pritchard (1979:182); and considered in error for "Maracaibo" [Venezuela] by Pritchard and Trebbau (1984:172).

Rhinoclemmys funerea (Cope 1876)
Black Wood Turtle


Manuel Merchán Fornelino / Costa Rica

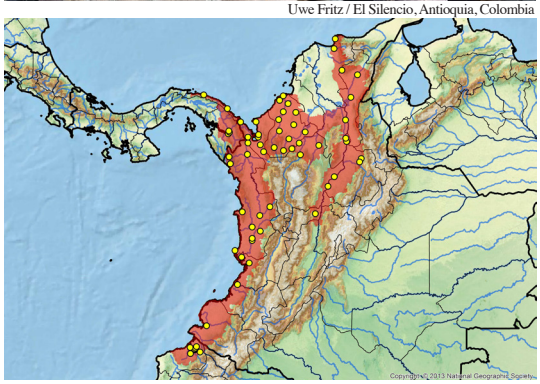


(orange dot = possible trade)
Costa Rica, Honduras, Nicaragua, Panama
IUCN Red List: Near Threatened (1996)
Chelopus funereus Cope 1876:154, *Emys funerea, Geoemyda funerea, Geoemyda punctularia funerea, Rhinoclemmys funerea, Callopsis funerea*
Type locality: "Costa Rica...Limon."
Geoemyda costaricensis Kanberg 1930:162
Type locality: "Costa Rica."

Rhinoclemmys melanosterna (Gray 1861b) (14:31)
Colombian Wood Turtle



Uwe Fritz / El Silencio, Antioquia, Colombia

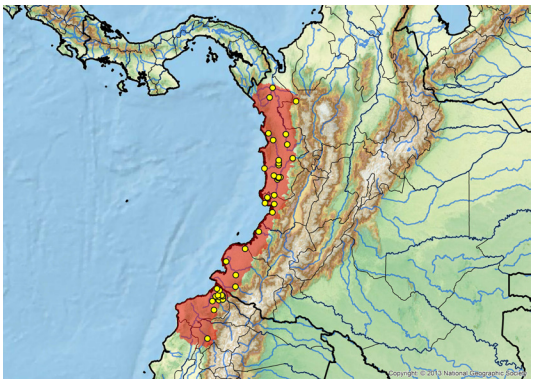


Colombia (Antioquia, Atlántico, Bolívar, Boyacá, Caldas, Cauca, Cesar, Chocó, Córdoba, Cundinamarca, La Guajira, Magdalena, Nariño, Santander, Sucre, Valle del Cauca), Ecuador, Panama
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2011)
Geoclemmys melanosterna Gray 1861b:205, *Clemmys melanosterna, Rhinoclemmys melanosterna, Rhinoclemys melanosterna, Nicoria punctularia melanosternum, Geoemyda punctularia melanosternum, Geoemyda punctularia melanosterna, Callopsis punctularia melanosterna, Rhinoclemmys punctularia melanosterna*
Type locality: "Gulf of Darien: Cherunha" [Colombia]. Restricted to "River Buonaventura..[and]..Chirambira, Gulf of Darien" [Colombia] by Boulenger (1889:124); to "Chirambira bei Buenaventura, Columbien" [Colombia] by Mertens and Wermuth (1955: 352), and to "Punta Chirambira en el Delta del Río San Juan...al norte de Buenaventura en la Costa del Pacífico, Chocó" [Colombia] by Medem (1958:21).

Rhinoclemmys nasuta (Boulenger 1902a)
Large-nosed Wood Turtle

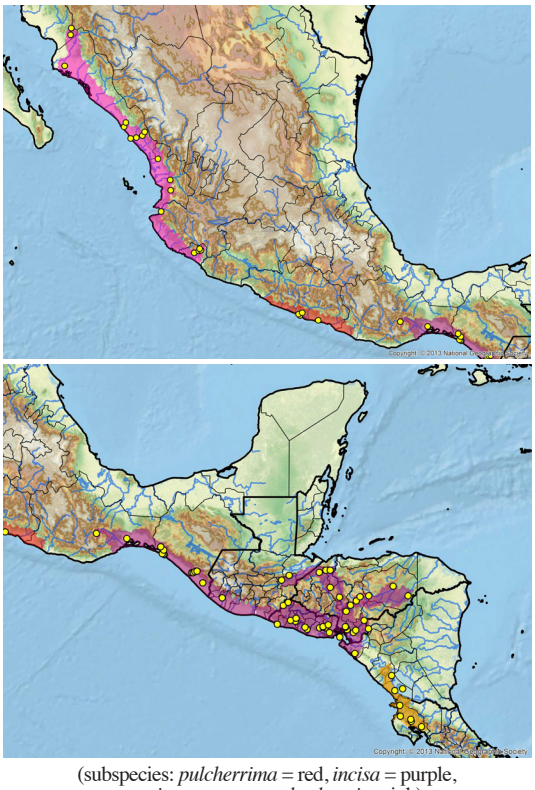


José Vicente Rueda-Almonacid / CBFTT / Isla Palma, Valle del Cauca, Colombia



Colombia (Cauca, Chocó, Nariño, Valle del Cauca), Ecuador
CBFTT Account: Carr and Giraldo (2009)
IUCN Red List: Near Threatened (1996)
TFTSG Draft Red List: Near Threatened (2011)
Nicoria nasuta Boulenger 1902a:53, *Geoemyda nasuta, Geoemyda punctularia nasuta, Callopsis punctularia nasuta, Rhinoclemmys punctularia nasuta, Callopsis nasuta, Rhinoclemmys nasuta*
Type locality: "North-western Ecuador...Bulún, 160 feet, and from the Rio Durango, 350 feet." Emended to "San Francisco de Pulún, Río Bogota" [Colombia] by Carr and Almendariz (1990:92).

Rhinoclemmys pulcherrima (Gray 1856b)
Painted Wood Turtle



(subspecies: *pulcherrima* = red, *incisa* = purple, *manni* = orange, *rogerbarbouri* = pink)
Costa Rica, El Salvador, Guatemala, Honduras, Mexico (Chiapas, Colima, Guerrero, Jalisco, Nayarit, Oaxaca, Sinaloa, Sonora), Nicaragua
IUCN Red List: Least Concern [Not Listed] (1996)

Rhinoclemmys pulcherrima pulcherrima (Gray 1856b)
Guerrero Wood Turtle



John L. Carr / Mexico [captivity]

Mexico (Guerrero, Oaxaca)

Emys pulcherrimus Gray 1856b:25, *Clemmys pulcherrima, Callichelys pulcherrima, Emys pulcherrima, Rhinoclemmys pulcherrima, Chelopus pulcherrima, Pseudemys pulcherrima, Chelopus pulcherrimus, Nicoria punctularia pulcherrima, Geoemyda punctularia pulcherrima, Geoemyda pulcherrima pulcherrima, Rhinoclemmys pulcherrima pulcherrima, Callopsis pulcherrima pulcherrima*
Type locality: "Mexico." Restricted to "Presidio de Mazatlán, Sinaloa, Mexico" by Smith and Taylor (1950a:343, 1950b:30); and to "vicinity of San Marcos, Guerrero, Mexico" by Ernst (1978:125).

Rhinoclemmys pulcherrima incisa (Bocourt 1868)
Incised Wood Turtle



John B. Iverson / Honduras

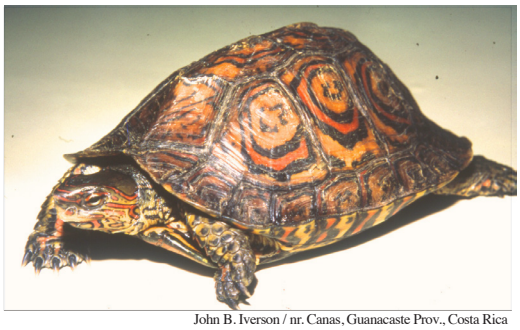
El Salvador, Guatemala, Honduras, Nicaragua, Mexico (Chiapas, Oaxaca)

Emys incisa Bocourt 1868:121, *Chelopus incisa, Chelopus incisus, Glyptemys incisa, Nicoria punctularia incisa, Clemmys incisa, Chrysemys incisa, Geoemyda punctularia incisa, Rhinoclemmys incisa, Geoemyda pulcherrima incisa, Rhinoclemmys pulcherrima incisa, Callopsis pulcherrima incisa*
Type locality: "l'Union, un des ports du Salvador" [El Salvador]. Restricted to "la Union, un des ports du Salvador sur le Pacifique; elle a été trouvée sur la montagne de Conchavoua" [El Salvador] by Duméril and Bocourt (1870:12).

Rhinoclemmys frontalis Gray 1873a:144
Type locality: "Tropical America."

Rhinoclemmys bocourti Gray 1873f:111
Type locality: "Central America."

Rhinoclemmys pulcherrima manni (Dunn 1930)
Central American Wood Turtle



John B. Iverson / nr. Canas, Guanacaste Prov., Costa Rica

Costa Rica, Nicaragua

Geoemyda manni Dunn 1930:33, *Geoemyda pulcherrima manni, Geoemyda punctularia manni, Callopsis pulcherrima manni, Rhinoclemmys pulcherrima manni*
Type locality: "San Jose, Costa Rica."

Rhinoclemmys pulcherrima rogerbarbouri (Ernst 1978)
Western Mexican Wood Turtle

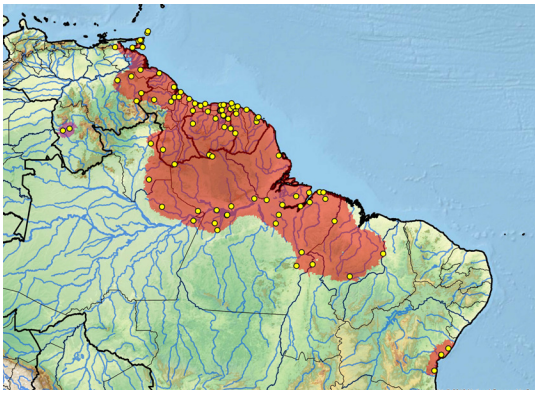


John B. Iverson / nr. Colima, Colima, Mexico

Mexico (Colima, Jalisco, Nayarit, Sinaloa, Sonora)

Callopsis pulcherrima rogerbarbouri Ernst 1978:127, *Rhinoclemmys pulcherrima rogerbarbouri*
Type locality: "Guirocoba, Sonora, Mexico."

Rhinoclemmys punctularia (Daudin 1801) (08:12, 09:28)
Spot-legged Turtle



(subspecies: *punctularia* = red, *flammigera* = purple)

Brazil (Amapá, Amazonas, Bahia, Maranhão, Pará, Piauí, Roraima, Tocantins), French Guiana, Guyana, Suriname, Trinidad and Tobago, Venezuela (Amazonas, Bolívar, Delta Amacuro, Monagas)
Introduced: Brazil (Rio de Janeiro)
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2011)

Rhinoclemmys punctularia punctularia (Daudin 1801) (08:12, 09:28)
Eastern Spot-legged Turtle



Jérôme Maran / French Guiana

Brazil (Amapá, Amazonas, Maranhão, Pará, Piauí, Roraima, Tocantins), French Guiana, Guyana, Suriname, Trinidad and Tobago, Venezuela (Bolívar, Delta Amacuro, Monagas)
Introduced: Brazil (Rio de Janeiro)

Testudo scabra Linnaeus 1758:198 (*nomen oblitum* and senior homonym, not = *Testudo scabra* Retzius *in* Schoepff 1792 = *Pelomedusa galeata* or *Testudo scabra* Latreille *in* Sonnini and Latreille 1801 = *Lissemys punctata punctata*) (08:12), *Emys scabra, Rhinoclemmys scabra , Rhinoclemys scabra*
Type locality: "Indiis" [West Indies]. Restricted to "India orientali, Carolina" [in error] by Linnaeus (1766:351); and to "Cayenne, French Guiana" by Rhodin and Carr (2009:11).

Testudo verrucosa Walbaum 1782:116 (*unavailable name*)
Type locality: Not designated.

Testudo verrucosa Suckow 1798:40 (junior homonym, not = *Testudo (ferox) verrucosa* Schoepff 1795 = *Apalone ferox*), *Chemelys verrucosa*
Type locality: Not known.

Testudo punctularia Daudin 1801:249["349"] (*nomen conservandum*, ICZN 1963), *Emys punctularia, Chersine punctularia, Clemmys (Clemmys) punctularia, Clemmys punctularia, Chelopus punctularius, Nicoria punctularia, Geoemyda punctularia, Geoemyda punctularia punctularia, Rhinoclemmys punctularia, Rhinoclemmys punctularia punctularia, Callopsis punctularia punctularia*
Type locality: "Amérique méridionale...sur-tout...la Guiane..[&].. Cayenne" [French Guiana].

Testudo dorsata Schoepff 1801:136 (*nomen suppressum*, ICZN 1963), *Emys dorsata, Clemmys dorsata*
Type locality: Not known.

Testudo alacacca Stedman *in* Schweigger 1812:429 (*nomen nudum)*
Type locality: "Surinam."

Emys dorsualis Spix 1824:11, *Emys dorsalis*
Type locality: "juxta flumen Solimoens" [Amazonas, Brazil].

Rhinoclemys bellii Gray 1863c:183, *Rhinoclemmys bellii, Rhinoclemmys scabra bellii*
Type locality: "Tropical America."

Geoclemys callocephalus Gray 1863h:254, *Clemmys callocephala, Geoclemmys callocephala, Geoclemmys callocephalus, Rhinoclemmys callocephala, Rhinoclemys callocephala*
Type locality: Not known. Restricted to "S. America" by Boulenger (1889:124).

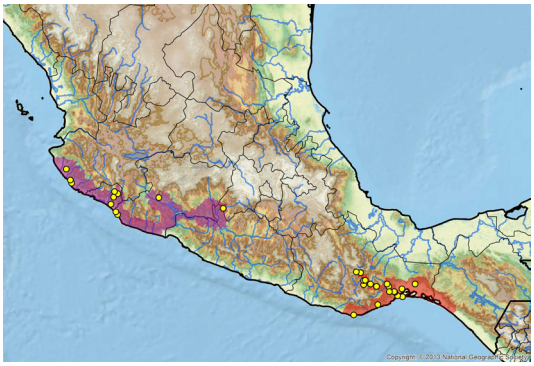
Rhinoclemmys lunata Gray 1873a:144, *Geoemyda punctularia lunata, Callopsis punctularia lunata, Rhinoclemys lunata, Rhinoclemmys punctularia lunata*
Type locality: Not designated. Restricted to "Dutch Guiana" [Suriname] by Boulenger (1889:124).

Rhinoclemmys ventricosa Gray 1873a:145, *Rhinoclemys ventricosa*
Type locality: "Tropical America." Restricted to "Dutch Guiana" [Suriname] by Boulenger (1889:124).

Rhinoclemmys punctularia flammigera Paolillo 1985 (08:25, 09:28)
Upper Orinoco Spot-legged Turtle
Venezuela (Amazonas)

Rhinoclemmys punctularia flammigera Paolillo 1985:294, *Rhinoclemmys flammigera*
Type locality: "Caño Maica, 10 km SE of Carmelitas, Territorio Federal Amazonas, Venezuela (4º4' N, 66º31' W)."

Rhinoclemmys rubida (Cope 1870a)
Mexican Spotted Wood Turtle



(subspecies: *rubida* = red, *perixantha* = purple)

Mexico (Chiapas, Colima, Guerrero, Jalisco, Michoacán, Oaxaca)
IUCN Red List: Near Threatened (2007); Previously: Vulnerable (1996)

Rhinoclemmys rubida rubida (Cope 1870a)
Oaxaca Wood Turtle



Michael Redmer / Mexico [captivity]

Mexico (Chiapas, Oaxaca)

Chelopus rubidus Cope 1870a:148, *Geoclemmys rubida, Emys rubida, Nicoria rubida, Clemmys rubida, Geoemyda rubida, Geoemyda rubida rubida, Rhinoclemmys rubida, Rhinoclemmys rubida rubida, Callopsis rubida, Callopsis rubida rubida, Chelopus rubidus rubidus*
Type locality: "Tuchitan Tehuantepec, Mexico" [Juchitán, Oaxaca].

Rhinoclemmys mexicana Gray 1870b:659, *Chelopus mexicana, Chelopus mexicanus, Emys mexicana*
Type locality: "Mexico; San Juan del Rio" [Oaxaca].

Rhinoclemmys rubida perixantha (Mosimann and Rabb 1953)
Colima Wood Turtle



John B. Iverson / nr. Colima, Colima, Mexico

Mexico (Colima, Guerrero, Jalisco, Michoacán)

Geoemyda rubida perixantha Mosimann and Rabb 1953:1, *Rhinoclemmys rubida perixantha, Callopsis rubida perixantha, Chelopus rubidus perixanthus*

Type locality: "8 kilometers south of Tecoman, Colima, Mexico."

TESTUDINIDAE Batsch 1788

Testudines Batsch 1788:437
Testudia Rafinesque 1814:66
Tortudines Schmid 1819:10
Testudinidae Gray 1825:210
Tylopodae Wagler 1828:861
Dysmydae Ritgen 1828:270
Tylopodes Burmeister 1837:732
Baenodactyli Mayer 1849:198
Testudinina Agassiz 1857a:356
Testudinidi Portis 1890:12

Aldabrachelys Loveridge and Williams 1957 (07:52, 07:53, 08:13, 09:29, 09:30, 12:28, 14:32) (**55**)

Testudo (*Megalochelys*) Fitzinger 1843:29 (junior homonym, not = *Megalochelys* Falconer and Cautley 1837 [= Testudinidae †])

Type species: *Testudo (Megalochelys) gigantea* [= *Testudo gigantea* Schweigger 1812], by original designation.

Geochelone (*Aldabrachelys*) Loveridge and Williams 1957:225

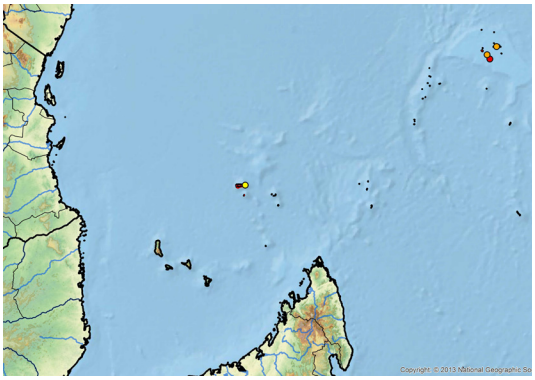
Type species: *Geochelone* (*Aldabrachelys) gigantea* [= *Testudo gigantea* Schweigger 1812], by original designation.

Dipsochelys Bour 1982a:117

Type species: *Dipsochelys elephantina* [= *Testudo elephantina* Duméril and Bibron 1835 = subjective synonym of *Testudo gigantea* Schweigger 1812], by original designation.

Aldabrachelys gigantea (Schweigger 1812) (07:54, 07:55, 08:13, 09:29, 09:30, 11:10, 12:28, 14:32) (**56**)

Aldabra Giant Tortoise



(subspecies: *gigantea* = yellow dot, *daudinii* = red dot, *arnoldi* and *hololissa* = orange dots [probable])

Seychelles (Aldabra, Granitic Islands)
IUCN Red List: Vulnerable D2 (1996)
CITES: Appendix II, as Testudinidae spp.

Aldabrachelys gigantea gigantea (Schweigger 1812) (07:54, 08:13, 09:29, 09:30, 11:10) (**57**)

Aldabra Giant Tortoise



Bernard Devaux / Aldabra, Seychelles

Seychelles (Aldabra)
Introduced: Mauritius (Aigrettes, Rodrigues, Round), Seychelles (Assomption, Alphonse, Astove, Cerf, Cosmolédo, Cousin, Cousine, Curieuse, D'Arros, Desroches, Farquhar, Frégate, Grande Soeur, Moyenne, North, Rémire, Silhouette), Tanzania (Zanzibar [Changuu])

Testudo gigantea Schweigger 1812:327 (08:13, 09:29, 14:32) (partim, misidentified type) (*nomen conservandum*, ICZN 2013b), *Geochelone (Chelonoidis) gigantea, Geochelone gigantea, Testudo gigantea gigantea, Geochelone gigantea gigantea, Aldabrachelys gigantea, Megalochelys gigantea, Megalochelys gigantea gigantea, Dipsochelys gigantea, Aldabrachelys gigantea gigantea, Dipsochelys giganteus*

Type locality: "Brasilia" [Brazil]. Restricted to "Dune Patates, South Island, Aldabra Atoll, Republic of Seychelles" by neotype designation by Frazier (2006:278).

Testudo dussumieri Schlegel *in* Gray 1830e:3 (*nomen nudum*)

Testudo dussumieri Gray 1831d:9 (09:29, 14:32) (*nomen suppressum*, ICZN 2013b), *Dipsochelys dussumieri, Geochelone dussumieri, Aldabrachelys dussumieri, Dipsochelys dussumieri dussumieri*

Type locality: "Insula Mauritiana, Insula Aldebra" [Mauritius and Aldabra, Seychelles]. Restricted to "Aldabra (N.W. of Madagascar)" by Hubrecht (1881:44); and to "Insula Aldebra" [Aldabra, Seychelles] by Bour (1985:291).

Testudo elephantina Duméril and Bibron 1835:110, *Testudo*

gigantea elephantina, Geochelone elephantina, Geochelone gigantea elephantina, Dipsochelys elephantina, Aldabrachelys elephantina, Dipsochelys elephantina elephantina
Type locality: "la plupart des îles qui sont situées dans le Canal de Mosambique, telle que Anjouan, Aldebra, les Comores, d'où on l'apporte fréquemment à Bourbon et à Maurice." Restricted to "Aldabra" [Seychelles] by Boulenger (1889:168); to "North Aldabra" by Rothschild (1915:418); and to "Ile Malabar, Aldabra Atoll, Republic of Seychelles" by Bour (1985:291).

Testudo ponderosa Günther 1877:35, *Aldabrachelys ponderosa*
Type locality: Not known. Restricted to "Aldabra" [Seychelles] by Bour (1985:292).

Testudo sumeirei Sauzier 1892:398, *Geochelone sumeirei, Dipsochelys sumeirei, Megalochelys sumeirei, Dipsochelys elephantina sumeirei, Aldabrachelys sumeirei, Dipsochelys dussumieri sumeirei*
Type locality: "probable...de Maurice..[&]..la Réunion..[&]..des Séchelles." Restricted to "Seychelles" by Rothschild (1899:360); to "Seychelles Islands?" by Auffenberg (1974:144), and to "central Seychelles" by Bour (1985:292).

Testudo goufféi Rothschild 1906:753, *Testudo gouffei, Geochelone gouffei, Geochelone (Aldabrachelys) gouffei, Geochelone (Aldabrachelys) gigantea gouffei, Geochelone gigantea gouffei, Megalochelys gouffei, Aldabrachelys gouffei*
Type locality: "Therese Island, St. Anne's Channel, Seychelles Islands." Emended to "more likely...from Juan de Novo or Farquhar Island" [Seychelles] by Rothschild (1915:427).

Aldabrachelys gigantea arnoldi (Bour 1982a) (07:54, 09:30, 11:10)
Arnold's Giant Tortoise


John Pemberton / CBFTT / Seychelles

Seychelles (Mahé?, North? [all extirpated])
Introduced: Seychelles (North, Cousine, Frégate, Silhouette)
CBFTT Account: Gerlach (2009)

Dipsochelys arnoldi Bour 1982a:121, *Testudo arnoldi, Aldabrachelys arnoldi, Aldabrachelys gigantea arnoldi, Dipsochelys dussumieri arnoldi*
Type locality: "Seychelles...probablement...les îles granitiques."

Aldabrachelys gigantea daudinii (Duméril and Bibron 1835) (09:30)
(Extinct, ca. 1850)
Daudin's Giant Tortoise


Roger Bour / Seychelles [MNHN, Paris]

Seychelles (Mahé? [extinct])

Testudo daudinii Duméril and Bibron 1835:123, *Testudo gigantea daudinii, Geochelone gigantea daudinii, Dipsochelys daudinii, Geochelone daudinii, Aldabrachelys daudinii, Aldabrachelys gigantea daudinii, Dipsochelys dussumieri daudinii*
Type locality: "Indes orientales." Restricted to "les îles Seychelles granitiques" by Bour (1985:58).

Aldabrachelys gigantea hololissa (Günther 1877) (09:30, 11:10)
Seychelles Giant Tortoise


Justin Gerlach / CBFTT / Seychelles

Seychelles (Cerf?, Cousine?, Frégate?, Mahé?, Praslin?, Round?, Silhouette? [all extirpated])
Introduced: Seychelles (Cerf, Cousine, Round)
CBFTT Account: Gerlach (2011)

Testudo hololissa Günther 1877:39, *Dipsochelys hololissa, Geochelone hololissa, Aldabrachelys hololissa, Aldabrachelys gigantea hololissa, Dipsochelys dussumieri hololissa*
Type locality: "Seychelle Islands...[probably] originally imported from the Aldabra group." Restricted to "des îles Seychelles" by Sauzier (1899:142).

Dipsochelys resurrecta Gerlach and Canning 1996:133 (*nomen nudum*)

Astrochelys Gray 1873j (07:52)

Testudo (*Astrochelys*) Gray 1873j:4

Type species: *Testudo* (*Astrochelys*) *radiata* [= *Testudo radiata* Shaw 1802], by original monotypy.

Asterochelys Gray 1874:724 (*nomen novum*)

Angonoka Le, Raxworthy, McCord, and Mertz 2006:528 (09:31)

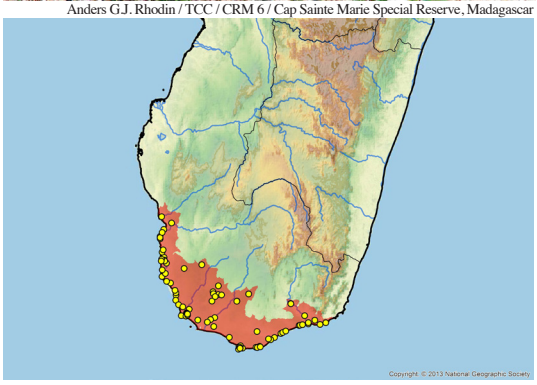
Type species: *Angonoka yniphora* [= *Testudo yniphora* Vaillant 1885a], by original designation.

Astrochelys radiata (Shaw 1802)

Radiated Tortoise, Sokake



Anders G.J. Rhodin / TCC / CRM 6 / Cap Sainte Marie Special Reserve, Madagascar



Madagascar

Introduced: Mauritius (Rodrigues, Round), Réunion

IUCN Red List: Critically Endangered A4d, E (2008); Previously: Vulnerable (1996)

CITES: Appendix I

Testudo coui Daudin 1801:271 (*nomen oblitum*)

Type locality: Not known.

Testudo radiata Shaw 1802:22, *Psammobates radiatus, Asterochelys radiata, Testudo radiata radiata, Geochelone radiata, Astrochelys radiata*

Type locality: "Madagascar." Restricted to "Soalara (Baie de Saint-Augustin), sud-ouest de Madagascar" by Bour (1979:152).

Testudo madagascariensis Schweigger 1812:457 (*nomen nudum*)

Type locality: "Madagascar."

Testudo desertorum Grandidier 1869:257

Type locality: "Madagascar."

Testudo hypselonota Bourret 1941b:9

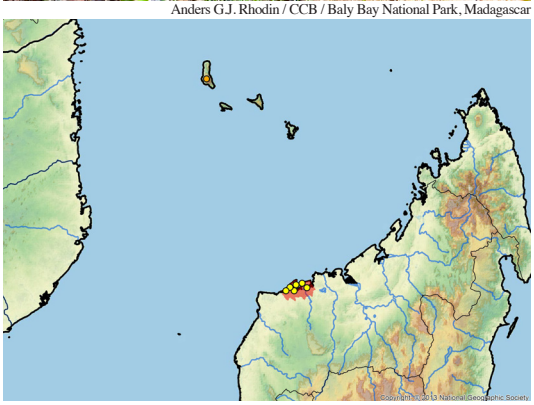
Type locality: "provenant d'un Chinois de Cholon qui l'avait... achetée au marché...il n'est pas certain qu'elle ait été trouvée en Cochinchine" [Vietnam] [in error, trade specimen]. Restricted to "Cholon?...Indochina" by Wermuth and Mertens (1961:213) [in error]. Shown to be identical to *Testudo radiata* from Madagascar by Auffenberg (1963:465); type locality restricted to "durch den Tierhandel...von Madagascar nach Indochina" by Wermuth (1965:285).

Astrochelys yniphora (Vaillant 1885a) (07:56, 09:31)

Ploughshare Tortoise, Angonoka



Anders G.J. Rhodin / CCB / Baly Bay National Park, Madagascar



(orange dot = trade)

Madagascar

Introduced: Mauritius (Rodrigues)

IUCN Red List: Critically Endangered A4ad, B2ab(v), C1, E (2008); Previously: Endangered (1996)

CITES: Appendix I

Testudo yniphora Vaillant 1885a:441, *Testudo radiata yniphora, Asterochelys yniphora, Geochelone yniphora, Geochelone (Asterochelys) yniphora, Astrochelys yniphora, Angonoka yniphora*

Type locality: "un îlot situé au nord-nord-est de...grande Comore...d'une localité située vers Aldabra" [in error]. Restricted to "cap d'Amparafaka (Baie de Baly), nord-ouest de Madagascar" by Bour (1979:152).

Testudo hyniphora Vaillant *in* Vaillant and Grandidier 1910:40 (*nomen novum*)

Centrochelys Gray 1872c (07:52)

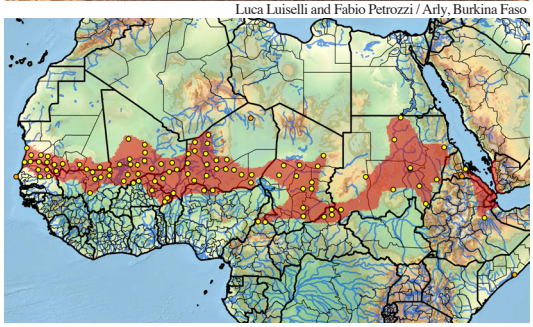
Peltastes (*Centrochelys*) Gray 1872c:5
Type species: *Peltastes (Centrochelys) sulcatus* [= *Testudo sulcata* Miller 1779], by original monotypy.

Centrochelys sulcata (Miller 1779) (12:29)

African Spurred Tortoise



Luca Luiselli and Fabio Petrozzi / Arly, Burkina Faso



(orange dots = probable trade)

Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Djibouti (?), Eritrea, Ethiopia, Mali, Mauritania, Niger, Nigeria, Saudi Arabia (?), Senegal, Somalia (?), Sudan, Yemen (?)

IUCN Red List: Vulnerable A1cd (1996)

TFTSG Draft Red List: Endangered (2013)

CITES: Appendix II, as Testudinidae spp.

Testudo sulcata Miller 1779:pl.26,p.54, *Geochelone (Geochelone) sulcata, Geochelone sulcata, Peltastes sulcatus, Centrochelys sulcatus, Centrochelys sulcata*
Type locality: "India occidentali" [in error]. Restricted to "West Indies" [in error] by Miller (1796:54).

Testudo calcarata Schneider 1784:317 (*nomen novum*), *Chersine calcarata*
Type locality: "Westindien." [in error].

Testudo radiata senegalensis Gray 1831d:11, *Geochelone senegalensis, Geochelone sulcata senegalensis*
Type locality: "Senegal."

Geochelone sulcata sudanensis Ballasina, Vandepitte, Mochi, and Fenwick 2006:111 (*nomen nudum*)

Chelonoidis Fitzinger 1835 (07:52) (**58**)

Geochelone (*Chelonoidis*) Fitzinger 1835:112
Type species: *Testudo (Chelonoidis) boiei* [= *Testudo boiei* Wagler 1830a = subjective synonym of *Testudo carbonaria* Spix 1824], by subsequent designation by Fitzinger (1843:29).

Testudo (*Gopher*) Gray 1870a:190
Type species: *Testudo (Gopher) chilensis* Gray 1870a, by original monotypy.

Elephantopus Gray 1874:724 (junior homonym, not = *Elephantopus* Agassiz 1846 [= Siphonophora])
Type species: *Elephantopus planiceps* [= *Testudo planiceps* Gray 1854b = unidentified taxon of *Chelonoidis nigra* species complex], by original monotypy.

Testudo (*Pampatestudo*) Lindholm 1929:285 (*nomen novum*)
Type species: *Testudo (Pampatestudo) chilensis* [= *Testudo (Gopher) chilensis* Gray 1870a], by original monotypy.

Testudo (*Monachelys*) Williams 1952:547
Type species: *Testudo (Monachelys) monensis* † Williams 1952, by original designation.

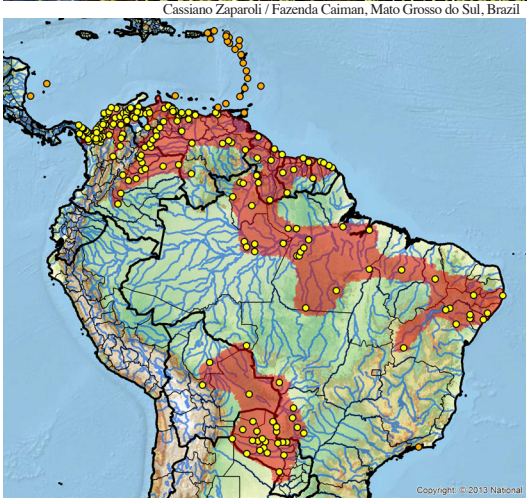
Darwintestudo Antenbrink-Vetter and Vetter 1998:4
Type species: *Darwintestudo hoodensis* [= *Testudo hoodensis* Van Denburgh 1907], by original designation.

Chelonoidis carbonarius (Spix 1824) (10:19, 10:20, 14:33) (**58**)

Red-footed Tortoise



Cassiano Zaparoli / Fazenda Caiman, Mato Grosso do Sul, Brazil



(orange dots = introduced or trade)

Argentina (Formosa), Bolivia (Beni, Cochabamba, La Paz, Pando, Santa Cruz), Brazil (Alagoas, Amazonas, Bahia, Maranhão, Mato Grosso, Mato Grosso do Sul, Pará, Pernambuco, Piauí, Rio de Janeiro, Rondônia, Roraima, Sergipe), Colombia (Antioquia, Arauca, Atlántico, Bolívar, Boyacá, Caldas, Caquetá, Casanare, Cauca, Cesar, Chocó, Córdoba, Cundinamarca, Guainía, La Guajira, Magdalena, Meta, Santander, Sucre, Tolima, Vichada), French Guiana, Guyana, Panama, Paraguay, Suriname, Venezuela (Apure, Barinas, Bolívar, Carabobo, Cojedes, Falcón, Guárico, Mérida, Miranda, Portuguesa, Sucre, Yaracuy, Zulia)

Introduced (modern or prehistoric?): Anguilla, Antigua, Barbuda, Barbados, Brazil (Rio de Janeiro), British Virgin Islands, Colombia (Providencia), Dominica, Grenada, Guadeloupe, Martinique, Montserrat, Netherlands Antilles, Nicaragua (Maíz Grande), Saint-Barthélemy, Saint Kitts and Nevis, Saint Lucia, Saint Martin, Saint Vincent and the Grenadines, Trinidad, US Virgin Islands, Venezuela (Isla Margarita, Los Tostigos)

IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Vulnerable (2011)
CITES: Appendix II, as Testudinidae spp.

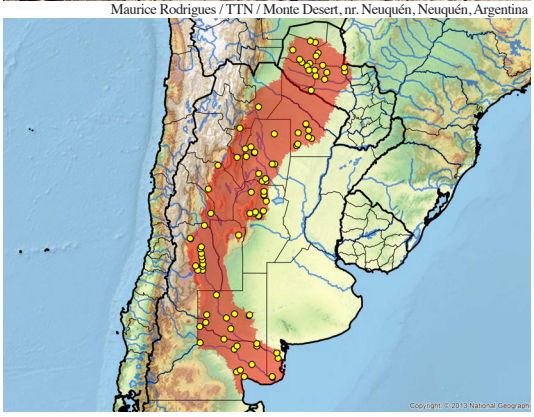
Testudo carbonaria Spix 1824:22, *Testudo tabulata carbonaria, Geochelone carbonaria, Chelonoidis carbonaria, Geochelone carbonaria carbonaria, Chelonoidis carbonaria carbonaria, Chelonoidis carbonarius*
Type locality: "flumen Amazonum" [Pará, Brazil].

Testudo boiei Wagler 1830a:pl.XIII [(14:33)], *Geochelone (Chelonoidis) boiei, Geochelone boiei, Chelonoidis boiei*
Type locality: Not known.

Testudo hercules truncata Gray 1830e:3 [(10:7, 10:20)]
Type locality: "South America."

Chelonoidis chilensis (Gray 1870a) [(07:57, 10:21, 12:30)] (**59**)
Chaco Tortoise, Pampas Tortoise


Maurice Rodrigues / TTN / Monte Desert, nr. Neuquén, Neuquén, Argentina



Argentina (Buenos Aires, Catamarca, Chaco, Córdoba, Formosa, La Pampa, La Rioja, Mendoza, Neuquén, Rio Negro, Salta, San Juan, San Luis, Santa Fe, Santiago del Estero, Tucumán), Bolivia (Santa Cruz, Tarija), Paraguay
IUCN Red List: Vulnerable A1cd (1996)
TFTSG Draft Red List: Vulnerable (2011)
CITES: Appendix II, as Testudinidae spp.

Testudo (Gopher) chilensis Gray 1870a:190, *Testudo chilensis, Geochelone chilensis, Geochelone chilensis chilensis, Chelonoidis chilensis, Chelonoidis chilensis chilensis*
Type locality: "Chili" [Chile; in error], see Sclater (1870:470). Emended to "Chili...N. Patagonia...Mendoza and the Pampas.. [&]..Monte Video and Buenos Ayres" by Gray (1870d:707); and restricted to "Mendoza" [Argentina] by Boulenger (1889:159).

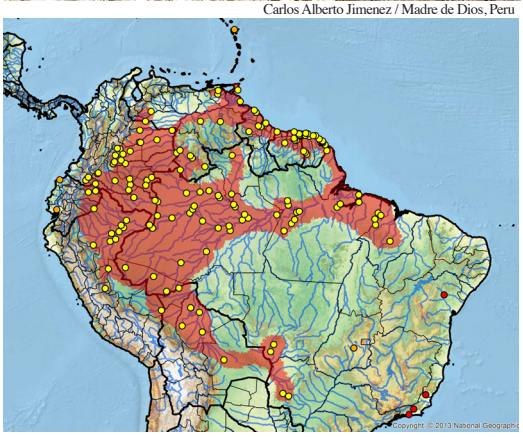
Testudo argentina Sclater 1870:471 (*nomen novum*)

Geochelone donosobarrosi Freiberg 1973:83 [(12:30)], *Geochelone chilensis donosobarrosi, Chelonoidis chilensis donosobarrosi, Chelonoidis donosobarrosi*
Type locality: "San Antonio, Rio Negro" [Argentina].

Geochelone petersi Freiberg 1973:86 [(12:30)], *Chelonoidis chilensis petersi, Chelonoidis petersi, Geochelone chilensis petersi*
Type locality: "Kishka, La Banda, Santiago del Estero" [Argentina].

Chelonoidis denticulatus (Linnaeus 1766) [(10:19)] (**58**)
Yellow-footed Tortoise


Carlos Alberto Jimenez / Madre de Dios, Peru



(red dots = possibe extirpated or trade;
orange dots = probable introduced or trade)

Bolivia (Beni, La Paz, Pando, Santa Cruz), Brazil (Acre, Amapá, Amazonas, Bahia [?, extirpated?], Espírito Santo [?, extirpated?], Maranhão, Mato Grosso, Mato Grosso do Sul, Pará, Rio de Janeiro [?, extirpated?], Roraima), Colombia (Amazonas, Arauca, Caquetá, Casanare, Guainía, Guaviare, Meta, Putumayo, Vaupés, Vichada), Ecuador, French Guiana, Guyana, Peru (Cusco, Loreto, Madre de Dios, Pasco, Ucayali), Suriname, Trinidad, Venezuela (Amazonas, Bolívar, Delta Amacuro, Monagas)
Introduced: Guadeloupe
IUCN Red List: Vulnerable A1cd+2cd (1996)
TFTSG Draft Red List: Near Threatened (2011)
CITES: Appendix II, as Testudinidae spp.

Testudo denticulata Linnaeus 1766:352, *Chersine denticulata, Geochelone (Geochelone) denticulata, Geochelone denticulata, Chelonoidis denticulata, Chelonoidis denticulatus*
Type locality: "Virginia" [USA] [in error].

Testudo tabulata Walbaum 1782:122 (*unavailable name*)
Type locality: Not designated.

Testudo tessellata Stobaeus *in* Schneider 1792:262, *Chersine tessellata*

Testudo stobaeana Gmelin *in* Schoepff 1793:48 (*nomen nudum*)

Testudo tabulata Walbaum *in* Schoepff 1793:56, *Chersine tabulata, Geochelone (Chelonoidis) tabulata, Geochelone tabulata, Chelonoidis tabulata*

Type locality: "Africa australi?" [in error].

Testudo gigantea Schweigger 1812:327 (08:13, 09:29) (*partim*, misidentified type)
Type locality: "Brasilia" [Brazil]. Restricted to "Dune Patates, South Island, Aldabra Atoll, Republic of Seychelles" by neotype designation by Frazier (2006:278).

Testudo terrestris brasiliensis Seba *in* Schweigger 1812:445 (*nomen nudum*), *Testudo brasiliensis*
Type locality: Not designated. [Brazil].

Testudo terrestris americana Stobaeus *in* Schweigger 1812:445
Type locality: Not designated.

Testudo tabulata cayennensis Schweigger 1812:445 (*nomen nudum*), *Testudo terrestris cayennensis*
Type locality: Not designated. [French Guiana].

Testudo terrestris surinamensis Stedman *in* Schweigger 1812:445 (*nomen nudum*)
Type locality: Not designated. [Suriname].

Testudo hercules Spix 1824:20
Type locality: "sylvis ad flumen Solimoens" [Amazonas, Brazil].

Testudo sculpta Spix 1824:21
Type locality: "sylvis juxta flumen Amazonum" [Pará, Brazil].

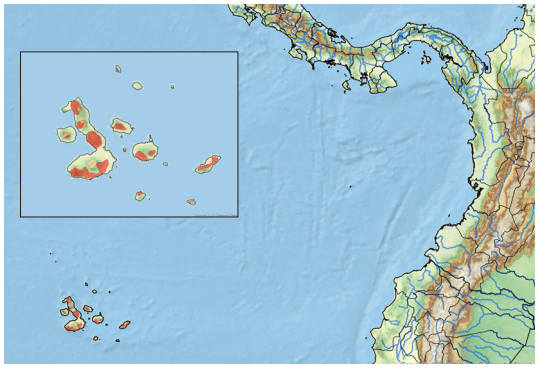
Testudo cagado Spix 1824:23
Type locality: "campis et nemoribus campestribus Bahiae" [Bahia, Brazil].

Testudo planata Gmelin *in* Gray 1831d:9 (*nomen nudum*)

Testudo foveolata Schinz 1833:40 (*nomen nudum*)

Chelonoidis niger species complex (09:32, 12:31) (**58, 60**)

Galapagos Giant Tortoises



Ecuador (Galápagos: Española [Hood]; Fernandina [Narborough] [possibly extinct]; Floreana [Charles] [extinct]; Isabela [Albemarle]; Pinta [Abingdon] [extinct]; Pinzón [Duncan]; San Cristóbal [Chatham]; Santa Cruz [Indefatigable]; Santiago [San Salvador] [James]

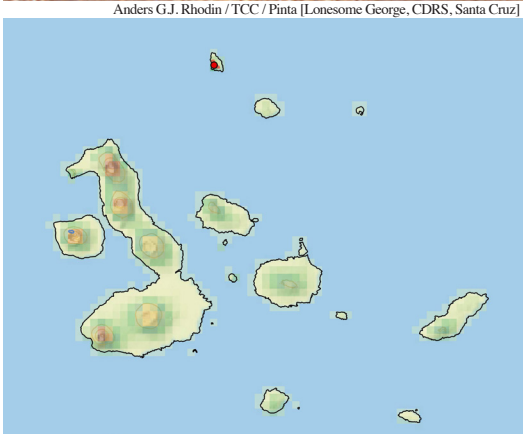
Chelonoidis abingdonii (Günther 1877) (09:34, 12:31)

(Extinct, 2012)

Pinta Giant Tortoise, Abingdon Island Giant Tortoise



Anders G.J. Rhodin / TCC / Pinta [Lonesome George, CDRS, Santa Cruz]



Ecuador (Galápagos: Pinta [Abingdon] [extinct])

Introduced: Ecuador (Galápagos: Isabela [Albemarle]) (hybrids with *C. becki*)

IUCN Red List: Extinct (2016); Previously: Extinct in the Wild (1996)

CITES: Appendix I, as *Chelonoidis nigra*

Testudo ephippium Günther 1874:422 (*partim*, *nomen nudum*)
Type locality: "Charles Island" [Floreana, Galápagos, Ecuador] [in error].

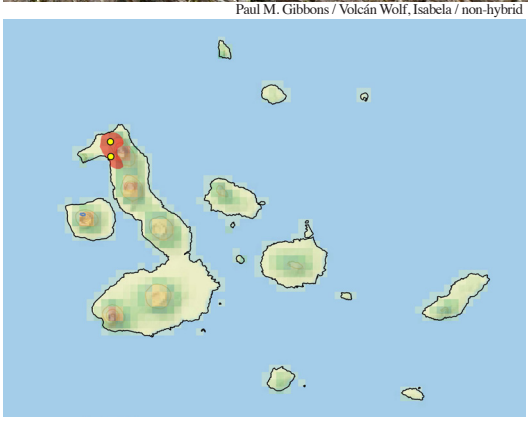
Testudo ephippium Günther 1875a:271 (*partim*, misidentified type)
Type locality: "Charles Island" [Floreana, Galápagos, Ecuador] [in error]. Restricted to "Duncan" [Pinzón, Galápagos, Ecuador] by Van Denburgh (1914:259) [in error].

Testudo abingdonii Günther 1877:85, *Testudo elephantopus abingdonii, Geochelone abingdonii, Geochelone elephantopus abingdonii, Chelonoidis abingdonii, Chelonoidis elephantopus abingdonii, Geochelone (Chelonoidis) nigra abingdonii, Geochelone nigra abingdonii, Chelonoidis nigra abingdonii, Chelonoidis elephantopus abingdonii*
Type locality: "Abingdon Island" [Pinta, Galápagos, Ecuador].

Chelonoidis becki (Rothschild 1901) (12:31) (**60**)
Volcán Wolf Giant Tortoise, Wolf Volcano Giant Tortoise



Paul M. Gibbons / Volcán Wolf, Isabela / non-hybrid



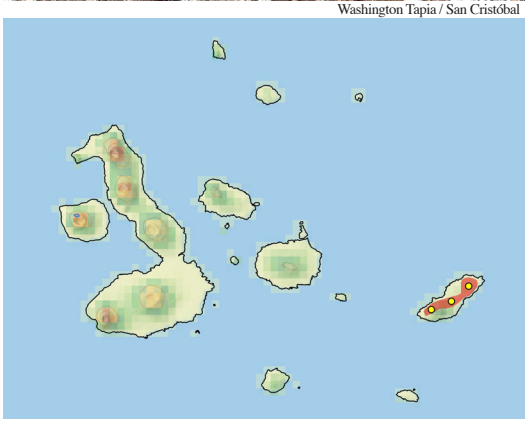
Ecuador (Galápagos: Isabela [Albemarle])
Invasives: Hybrids with *Chelonoidis abingdonii* and *C. niger*
IUCN Red List: Vulnerable D1+2 (1996), as *Chelonoidis nigra becki*
TFTSG Draft Red List: Vulnerable (2012)
CITES: Appendix I, as *Chelonoidis nigra*

Testudo becki Rothschild 1901:372, *Geochelone becki, Geochelone elephantopus becki, Chelonoidis becki, Chelonoidis elephantopus becki, Geochelone (Chelonoidis) nigra becki, Geochelone nigra becki, Chelonoidis nigra becki*
Type locality: "Cape Berkeley, northern point of Albemarle Island, Galapagos Archipelago" [Isabela, Galápagos, Ecuador]. Restricted to "Bank's Bay, Albemarle" [Isabela, Galápagos, Ecuador] by Van Denburgh (1914:259).

Chelonoidis chathamensis (Van Denburgh 1907) (07:59, 12:31) (**61**)
San Cristóbal Giant Tortoise, Chatham Island Giant Tortoise



Washington Tapia / San Cristóbal



Ecuador (Galápagos: San Cristóbal [Chatham])
IUCN Red List: Vulnerable D1+2 (1996), as *Chelonoidis nigra chathamensis*
TFTSG Draft Red List: Endangered (2017)
CITES: Appendix I, as *Chelonoidis nigra*

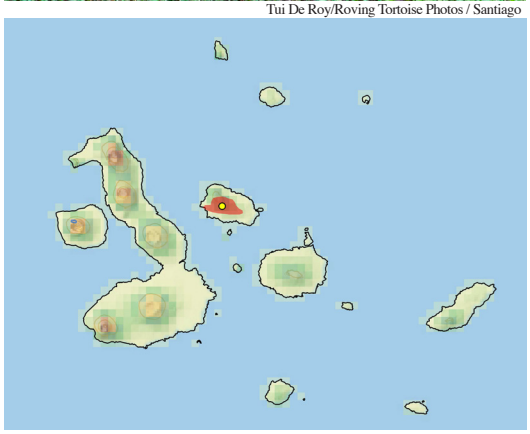
Testudo chathamensis Van Denburgh 1907:4, *Testudo elephantopus chathamensis, Geochelone chathamensis, Geochelone elephantopus chathamensis, Chelonoidis chathamensis, Chelonoidis elephantopus chathamensis, Geochelone (Chelonoidis) nigra chathamensis, Geochelone nigra chathamensis, Chelonoidis nigra chathamensis*
Type locality: "Chatham Island, Galapagos Archipelago" [San Cristóbal, Galápagos, Ecuador].

Chelonoidis darwini (Van Denburgh 1907) [(12:31)] [(60)]

Santiago Giant Tortoise, James Island Giant Tortoise



Tui De Roy/Roving Tortoise Photos / Santiago



Ecuador (Galápagos: Santiago [San Salvador] [James])

IUCN Red List: Critically Endangered A1bde (2016); Previously: Endangered (1996)

CITES: Appendix I, as *Chelonoidis nigra*

Testudo schweiggeri Fitzinger 1826:44 (*nomen nudum*)

Geochelone (Geochelone) schweiggeri Fitzinger 1835:122 (*nomen dubium* and *oblitum*; junior homonym, not = *Testudo schweiggeri* Gray *in* Duméril and Bibron 1835 [= *Testudo schweigeri* Gray 1830e] = *Cylindraspis triserrata*), *Geochelone schweiggeri*

Type locality: Not designated. Restricted to "America: Insel St. Jacob der Gallopagen" [= Santiago, Galápagos, Ecuador] by Fitzinger (1853:110).

Testudo darwini Van Denburgh 1907:4, *Testudo elephantopus darwini, Geochelone darwini, Geochelone elephantopus darwini, Chelonoidis darwini, Chelonoidis elephantopus darwini, Geochelone (Chelonoidis) nigra darwini, Geochelone nigra darwini, Chelonoidis nigra darwini*

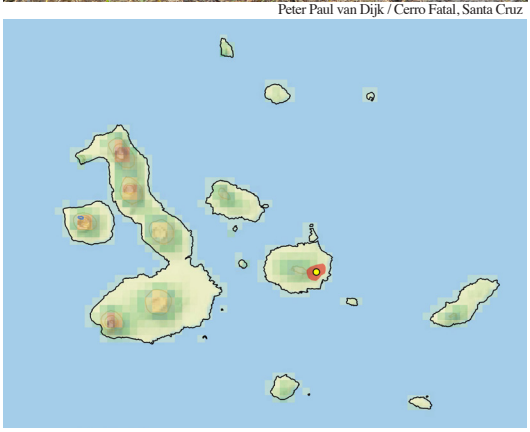
Type locality: "James Island, Galapagos Archipelago" [Santiago, Galápagos, Ecuador].

Chelonoidis donfaustoi Poulakakis, Edwards, and Caccone *in* Poulakakis, Edwards, Chiari, Garrick, Russello, Benavides, Watkins-Colwell, Glaberman, Tapia, Gibbs, Cayot, and Caccone 2015 [(61)]

Eastern Santa Cruz Giant Tortoise, Cerro Fatal Giant Tortoise, Don Fausto's Giant Tortoise



Peter Paul van Dijk / Cerro Fatal, Santa Cruz



Ecuador (Galápagos: Santa Cruz [Indefatigable])

IUCN Red List: Not Evaluated

TFTSG Draft Red List: Critically Endangered (2015)

CITES: Appendix I, as *Chelonoidis nigra*

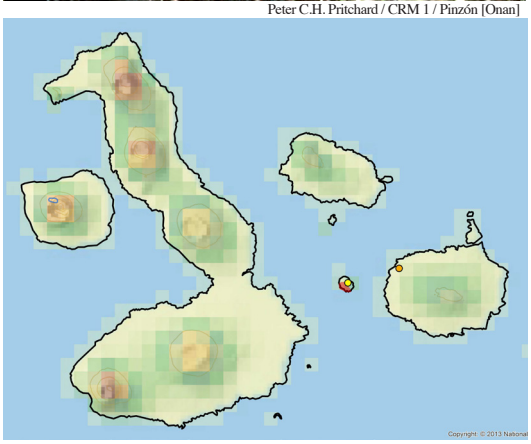
Chelonoidis donfaustoi Poulakakis, Edwards, and Caccone *in* Poulakakis, Edwards, Chiari, Garrick, Russello, Benavides, Watkins-Colwell, Glaberman, Tapia, Gibbs, Cayot, and Caccone 2015:12, *Chelonoidis nigra donfaustoi*

Type locality: "Cerro Fatal in Santa Cruz" [Galápagos, Ecuador].

Chelonoidis duncanensis (Pritchard 1996) (07:60, 12:31)
Pinzón Giant Tortoise, Duncan Island Giant Tortoise



Peter C.H. Pritchard / CRM 1 / Pinzón [Onan]



(orange dot = introduced)

Ecuador (Galápagos: Pinzón [Duncan])
Introduced: Ecuador (Galápagos: Santa Cruz [Indefatigable])
IUCN Red List: Extinct in the Wild (1996), as *Chelonoidis nigra duncanensis*
TFTSG Draft Red List: Vulnerable (2012)
CITES: Appendix I, as *Chelonoidis nigra*

Testudo ephippium Günther 1874:422 (*partim*, *nomen nudum*)

Testudo ephippium Günther 1875a:271 (*partim*, misidentified type), *Testudo elephantopus ephippium, Geochelone elephantopus ephippium, Geochelone ephippium, Chelonoidis ephippium, Chelonoidis nigra ephippium, Chelonoidis elephantopus ephippium, Geochelone (Chelonoidis) nigra ephippium, Geochelone nigra ephippium*
Type locality: "Charles Island" [Floreana, Galápagos, Ecuador] [in error]. Restricted to "Duncan" [Pinzón, Galápagos, Ecuador] by Van Denburgh (1914:259) [in error].

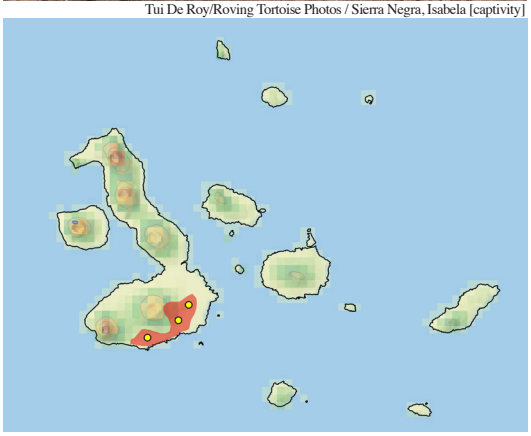
Testudo duncanensis Garman 1917:269 (*nomen nudum*)

Geochelone nigra duncanensis Pritchard 1996:47, *Chelonoidis nigra duncanensis, Chelonoidis duncanensis*
Type locality: "Duncan Island" [Pinzón, Galápagos, Ecuador].

Chelonoidis guntheri (Baur 1889) (07:64, 08:14, 09:36, 12:31) (**60**)
Sierra Negra Giant Tortoise



Tui De Roy/Roving Tortoise Photos / Sierra Negra, Isabela [captivity]



Ecuador (Galápagos: Isabela [Albemarle])
IUCN Red List: Endangered C2a (1996), as *Chelonoidis nigra guentheri*
TFTSG Draft Red List: Endangered (2012)
CITES: Appendix I, as *Chelonoidis nigra*

Testudo güntheri Baur 1889:1044 (07:64, 09:36) (invalid diacritic requiring emendation, senior homonym, not = *Testudo güntheri* Gadow *in* Van Denburgh 1914 = *Cylindraspis triserrata*), *Geochelone elephantopus güntheri, Geochelone güntheri, Geochelone (Chelonoidis) nigra güntheri, Geochelone nigra güntheri, Chelonoidis elephantopus güntheri*
Type locality: "Galapagos." Restricted to "Vilamil, Albemarle" [Isabela, Galápagos, Ecuador] by Van Denburgh (1914:259).

Testudo wallacei Rothschild 1902:619 (12:31), *Testudo elephantopus wallacei, Geochelone elephantopus wallacei, Geochelone wallacei, Chelonoidis elephantopus wallacei, Chelonoidis nigra wallacei, Geochelone nigra wallacei*
Type locality: "Chatham Island" [San Cristóbal, Galápagos, Ecuador] by supposition. Restricted to "Jervis" [Rábida, Galápagos, Ecuador] by Van Denburgh (1914:259).

Geochelone elephantopus guntheri Baur *in* Pritchard 1971a:26 (07:64, 09:36) (*nomen novum*, justified emendation), *Geochelone elephantopus guntheri, Geochelone guntheri, Geochelone (Chelonoidis) nigra guntheri, Geochelone nigra guntheri, Chelonoidis elephantopus guntheri*

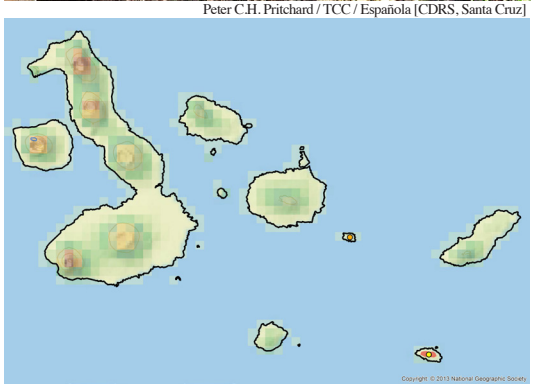
Geochelone elephantopus guentheri Baur *in* Pritchard 1971b:50 (07:64, 09:36) (*nomen novum*, unjustified emendation, junior homonym, not = *Testudo guentheri* Gadow 1894 = *Cylindraspis triserrata*), *Testudo guentheri, Geochelone guentheri, Chelonoidis guentheri, Chelonoidis elephantopus guentheri, Geochelone nigra guentheri, Chelonoidis nigra guentheri*

Chelonoidis hoodensis (Van Denburgh 1907) (12:31)

Española Giant Tortoise, Hood Island Giant Tortoise



Peter C.H. Pritchard / TCC / Española [CDRS, Santa Cruz]



(orange dot = introduced)

Ecuador (Galápagos: Española [Hood])

Introduced: Ecuador (Galápagos: Santa Fé [Barrington])

IUCN Red List: Critically Endangered D (1996), as *Chelonoidis nigra hoodensis*

TFTSG Draft Red List: Critically Endangered (2015)

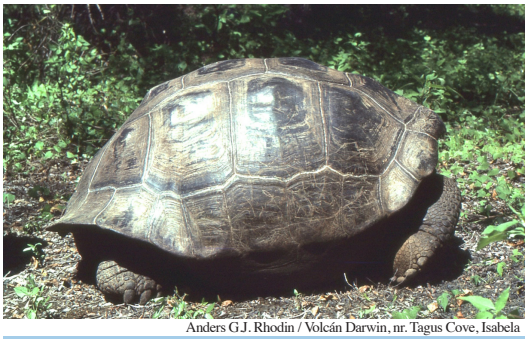
CITES: Appendix I, as *Chelonoidis nigra*

Testudo hoodensis Van Denburgh 1907:3, *Testudo elephantopus hoodensis, Geochelone elephantopus hoodensis, Geochelone hoodensis, Chelonoidis hoodensis, Chelonoidis elephantopus hoodensis, Geochelone (Chelonoidis) nigra hoodensis, Geochelone nigra hoodensis, Chelonoidis nigra hoodensis, Darwintestudo hoodensis*

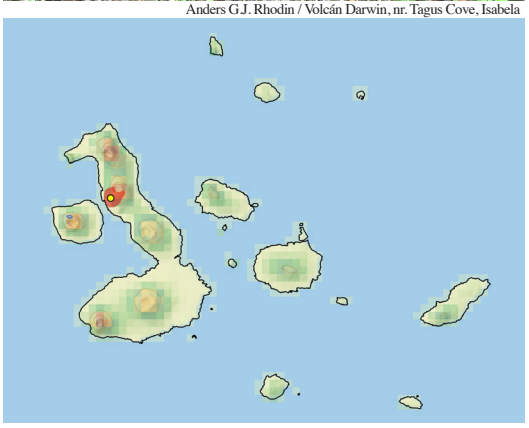
Type locality: "Hood Island, Galapagos Archipelago" [Española, Galápagos, Ecuador].

Chelonoidis microphyes (Günther 1875a) (07:64, 08:14, 09:36, 12:31)

Volcán Darwin Giant Tortoise, Darwin Volcano Giant Tortoise, Tagus Cove Giant Tortoise



Anders G.J. Rhodin / Volcán Darwin, nr. Tagus Cove, Isabela



Ecuador (Galápagos: Isabela [Albemarle])

IUCN Red List: Vulnerable D1+2 (1996), as *Chelonoidis nigra microphyes*

TFTSG Draft Red List: Endangered (2012)

CITES: Appendix I, as *Chelonoidis nigra*

Testudo microphyes Günther 1874:422 (*nomen nudum*)

Type locality: ""Hood's Island" [Española, Galápagos, Ecuador] [in error].

Testudo microphyes Günther 1875a:275 (08:14)

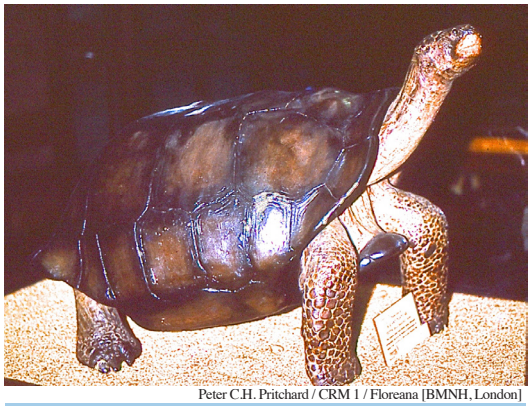
Geochelone elephantopus microphyes, Geochelone microphyes, Chelonoidis microphyes, Chelonoidis elephantopus microphyes, Geochelone (Chelonoidis) nigra microphyes, Geochelone nigra microphyes, Chelonoidis nigra microphyes

Type locality: "Hood's Island" [Española, Galápagos, Ecuador] by supposition [in error]. Emended to "Tagus Cove, about 4 miles inland...northern Albemarle Island" [Isabela, Galápagos, Ecuador] by Günther (1877:78).

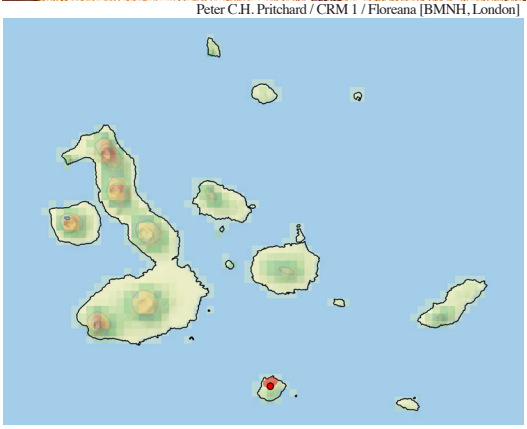
Testudo macrophyes Garman 1917:273

Type locality: "Santa Isabela Island (Albemarle) near Tagus Cove" [Isabela, Galápagos, Ecuador].

Chelonoidis niger (Quoy and Gaimard 1824b) (07:58, 09:33, 12:31) (**58, 62**)
(Extinct, ca. 1850**)**
Floreana Giant Tortoise, Charles Island Giant Tortoise



Peter C.H. Pritchard / CRM 1 / Floreana [BMNH, London]



Ecuador (Galápagos: Floreana [Charles] [extinct])
Introduced: Ecuador (Galápagos: Isabela [Albemarle]) (hybrids with *C. becki*)
IUCN Red List: Extinct (1996), as *Chelonoidis nigra nigra*
TFTSG Draft Red List: Extinct (2012)
CITES: Appendix I

Testudo californiana Quoy and Gaimard 1824a:90 (62) (*nomen oblitum*)
Type locality: "La Californie...donnée vivante aux îles Sandwich" [California, USA; in error]. Erroneously given with "Sandwich Islands" [Hawaii, USA] by Wermuth and Mertens (1961, 1977).

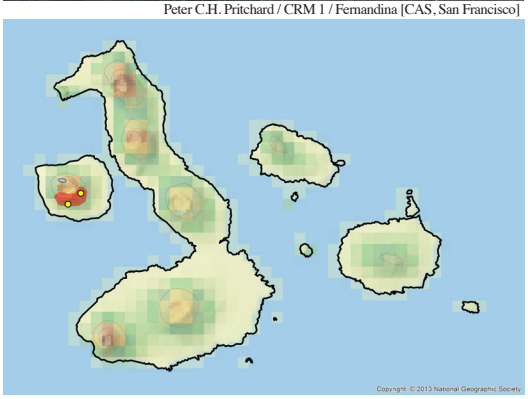
Testudo nigra Quoy and Gaimard 1824b:174 (62) (*nomen novum*), *Chelonoidis nigra, Geochelone nigra, Geochelone nigra nigra, Chelonoidis nigra nigra, Geochelone elephantopus nigra, Chelonoidis niger*
Type locality: "la Californie...donnée vivante, aux îles Sandwich" [California, USA; in error]. Restricted arbitrarily to "Cerro Azul d'Isabela" [Galápagos, Ecuador] by Bour *in* David (1994:83); and to "Charles Island (Santa María or Floreana)" [Galápagos, Ecuador] by Pritchard (1996:49).

Testudo galapagoensis Baur 1889:1044, *Testudo elephantopus galapagoensis, Geochelone elephantopus galapagoensis, Chelonoidis galapagoensis, Chelonoidis elephantopus galapagoensis, Geochelone (Chelonoidis) nigra galapagoensis, Geochelone nigra galapagoensis, Chelonoidis nigra galapagoensis*
Type locality: "Charles Island" [Floreana, Galápagos, Ecuador].

Chelonoidis phantasticus (Van Denburgh 1907) (07:62, 12:31) (**58, 63**)
Fernandina Giant Tortoise, Narborough Island Giant Tortoise



Peter C.H. Pritchard / CRM 1 / Fernandina [CAS, San Francisco]



Ecuador (Galápagos: Fernandina [Narborough] [possibly extinct])
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Critically Endangered (Possibly Extinct) (2016); Previous Draft: Extinct (63)
CITES: Appendix I, as *Chelonoidis nigra*

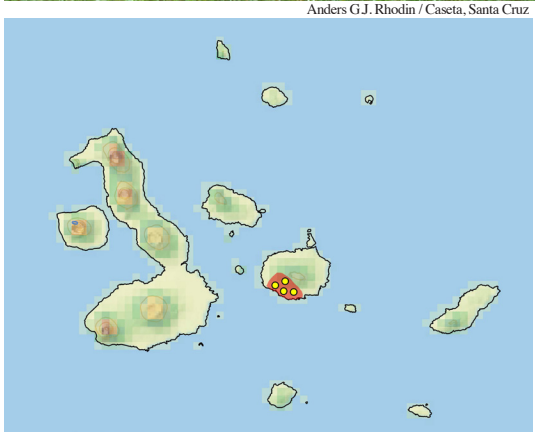
Testudo phantasticus Van Denburgh 1907:4, *Testudo phantastica, Testudo elephantopus phantastica, Geochelone elephantopus phantastica, Geochelone phantastica, Chelonoidis phantastica, Geochelone phantasticus, Chelonoidis elephantopus phantastica, Geochelone (Chelonoidis) nigra phantastica, Geochelone nigra phantastica, Chelonoidis nigra phantastica, Chelonoidis phantasticus*
Type locality: "Narborough Island, Galapagos Archipelago" [Fernandina, Galápagos, Ecuador].

Chelonoidis porteri (Rothschild 1903) (07:63, 09:35, 12:31) (**62**)

Western Santa Cruz Giant Tortoise, Indefatigable Island Giant Tortoise



Anders G.J. Rhodin / Caseta, Santa Cruz



Ecuador (Galápagos: Santa Cruz [Indefatigable])

IUCN Red List: Endangered C2a (1996), as *Chelonoidis nigra porteri*

TFTSG Draft Red List: Critically Endangered (2016)

CITES: Appendix I, as *Chelonoidis nigra*

Testudo nigrita Duméril and Bibron 1835:80 (**62**) (*nomen dubium*), *Testudo elephantopus nigrita, Geochelone nigrita, Chelonoidis nigrita, Geochelone elephantopus nigrita, Chelonoidis elephantopus nigrita, Geochelone (Chelonoidis) nigra nigrita, Geochelone nigra nigrita, Chelonoidis nigra nigrita*

Type locality: Not known. Restricted to "Insel Indefatigable" [Santa Cruz, Galápagos, Ecuador] by Mertens and Wermuth (1955:376).

Testudo porteri Rothschild 1903:119, *Geochelone elephantopus porteri, Geochelone porteri, Geochelone nigra porteri, Chelonoidis elephantopus porteri, Chelonoidis nigra porteri, Chelonoidis porteri*

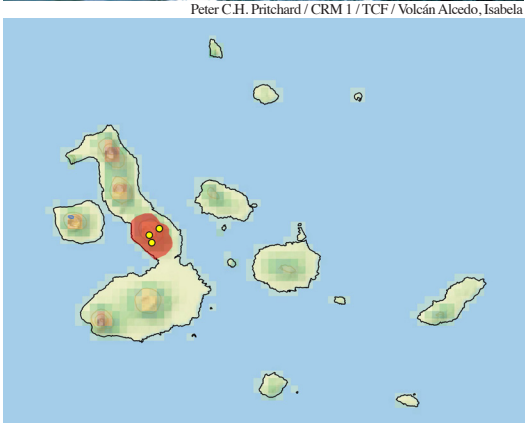
Type locality: "Indefatigable Island, Galapagos group" [Santa Cruz, Galápagos, Ecuador].

Chelonoidis vandenburghi (DeSola 1930) (07:64, 08:14, 09:36, 12:31) (**60**)

Volcán Alcedo Giant Tortoise, Alcedo Volcano Giant Tortoise



Peter C.H. Pritchard / CRM 1 / TCF / Volcán Alcedo, Isabela



Ecuador (Galápagos: Isabela [Albemarle])

IUCN Red List: Vulnerable D2 (1996), as *Chelonoidis nigra vandenburghi*

TFTSG Draft Red List: Vulnerable (2012)

CITES: Appendix I, as *Chelonoidis nigra*

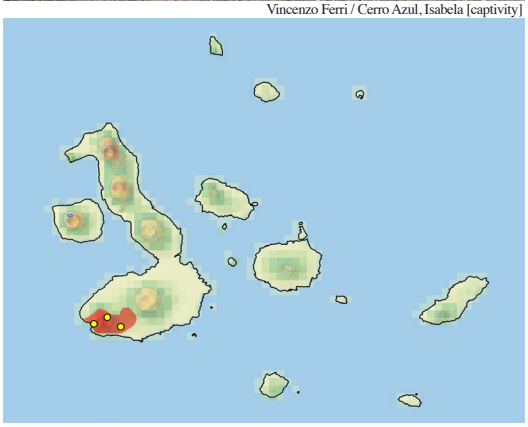
Testudo vandenburghi DeSola 1930:79, *Geochelone vandenburghi, Geochelone elephantopus vandenburghi, Chelonoidis vandenburghi, Chelonoidis elephantopus vandenburghi, Geochelone (Chelonoidis) nigra vandenburghi, Geochelone nigra vandenburghi, Chelonoidis nigra vandenburghi*

Type locality: "forty miles from Villamil...at the coast on the southern border of Perry Isthmus...mid-Albemarle Island...Cowley Mountain nearly north...to the south...Villamil Mountain" [Isabela, Galápagos, Ecuador], emended to "Cowley Mountain...the first mountain north of Villamil Mountain" [Volcán Alcedo, Isabela, Galápagos, Ecuador] by Iverson (1992:250).

Chelonoidis vicina (Günther 1875a) (07:64, 08:14, 09:36, 12:31) **(60)**
Cerro Azul Giant Tortoise, Iguana Cove Giant Tortoise



Vincenzo Ferri / Cerro Azul, Isabela [captivity]



Ecuador (Galápagos: Isabela [Albemarle])
IUCN Red List: Endangered C2a (1996), as *Chelonoidis nigra vicina*
TFTSG Draft Red List: Vulnerable (2017)
CITES: Appendix I, as *Chelonoidis nigra*

Testudo vicina Günther 1874:422 (*nomen nudum*)
Type locality: "Galapagos" [Galápagos, Ecuador] without precise locality.

Testudo vicina Günther 1875a:277, *Geochelone vicina, Geochelone (Chelonoidis) nigra vicina, Geochelone nigra vicina, Geochelone elephantopus vicina, Chelonoidis elephantopus vicina, Chelonoidis nigra vicina, Chelonoidis vicina*
Type locality: "Galapagos." Restricted to "South Albemarle" [Isabela, Galápagos, Ecuador] by Günther (1877:73); and to "Iguana Cove, Albemarle" [Isabela, Galápagos, Ecuador] by Van Denburgh (1914:259).

***Chelonoidis*, sp. indet.**

Testudo elephantopus Harlan 1827:284 (09:33) (*nomen dubium*), *Testudo elephantopus elephantopus, Geochelone elephantopus, Geochelone elephantopus elephantopus, Chelonoidis elephantopus, Chelonoidis elephantopus elephantopus, Geochelone nigra elephantopus*
Type locality: "Gallapagos Islands" [Galápagos, Ecuador]. Restricted to "South Albemarle" [Isabela, Galápagos, Ecuador] by Pritchard (1967:168); restricted to "Charles Island (Floreana, Santa Maria), Galapagos" [Ecuador] by Olson and Humphrey (2017:114).

Testudo planiceps Gray 1854b:12 (*nomen dubium* and junior homonym, not = *Testudo planiceps* Schneider 1792 = *Platemys platycephala platycephala*), *Geochelone planiceps, Chelonoidis planiceps*
Type locality: "Galapagos Islands" [Galápagos, Ecuador].

Testudo clivosa Garman 1917:283 (*nomen dubium*), *Geochelone clivosa, Chelonoidis clivosa*
Type locality: "Mascarenes" by supposition [in error].

Testudo typica Garman 1917:285 (*nomen dubium*), *Geochelone typica, Chelonoidis typica*
Type locality: "Galapagos" [Galápagos, Ecuador].

Chersina Gray 1830e (10:7)

Testudo (*Chersina*) Gray 1830e:5 (10:7)
Type species: *Testudo (Chersina) angulata* Duméril *in* Schweigger 1812], by original monotypy.

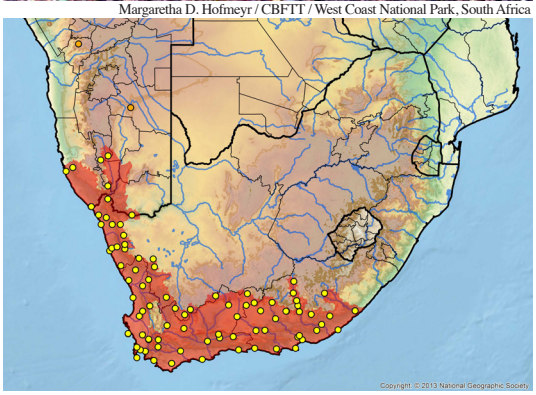
Testudo (*Goniochersus*) Lindholm 1929:285
Type species: *Testudo* (*Goniochersus*) *angulata* [= *Testudo angulata* Schweigger 1812], by original designation.

Neotestudo Hewitt 1931:504
Type species: *Neotestudo angulata* [= *Testudo angulata* Schweigger 1812], by original monotypy.

Chersina angulata (Duméril *in* Schweigger 1812) (09:37)
Angulate Tortoise, South African Bowsprit Tortoise



Margaretha D. Hofmeyr / CBFTT / West Coast National Park, South Africa



(orange dots = probable trade)

Namibia, South Africa
CBFTT Account: Hofmeyr (2009)
IUCN Red List: Least Concern (2017); Previously: Least Concern [Not Listed] (1996)
CITES: Appendix II, as Testudinidae spp.

Testudo angulata Duméril *in* Schweigger 1812:321, *Testudo (Chersina) angulata, Chersina angulata, Testudo (Goniochersus) angulata, Goniochersus angulata, Goniochersus angulatus, Neotestudo angulata, Chersine angulata*
Type locality: Not known.

Testudo bellii Gray 1828:2
Type locality: "Cape of Good Hope" [South Africa].

Chersina angulata pallida Gray 1831d:69
Type locality: Not known.

Testudo flavofusca Gray 1844:11 (*nomen nudum*)

Testudo sculpta Brandt *in* Gray 1856b:12 (*nomen nudum*)

Chersobius Fitzinger 1835 (07:67, 10:23) **(64)**

Testudo (*Chersobius*) Fitzinger 1835:112

Type species: *Testudo (Chersobius) signatus* Walbaum [= *Testudo signata* Gmelin 1789], by subsequent designation by Lindholm (1929:284).

Pseudomopus Hewitt 1931:496

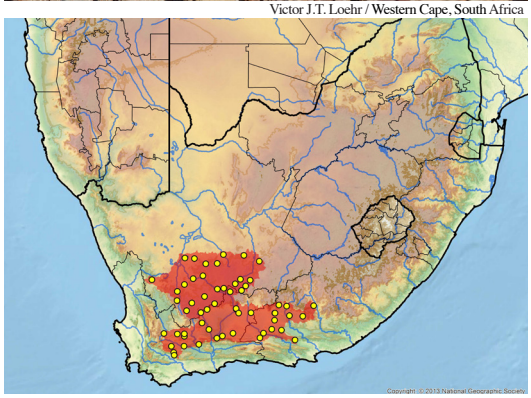
Type species: *Pseudomopus signatus* Walbaum [= *Testudo signata* Gmelin 1789], by original designation.

Chersobius boulengeri (Duerden 1906) **(64)**

Karoo Dwarf Tortoise, Karoo Padloper



Victor J.T. Loehr / Western Cape, South Africa



South Africa

IUCN Red List: Near Threatened (2017), as *Homopus boulengeri*; Previously: Least Concern [Not Listed] (1996)

CITES: Appendix II, as Testudinidae spp.

Homopus boulengeri Duerden 1906:406, *Pseudomopus boulengeri*, *Chersobius signatus*

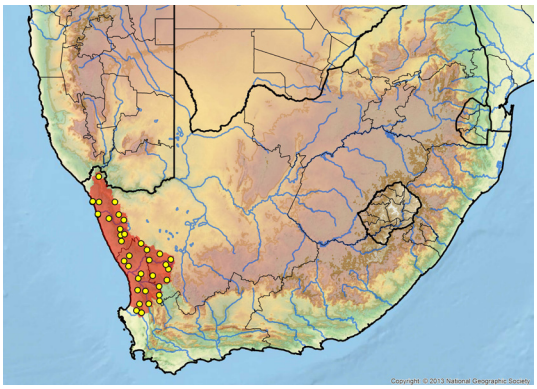
Type locality: "South Africa—Districts of Willowmore, Aberdeen, and Beaufort West."

Chersobius signatus (Gmelin 1789) (10:24) **(64)**

Speckled Tortoise, Speckled Padloper



Victor J.T. Loehr / Clanwilliam, Western Cape, South Africa



South Africa

IUCN Red List: Vulnerable A2acd (2017), as *Homopus signatus*; Previously: Near Threatened (1996)

CITES: Appendix II, as Testudinidae spp.

Testudo signata Walbaum 1782:120 (*unavailable name*)

Type locality: Not known.

Testudo signata Gmelin 1789:1043, *Chersine signata*, *Homopus signatus*, *Pseudomopus signatus*, *Pseudomopus signatus signatus*, *Chersobius signatus*, *Homopus signata*, *Homopus signatus signatus*

Type locality: "Virginia" [USA, in error]. Restricted to "vicinity of Springbok, Cape Province, South Africa" by Bour (1988:3).

Testudo cafra Daudin 1801:291 (10:24), *Homopus signatus cafra*, *Homopus signatus cafer*

Type locality: "Afrique...la Cafrerie" [South Africa]. Restricted to "Drainage of the Olifants River, Cape Province, South Africa" by Bour (1988:3).

Testudo juvencella Daudin 1802:380 (10:25)

Type locality: "Afrique."

Pseudomopus signatus peersi Hewitt 1935:345, *Homopus signatus peersi*, *Chersobius peersi*

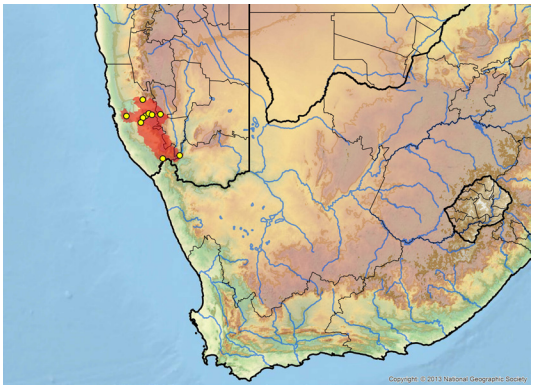
Type locality: "Klaver District, C.P. [Cape Province], near Van Rhynsdorp" [South Africa].

Chersobius solus Branch 2007 (07:67) **(64)**

Nama Tortoise, Nama Padloper



Maurice Rodrigues / TCC / Namibia



Namibia
IUCN Red List: Vulnerable C2a (1996), originally listed as *Homopus bergeri*
TFTSG Draft Red List: Endangered (2013)
CITES: Appendix II, as Testudinidae spp.

Homopus bergeri Lindholm 1906:348 (*partim*)
Type locality: "nach Gibeon in Deutsch-Südwestafrika...möglicherweise weiter im Innern Südafrikas" [Namibia or South Africa].

Homopus solos Devaux 2003:40 (*nomen nudum*)

Homopus solus Branch 2007:11, *Chersobius solus*
Type locality: "vicinity of Aus, Luderitz District, Namibia."

Cylindraspis Fitzinger 1835 [55]

Chelonura Rafinesque 1815:74 (*nomen nudum*)

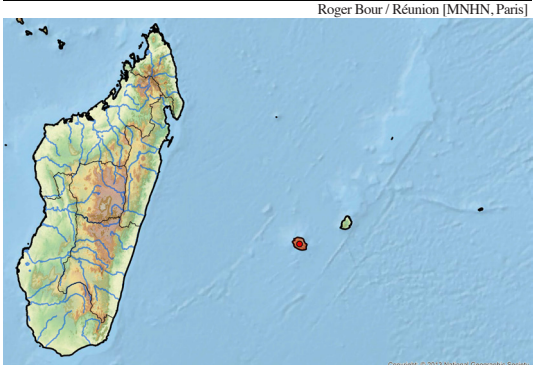
Chelonura Rafinesque 1832:64 (junior homonym, not = *Chelonura* Fleming 1822 = *Chelydra*)
Type species: *Chelonura indica* [= *Testudo indica* Schneider 1783], by original designation.

Geochelone (*Cylindraspis*) Fitzinger 1835:112
Type species: *Chersina* (*Cylindraspis*) *vosmaeri* [= *Testudo indica vosmaeri* Suckow 1798], by subsequent designation by Fitzinger (1843:29).

Cylindraspis indica (Schneider 1783) [07:65]
(Extinct, ca. 1840)
Reunion Giant Tortoise



Roger Bour / Réunion [MNHN, Paris]



Réunion [extinct]
IUCN Red List: Extinct (1996)

Testudo indica Schneider 1783:355, *Chelonura indica, Cylindrapis indica, Megalochelys indica, Geochelone indica, Cylindraspis indica*
Type locality: "Ostindien". Restricted to "Réunion" by Austin and Arnold (2001:2517).

Testudo tabulata africana Schweigger 1812:322 [09:38]
Type locality: "Africa" by inference.

Chersine retusa Merrem 1820:29 (*nomen novum*), *Testudo retusa*
Type locality: "India orientali."

Testudo perraultii Duméril and Bibron 1835:126 (*nomen novum*), *Geochelone (Cylindraspis) perraultii, Testudo indica perraultii*
Type locality: "Indes Orientales."

Testudo graii Duméril and Bibron 1835:135 (*nomen novum*), *Geochelone graii, Cylindraspis graii*
Type locality: "Afrique?"

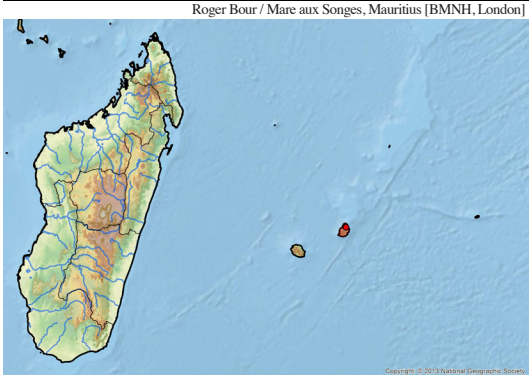
Chersina grayi Strauch 1865:36 (*nomen novum*), *Geochelone grayi, Geochelone (Cylindraspis) grayi*
Type locality: "Afrika."

Cylindraspis borbonica Bour 1978:492
Type locality: "Réunion."

Cylindraspis inepta (Günther 1873)
(Extinct, ca. 1735)
Mauritius Giant Domed Tortoise



Roger Bour / Mare aux Songes, Mauritius [BMNH, London]



Mauritius (Mauritius [extinct])
IUCN Red List: Extinct (1996)

Testudo neraudii Gray 1831d:14 (*nomen oblitum*)
Type locality: "Isle of France" [Mauritius]. Restricted to "Quatre Cocos, Flacq, Maurice" [Mauritius] by Bour (1985:37).

Testudo inepta Günther 1873:397, *Geochelone inepta, Cylindraspis inepta*
Type locality: "Mauritius." Restricted to "La Mare aux Songes... near Mahe'bourg...Mauritius" by Günther (1875b:297).

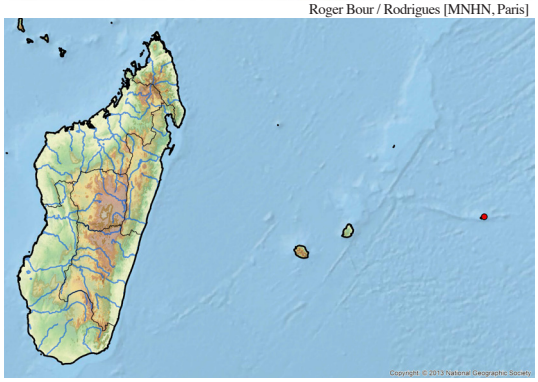
Testudo boutonii Günther 1875b:297
Type locality: "La Mare aux Songes...near Mahe'bourg... Mauritius."

Testudo sauzieri Gadow 1894:315, *Geochelone sauzieri*
Type locality: "Mare aux Songes, in Mauritius."

Cylindraspis peltastes (Duméril and Bibron 1835)
(Extinct, ca. 1800**)**
Rodrigues Domed Tortoise



Roger Bour / Rodrigues [MNHN, Paris]



Mauritius (Rodrigues [extinct])
IUCN Red List: Extinct (1996)

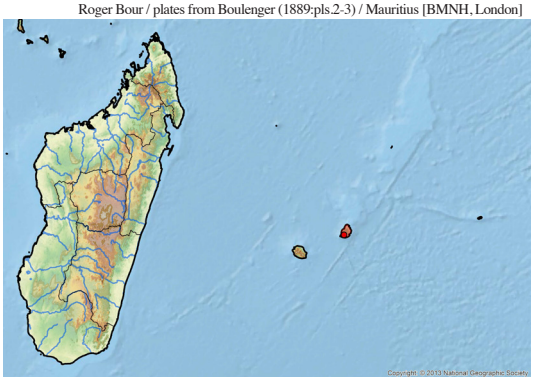
Testudo rotunda Latreille *in* Sonnini and Latreille 1801:107 (*partim, nomen dubium*), *Chersine rotunda, Geochelone (Geochelone) rotunda*
Type locality: Not known. Restricted to "Mascarenes...Rodrigues" by Bour (2005:25).

Testudo peltastes Duméril and Bibron 1835:138, *Geochelone peltastes, Geochelone (Cylindraspis) peltastes, Cylindraspis peltastes*
Type locality: Not known. Restricted to "Rodriguez" [Rodrigues] by Günther (1877:53).

Cylindraspis triserrata (Günther 1873)
(Extinct, ca. 1735**)**
Mauritius Giant Flat-shelled Tortoise



Roger Bour / plates from Boulenger (1889:pls.2-3) / Mauritius [BMNH, London]



Mauritius (Mauritius [extinct])
IUCN Red List: Extinct (1996)

Testudo schweigeri Gray 1830e:3 [(10:7)] (*nomen oblitum*)
Type locality: Not known. Restricted to "Mauritius" by Austin and Arnold (2001:2517).

Testudo schweiggeri Gray *in* Duméril and Bibron 1835:108 (*nomen novum et oblitum*; senior homonym, not = *Geochelone (Geochelone) schweiggeri* Fitzinger 1835 = *Chelonoidis darwini*)

Testudo triserrata Günther 1873:397, *Geochelone triserrata, Cylindraspis triserrata*
Type locality: "Mauritius." Restricted to "La Mare aux Songes... near Mahe'bourg...Mauritius" by Günther (1875b:297).

Testudo leptocnemis Günther 1875b:297, *Geochelone leptocnemis, Cylindraspis leptocnemis*
Type locality: "district of Flacq..[&]..La Mare aux Songes...near Mahe'bourg...Mauritius." Restricted to "District of Flacq" [Mauritius] by Günther (1877:14).

Testudo microtympanum Boulenger 1891:4, *Geochelone microtympanum*
Type locality: "Mauritius" by supposition.

Testudo guentheri Gadow 1894:320 (senior homonym, not = *Geochelone elephantopus guentheri* Baur *in* Pritchard = *Chelonoidis guntheri*)
Type locality: "Mare aux Songes...Mauritius."

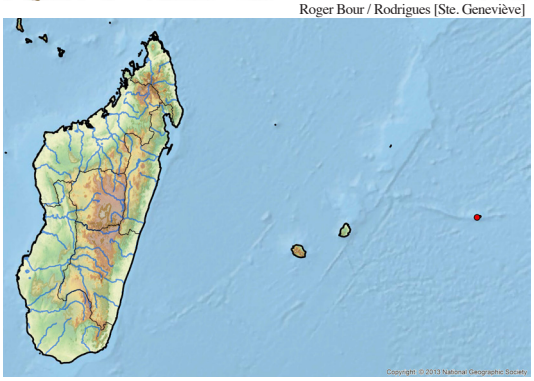
Testudo güntheri Gadow *in* Van Denburgh 1914:257 (*nomen novum*, invalid name, junior homonym, not = *Testudo güntheri* Baur 1889 = *Chelonoidis guntheri*), *Testudo guntheri*

Testudo gadowi Van Denburgh 1914:257 (*nomen novum*), *Geochelone (Megalochelys) gadowi, Geochelone (Cylindraspis) gadowi*

Cylindraspis vosmaeri (Suckow 1798) [(07:66)]
(Extinct, ca. 1800**)**
Rodrigues Giant Saddleback Tortoise



Roger Bour / Rodrigues [Ste. Geneviève]



Mauritius (Rodrigues [extinct])
IUCN Red List: Extinct (1996)

Testudo indica vosmaeri Suckow 1798:57, *Testudo vosmaeri, Geochelone (Cylindraspis) vosmaeri, Chersina (Cylindraspis) vosmaeri, Geochelone vosmaeri, Cylindraspis vosmaeri*
Type locality: Not known. Restricted to "Rodriguez" [Rodrigues] by Günther (1877:53).

Testudo rotunda Latreille *in* Sonnini and Latreille 1801:107 (*partim, nomen dubium*), *Chersine rotunda, Geochelone (Geochelone) rotunda*
Type locality: Not known. Restricted to "Mascarenes...Rodrigues" by Bour (2005:25).

Testudo rodericensis Günther 1873:397
Type locality: "Rodriguez" [Rodrigues].

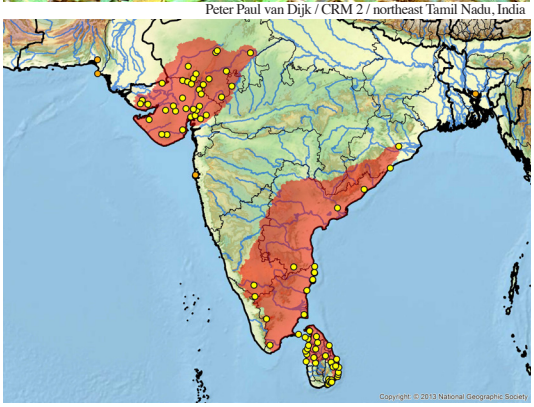
Testudo commersoni Vaillant 1898:138, *Geochelone commersoni, Cylindraspis commersoni*
Type locality: "Rodrigue" [Rodrigues].

Geochelone Fitzinger 1835 [(07:52)]
Geochelone Fitzinger 1835:112
Type species: *Geochelone stellata* [= *Testudo stellata* Schweigger 1812 = objective synonym of *Testudo elegans* Schoepff 1795], by subsequent designation by Fitzinger (1843:29).

Geochelone elegans (Schoepff 1795) [(65)]
Indian Star Tortoise



Peter Paul van Dijk / CRM 2 / northeast Tamil Nadu, India



(orange dots = trade)

India (Andhra Pradesh, Gujarat, Karnataka, Kerala, Madhya Pradesh, Rajasthan, Tamil Nadu), Pakistan, Sri Lanka
IUCN Red List: Vulnerable A4cd (2016); Previously: Least Concern (2000), Least Concern [Not Listed] (1996)
CITES: Appendix II, as Testudinidae spp.

Testudo elegans Schoepff 1795:111 [(65)], *Chersine elegans, Peltastes stellatus elegans, Geochelone elegans, Geochelone elegans elegans*
Type locality: "India orientali."

Testudo stellata Schweigger 1812:325 [(65)] (*nomen novum*), *Geochelone (Geochelone) stellata, Geochelone stellata, Peltastes stellatus*
Type locality: "India orientali."

Testudo actinodes Bell 1828a:419
Type locality: "Africâ" [in error].

Testudo actinoides Bell *in* Gray 1844:7 (*nomen novum*), *Peltastes stellatus actinoides*

Testudo megalopus Blyth 1854:640 [(66)]
Type locality: Not known. Restricted to "Calcutta" [India] by Das et al. (1998:127).

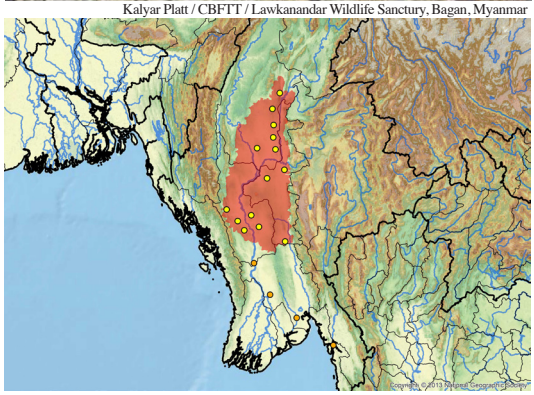
Peltastes stellatus maura Gray 1870c:8
Type locality: Not known.

Peltastes stellatus seba Gray 1870c:8
Type locality: Not known.

Geochelone platynota (Blyth 1863)
Burmese Star Tortoise



Kalyar Platt / CBFTT / Lawkanandar Wildlife Sanctury, Bagan, Myanmar



(orange dots = trade)

Myanmar

CBFTT Account: Platt, Thanda Swe, Win Ko Ko, Platt, Khin Myo Myo, Rainwater, and Emmett (2011)

IUCN Red List: Critically Endangered A1cd+2cd, C2a (2000); Previously: Critically Endangered (1996)

TFTSG Draft Red List: Critically Endangered (2011)

CITES: Appendix I

Testudo platynotus Blyth 1863:83, *Peltastes platynotus, Testudo platynota, Geochelone platynota, Geochelone elegans platynota*
Type locality: "Lower Pegu..[&]..Valley of the Irawadi" [Myanmar]. Restricted to "Irrawaddy Valley" [Myanmar] by Smith (1931:140).

Gopherus Rafinesque 1832 [(67)]

Gopherus Rafinesque 1815:74 (*nomen nudum*)

Gopherus Rafinesque 1832:64
Type species: *Gopherus polyphemus* [= *Testudo polyphemus* Daudin 1801], by original designation.

Xerobates Agassiz 1857a:252,446
Type species: *Xerobates berlandieri* Agassiz 1857a, by subsequent designation by Brown (1908:115).

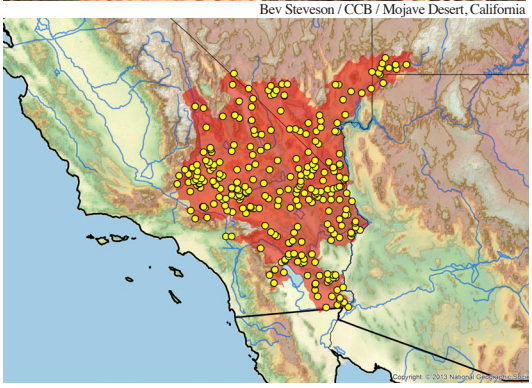
Bysmachelys Johnston 1937:439
Type species: *Bysmachelys canyonensis* † Johnston 1937 [= subjective synonym of *Testudo pertenuis* † Cope 1892 (see TEWG 2015)], by original monotypy.

Scaptochelys Bramble 1982:852
Type species: *Scaptochelys agassizii* [= *Xerobates agassizii* Cooper 1861], by original designation.

Gopherus agassizii (Cooper 1861) [(10:22, 11:11)]
Mojave Desert Tortoise, Mohave Desert Tortoise, Agassiz's Desert Tortoise



Bev Steveson / CCB / Mojave Desert, California



USA (Arizona, California, Nevada, Utah)

IUCN Red List: Vulnerable A1acde+2cde, E (1996)

TFTSG Draft Red List: Critically Endangered (2011)

CITES: Appendix II, as Testudinidae spp.

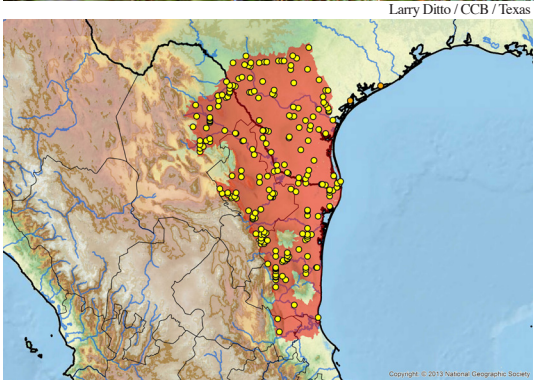
Xerobates agassizii Cooper 1861:120 [(10:22)], *Testudo agassizii, Gopherus agassizii, Gopherus polyphemus agassizii, Geochelone agassizii, Scaptochelys agassizii*
Type locality: "mountains of California, near Fort Mojave" [USA].

Xerobates lepidocephalus Ottley and Velázquez Solis 1989:497 [(11:11)]
Type locality: "western base of the Sierra San Vicente, approximately 1 km N of the Buena Mujer Dam, Baja California Sur, Mexico" [in error or introduced].

Gopherus berlandieri (Agassiz 1857a) [(14:34)]
Texas Tortoise, Berlandier's Tortoise



Larry Ditto / CCB / Texas



(orange dots = introduced)

Mexico (Coahuila, Nuevo Leon, San Luis Potosi, Tamaulipas), USA (Texas)
IUCN Red List: Least Concern (1996)
TFTSG Draft Red List: Near Threatened (2011)
CITES: Appendix II, as Testudinidae spp.

Testudo tuberculatu Berlandier 1850:287 [(14:34)] (*nomen oblitum*)
Type locality: "Tamaulipas" [Mexico].

Testudo bicolor Berlandier 1850:287 [(14:34)] (*nomen oblitum*)
Type locality: "Tamaulipas" [Mexico].

Xerobates berlandieri Agassiz 1857a:392,447, *Testudo berlandieri, Xerobates gopher berlandieri, Gopherus berlandieri, Gopherus polyphemus berlandieri, Scaptochelys berlandieri*
Type locality: "southern Texas [USA] and Mexico." Restricted to "Lower Rio Grande, Texas" [USA] by Stejneger and Barbour (1917:121); and to "Brownsville, Cameron County, Texas, USA" by Smith and Taylor (1950a:361).

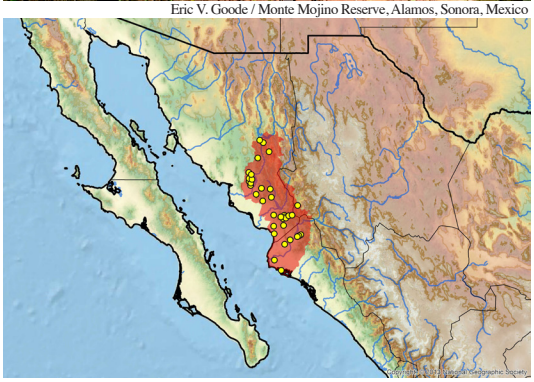
Testudo tuberculata Berlandier *in* True 1882:441 [(14:34)] (*nomen novum et nudum*)

Gopherus auffenbergi † Mooser 1972:61 [Late Pleistocene, Mexico (Aguascalientes)], *Xerobates auffenbergi*
Type locality: "Cedazo Ravine; 3 1/2 km. NE of Aguascalientes, Aguascalientes, Mexico."

Gopherus evgoodei Edwards, Karl, Vaughn, Rosen, Meléndez Torres, and Murphy 2016 [(68)]
Goode's Thornscrub Tortoise, Sinaloan Thornscrub Tortoise



Eric V. Goode / Monte Mojino Reserve, Alamos, Sonora, Mexico



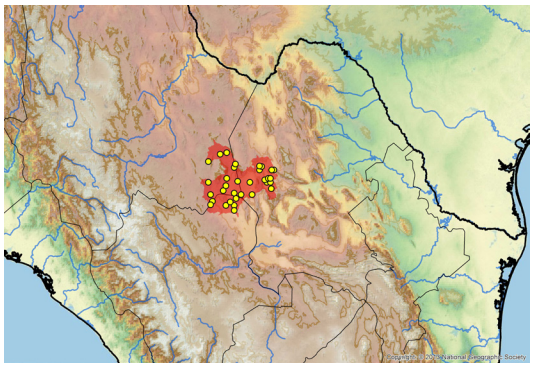
Mexico (Chihuahua, Sinaloa, Sonora)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Vulnerable (2016)
CITES: Appendix II, as Testudinidae spp.

Gopherus evgoodei Edwards, Karl, Vaughn, Rosen, Meléndez Torres, and Murphy 2016:140
Type locality: "Alamos (approximate location 27°02' N, 108°55' W, elevation 433 m), Sonora, Mexico."

Gopherus flavomarginatus Legler 1959 [(12:32)]
Bolson Tortoise



Eric V. Goode / TCC / Bolson de Mapimí, Durango, Mexico



Mexico (Chihuahua, Coahuila, Durango)
Introduced: USA (New Mexico)
IUCN Red List: Vulnerable A1cd (2007); Previously: Vulnerable (1996)
TFTSG Draft Red List: Critically Endangered (2017)
CITES: Appendix I

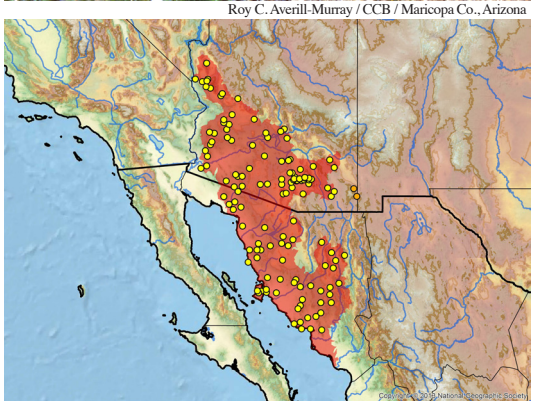
Gopherus flavomarginatus Legler 1959:337, *Gopherus polyphemus flavomarginatus, Gopherus flavomarginata*
Type locality: "30 to 40 miles from Lerdo, Durango, Mexico."

Gopherus huecoensis † Strain 1966:24 [Early Pleistocene, Blancan, USA (Texas)]
Type locality: "Madden Arroyo...Hudspeth County, Texas" [USA].

Gopherus morafkai Murphy, Berry, Edwards, Leviton, Lathrop, and Riedle 2011 (11:11)
Sonoran Desert Tortoise, Morafka's Desert Tortoise



Roy C. Averill-Murray / CCB / Maricopa Co., Arizona



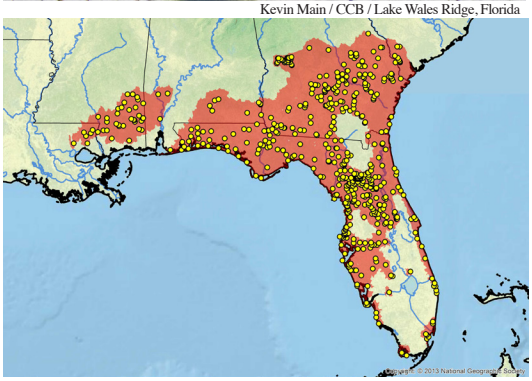
(orange dots = introduced or trade)
Mexico (Sinaloa, Sonora), USA (Arizona)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Vulnerable (2011)

Gopherus morafkai Murphy, Berry, Edwards, Leviton, Lathrop, and Riedle 2011:53 (11:11), *Xerobates morafkai*
Type locality: "Tucson (approximate location 32°7' N, 110°56' W, elevation 948 m), Pima County, Arizona, U.S.A."

Gopherus polyphemus (Daudin 1801) (12:33)
Gopher Tortoise



Kevin Main / CCB / Lake Wales Ridge, Florida



USA (Florida, Georgia, South Carolina, Alabama, Mississippi, Louisiana)
IUCN Red List: Vulnerable A1acde (1996)
TFTSG Draft Red List: Endangered (2011)
CITES: Appendix II, as Testudinidae spp.

Testudo polyphaemus Bartram 1791:18 (*nomen nudum*)

Testudo polyphemus Daudin 1801:256, *Emys polyphemus, Gopherus polyphemus, Xerobates polyphemus, Gopherus polyphemus polyphemus*
Type locality: "l'Amérique septentrionale, principalement sur les bords de la rivière Savannah et près de l'Alatamaha" [USA]. Restricted to "vicinity of Savannah, Georgia" [USA] by Schmidt (1953:104).

Testudo depressa Guérin 1829:pl.1,f.1
Type locality: Not designated. Restricted to "vicinity of Savannah, Georgia" [USA] by Schmidt (1953:105).

Testudo carolina Le Conte 1830:97 (*nomen novum* and junior homonym, not = *Testudo carolina* Linnaeus 1758 = *Terrapene carolina carolina*), *Xerobates carolinus, Gopherus carolinus*
Type locality: "pine forests of Georgia and Florida, ...never found north of Savannah river" [USA].

Testudo gopher Bartram *in* Gray 1844:4, *Xerobates gopher*
Type locality: Not designated. Restricted to "vicinity of Savannah, Georgia" [USA] by Schmidt (1953:105).

Testudo atascosae † Hay 1902:383 (*nomen dubium*) [Pleistocene, USA (Texas)], *Gopherus atascosae*
Type locality: "Atascosa county, Texas" [USA].

Gopherus praecedens † Hay 1916a:55 [Late Pleistocene, USA (Florida)]
Type locality: "Florida...Vero, St. Lucie county" [USA].

***Gopherus*, sp. indet.**

Testudo australis Girard 1858:470 (12:34) (*nomen dubium et oblitum*), *Gopherus australis*
Type locality: "Bay of Islands, New Zealand" [in error, based on a trade specimen].

Homopus Duméril and Bibron 1834 (07:67, 10:23) (64)

Homopus Duméril and Bibron 1834:357 (10:23)

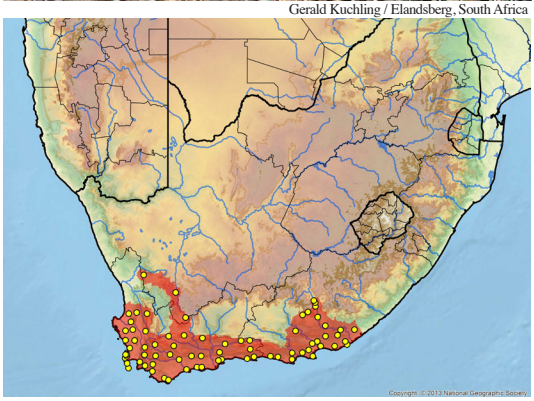
Type species: *Homopus areolatus* [*Tortue Aréolée* Schoepff = *Testudo areolata* Thunberg 1787], by subsequent designation by Duméril and Bibron (1835:7).

Homopus areolatus (Thunberg 1787) (64)

Parrot-beaked Tortoise, Common Padloper



Gerald Kuchling / Elandsberg, South Africa



South Africa

IUCN Red List: Least Concern (2017); Previously: Least Concern [Not Listed] (1996)

CITES: Appendix II, as Testudinidae spp.

Testudo areolata Thunberg 1787:180, *Chersine areolata*, *Homopus areolatus*, *Homopus areolata*

Type locality: "Indien" [India] [in error].

Testudo minuta Thunberg 1788:206 (*nomen nudum*)

Testudo miniata Lacepède 1788:166, synopsis[table] (09:6) (*nomen suppressum*, ICZN 2005a)

Type locality: "Cap de Bonne-espérance" [South Africa].

Testudo fasciata Daudin 1801:294 (junior homonym, not = *Testudo fasciata* Suckow 1798 = *Trachemys terrapen*), *Chersine fasciata*

Type locality: "l'île de Ceilan" [Sri Lanka] [in error].

Testudo africana Hermann 1804:218

Type locality: "Africa" by inference.

Chersine tetradactyla Merrem 1820:32

Type locality: "India orientali" [in error].

Testudo areolata pallida Gray 1831d:13

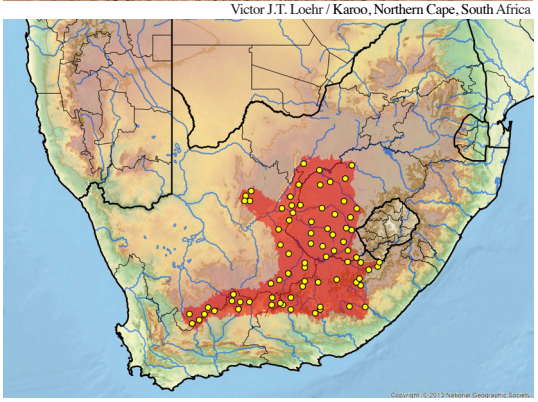
Type locality: Not designated. Restricted to "Süd-Afrika" [South Africa] by Wermuth and Mertens (1961:175).

Homopus femoralis Boulenger 1888a (64)

Greater Dwarf Tortoise, Greater Padloper



Victor J.T. Loehr / Karoo, Northern Cape, South Africa



South Africa

IUCN Red List: Least Concern (2017); Previously: Least Concern [Not Listed] (1996)

CITES: Appendix II, as Testudinidae spp.

Homopus femoralis Boulenger 1888a:251, *Testudo femoralis*

Type locality: "South Africa...Cradock."

Indotestudo Lindholm 1929

Testudo (*Indotestudo*) Lindholm 1929:285

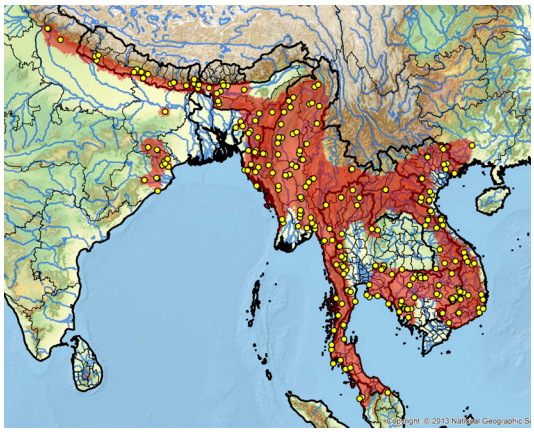
Type species: *Testudo* (*Indotestudo*) *elongata* [= *Testudo elongata* Blyth 1854], by original designation.

Indotestudo elongata (Blyth 1854) (66)

Elongated Tortoise, Yellow-headed Tortoise



Flora Ihlow / CBFTT / Doi Phu Nang National Park, Phayao Prov., Thailand



Bangladesh, Bhutan, Cambodia, China (?) (Guangxi, Yunnan), India (Assam, Bihar, Jharkhand, Meghalaya, Mizoram, Odisha, Sikkim, Tripura, Uttarakhand, Uttar Pradesh, West Bengal), Laos, Malaysia (Peninsular), Myanmar, Nepal, Thailand, Vietnam

CBFTT Account: Ihlow, Dawson, Hartmann, and Som (2016)

IUCN Red List: Endangered A1cd+2cd (2000); Previously: Vulnerable (1996)

TFTSG Draft Red List: Endangered (2011)

CITES: Appendix II, as Testudinidae spp.

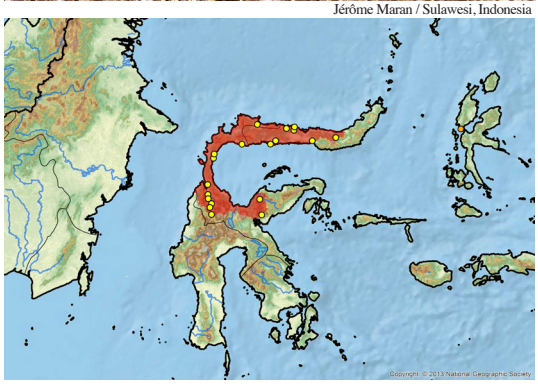
Testudo elongata Blyth 1854:639 [66], *Peltastes elongatus, Indotestudo elongata, Geochelone elongata, Indotestudo elongata elongata, Geochelone elongata elongata*
Type locality: "Arakan" [Myanmar].

Testudo parallelus Annandale 1913:76
Type locality: "Chaibassa (Singhbhum) district, Chota Nagpur" [India].

Indotestudo forstenii (Schlegel and Müller 1845) [69]
Forsten's Tortoise, Sulawesi Tortoise



Jérôme Maran / Sulawesi, Indonesia



(orange dot = erroneous original type locality)

Indonesia (Sulawesi)

IUCN Red List: Endangered A1cd+2cd (2000); Previously: Vulnerable (1996)

TFTSG Draft Red List: Endangered (2011)

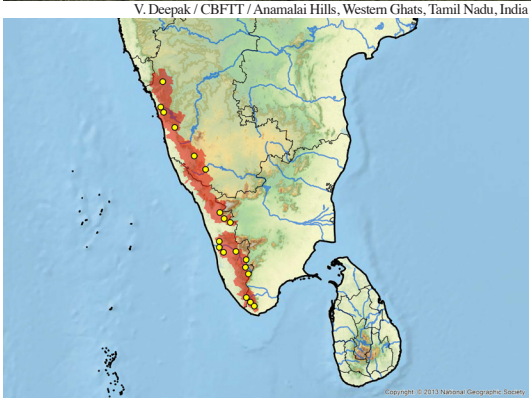
CITES: Appendix II, as Testudinidae spp.

Testudo forstenii Schlegel and Müller 1845:30 [69], *Peltastes forstenii, Geochelone forstenii, Indotestudo forstenii, Indotestudo elongata forstenii, Geochelone elongata forstenii*
Type locality: "Gilolo...Indischen Archipel" [Halmahera, Moluccas, Indonesia] [probably in error]; restricted here to "near Gorontalo, Sulawesi, Indonesia" by TTWG [69].

Indotestudo travancorica (Boulenger 1907) [07:68]
Travancore Tortoise



V. Deepak / CBFTT / Anamalai Hills, Western Ghats, Tamil Nadu, India



India (Karnataka, Kerala, Tamil Nadu)

CBFTT Account: Deepak, Ramesh, Bhupathy, and Vasudevan (2011)

IUCN Red List: Vulnerable A1cd (2000)

TFTSG Draft Red List: Endangered (2011)

CITES: Appendix II, as Testudinidae spp.

Testudo travancorica Boulenger 1907:560, *Geochelone travancorica, Indotestudo travancorica, Indotestudo elongata travancorica, Geochelone elongata travancorica*
Type locality: "near Trivandrum..[&]..Travancore hills between 500 and 1,000 feet altitude" [India].

Kinixys Bell 1827 [12:35]

Kinixys Bell 1827:398
Type species: *Kinixys homeana* Bell 1827, by subsequent designation by Bell (1828c:514).

Kinyxis Gray 1830e:6 (*nomen novum*)

Cinixys Wagler 1830b:138 (*nomen novum*)

Cinixys (*Cinothorax*) Fitzinger 1835:108
Type species: *Cinixys (Cinothorax) bellianus* [= *Testudo (Kinyxis) belliana* Gray 1830e], by subsequent designation by Fitzinger (1843:29).

Kinixis Hallowell 1839:161 (*nomen novum*)

Cinyxis Peters 1866:887 (*nomen novum*)

Kinothorax Gray 1873j:16 (*nomen novum*)

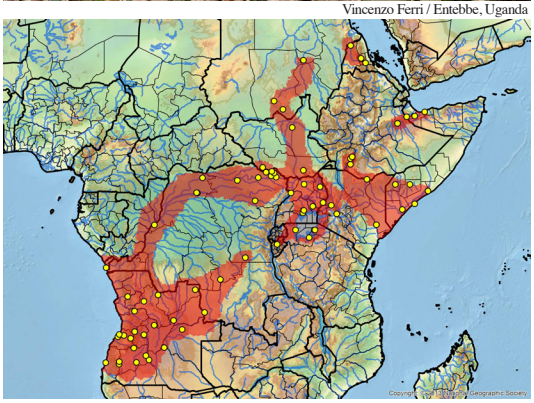
Madakinixys Vuillemin 1972b:169

Type species: *Madakinixys domerguei* Vuillemin 1972b, by original monotypy.

Kinixys belliana Gray 1830e (07:69, 08:11, 10:7, 12:35)
Bell's Hinge-back Tortoise



Vincenzo Ferri / Entebbe, Uganda



Angola, Burundi, Congo (DRC), Congo (ROC), Eritrea, Ethiopia, Kenya, Rwanda, Somalia, South Sudan, Sudan, Tanzania, Uganda
IUCN Red List: Least Concern [Not Listed] (1996)
SARCA Draft: Least Concern (regional) (2010)
TFTSG Draft Red List: Vulnerable (2013)
CITES: Appendix II, as Testudinidae spp.

Testudo (Kinyxis) belliana Gray 1830e:6 (10:7), *Kinixys belliana, Cinixys (Cinothorax) belliana, Cinixys belliana, Cinothorax bellianus, Kinixys belliana belliana*
Type locality: Not known.

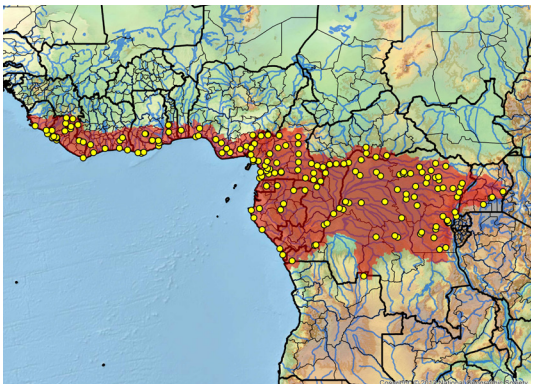
Kinixys schoensis Rüppell 1845:226, *Kinixys belliana schoensis*
Type locality: "Schoa, südlich von Abyssinien" [Ethiopia].

Kinixys belliana mertensi Laurent 1956:27
Type locality: "Dika, Uele...le nord du Congo" [Democratic Republic of Congo (DRC)].

Kinixys erosa (Schweigger 1812) (12:35)
Forest Hinge-back Tortoise, Serrated Hinge-back Tortoise



Tomas Diagne / Oyo State, Nigeria



Angola, Benin, Cameroon, Central African Republic, Congo (DRC), Congo (ROC), Equatorial Guinea, Gabon, Ghana, Guinea, Ivory Coast, Liberia, Nigeria, Sierra Leone, Togo, Uganda
CBFTT Account: Luiselli and Diagne (2014)
IUCN Red List: Data Deficient (1996)
TFTSG Draft Red List: Endangered (2013)
CITES: Appendix II, as Testudinidae spp.

Testudo erosa Schweigger 1812:321, *Kinixys erosa, Cinixys erosa, Kinixis erosa, Kinixys belliana erosa*
Type locality: "America septentrionali" [North America] [in error].

Testudo schoepfii Fitzinger 1826:44 (*nomen nudum*)

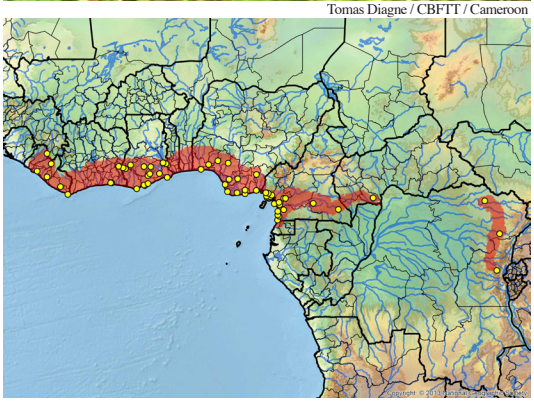
Kinixys castanea Bell 1827:398, *Cinixys (Cinixys) castanea, Cinixys castanea, Kinixis castanea*
Type locality: "Africa".

Kinixis denticulata Hallowell 1839:161, *Kinixys denticulata*
Type locality: "Liberia...banks of the St. Paul and Mesurado rivers."

Kinixys homeana Bell 1827 (12:35)
Home's Hinge-back Tortoise



Tomas Diagne / CBFTT / Cameroon

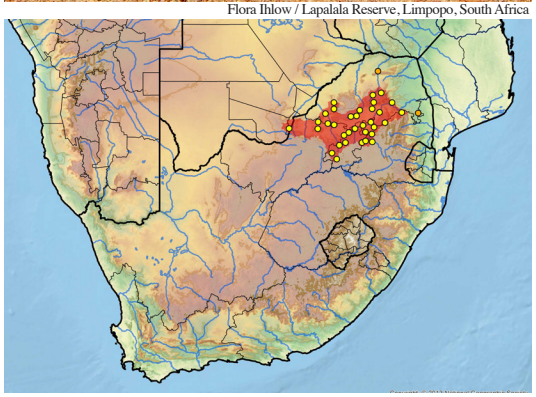


Benin, Cameroon, Central African Republic, Congo (DRC) (?), Equatorial Guinea, Gabon (?), Ghana, Ivory Coast, Liberia, Nigeria, Togo
CBFTT Account: Luiselli and Diagne (2013)

IUCN Red List: Vulnerable A2cd (2006); Previously: Data Deficient (1996)
TFTSG Draft Red List: Critically Endangered (2013)
CITES: Appendix II, as Testudinidae spp.
Kinixys homeana Bell 1827:400, *Cinixys homeana, Cinixys (Cinothorax) homeana, Testudo (Kinyxis) homeana, Kinixys belliana homeana*
Type locality: "Africâ occidentali" [West Africa].

Kinixys lobatsiana Power 1927 (12:35)
Lobatse Hinge-back Tortoise

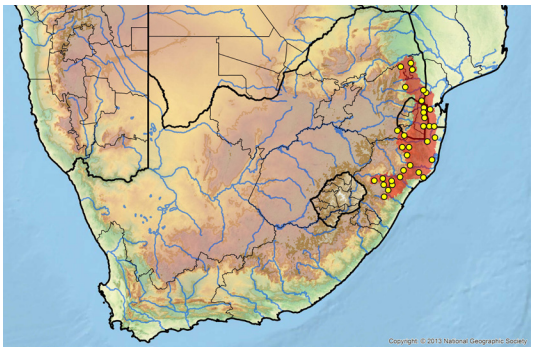

Flora Ihlow / Lapalala Reserve, Limpopo, South Africa


(orange dots = introduced)

Botswana, South Africa
IUCN Red List: Least Concern (2017)
TFTSG Draft Red List: Vulnerable (2017)
CITES: Appendix II, as Testudinidae spp.
Cinixys lobatsiana Power 1927:410, *Kinixys lobatsiana, Kinixys belliana lobatsiana*
Type locality: "Lobatsi [Bechuanaland Protectorate]" [Botswana].

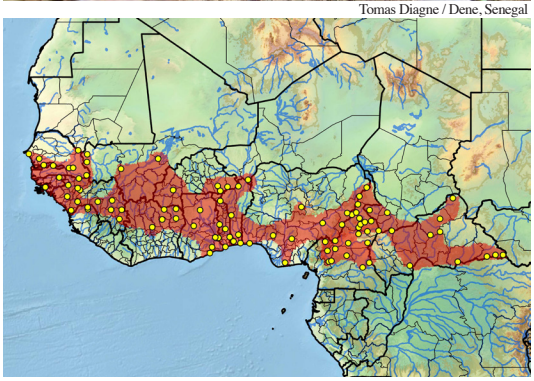
Kinixys natalensis Hewitt 1935 (12:35)
Natal Hinge-back Tortoise, KwaZulu-Natal Hinge-back Tortoise


Victor J.T. Loehr / KwaZulu-Natal, South Africa


Mozambique, South Africa, Swaziland
IUCN Red List: Near Threatened (1996)
SARCA Draft: Least Concern (2010)
TFTSG Draft Red List: Vulnerable (2013)
CITES: Appendix II, as Testudinidae spp.
Kinixys natalensis Hewitt 1935:353, *Kinixys belliana natalensis*
Type locality: "Jameson Drift, Tugela River, and...Dimane stream, near Jameson Drift" [Natal] [South Africa].

Kinixys nogueyi (Lataste 1886) (08:11, 09:39, 12:35)
Western Hinge-back Tortoise

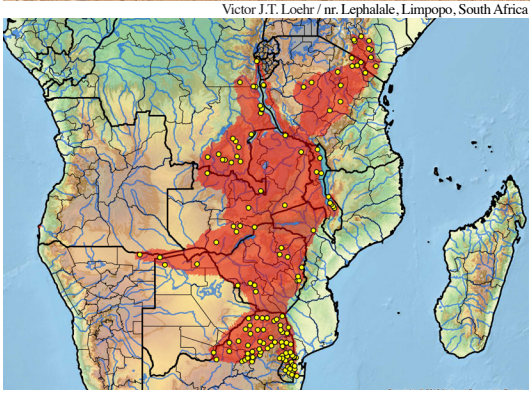

Tomas Diagne / Dene, Senegal


Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Congo (DRC), Gambia, Ghana, Guinea, Guinea-Bissau, Ivory Coast, Mali, Mauritania (?), Niger, Nigeria, Senegal, Sierra Leone, Togo
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Vulnerable (2013)
CITES: Appendix II, as Testudinidae spp.
Homopus nogueyi Lataste 1886:286, *Cinixys nogueyi, Cinixys belliana nogueyi, Kinixys nogueyi, Kinixys belliana nogueyi*
Type locality: "Médine (Haut-Sénégal)" [Senegal].
Cinixys dorri Lataste 1888:164
Type locality: "Haut-Sénégal" [Senegal]. Restricted to "Bakel, Haut-Sénégal" [Senegal] by Mertens and Wermuth (1955:372).

Kinixys spekii Gray 1863d [(12:35)]
Speke's Hinge-back Tortoise



Victor J.T. Loehr / nr. Lephalale, Limpopo, South Africa



Angola, Botswana, Burundi, Congo (DRC), Kenya, Malawi, Mozambique, Namibia (Caprivi), South Africa, Swaziland, Tanzania, Zambia, Zimbabwe
IUCN Red List: Not Evaluated
SARCA Draft: Least Concern (regional) (2010)
TFTSG Draft Red List: Vulnerable (2013)
CITES: Appendix II, as Testudinidae spp.

Kinixys spekii Gray 1863d:381, *Cinixys spekii, Kinixys belliana spekii*
Type locality: "Central Africa". Restricted to "Tanganyika Territory east of the lakes" [Tanzania] by Loveridge (1936:218).

Homopus darlingi Boulenger 1902b:15, *Kinixys darlingi, Kinixys belliana darlingi*
Type locality: "Mashonaland...Rhodesia...district about Salisbury... at Mazoë and between Umtali and Marandellas". Restricted to "Mashonaland" [Zimbabwe] by Mertens and Wermuth (1955:372) and to "Salisbury District, Mashonaland, Southern Rhodesia" [Zimbabwe] by Fritz and Havaš (2007:286).

Testudo procterae Loveridge 1923:928, *Malacochersus procterae*
Type locality: "Ikikuyu, Dodoma Dist., Tanganyika Territory" [Tanzania]. Restricted to "Ikikuyu, south of Gulwe, Tanganyika Territory" [Tanzania] by Fritz and Havaš (2007:286).

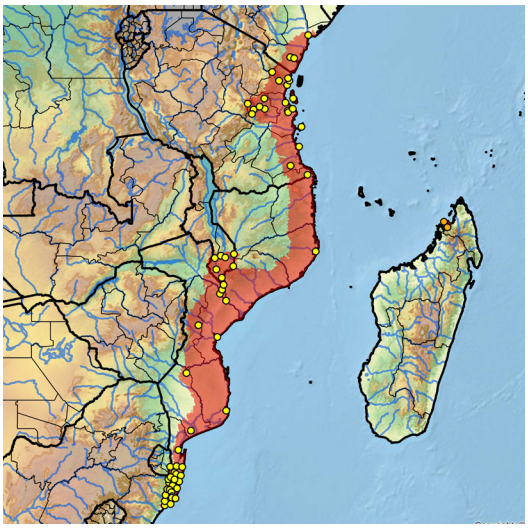
Kinixys australis Hewitt 1931:477, *Kinixys australis australis, Kinixys belliana australis*
Type locality: "White River, Eastern Transvaal" [South Africa].

Kinixys jordani Hewitt 1931:482
Type locality: "Isoka, N. Rhodesia" [Zambia].

Kinixys youngi Hewitt 1931:486
Type locality: "Nyasaland...near Livingstonia, on the shore of the lake" [Malawi].

Kinixys australis mababiensis FitzSimons 1932:37, *Kinixys belliana mababiensis*
Type locality: "Tsotsoroga Pan, Mababe Flats" [South Africa].

Kinixys zombensis Hewitt 1931 [(12:35)]
Southeastern Hinge-back Tortoise



(subspecies: *zombensis* = red, *domerguei* = orange dots)
Kenya, Malawi, Mozambique, South Africa, Tanzania, Madagascar (prehistoric introduction?)
IUCN Red List: Not Evaluated
SARCA Draft: Least Concern (regional) (2010)
TFTSG Draft Red List: Vulnerable (2013)
CITES: Appendix II, as Testudinidae spp.

Kinixys zombensis zombensis Hewitt 1931 [(12:35)]
Southeastern Hinge-back Tortoise



Flora Ihlow / Bonamanzi Game Reserve, KwaZulu Natal, South Africa

Malawi, Mozambique, South Africa, Tanzania

Kinixys belliana zombensis Hewitt 1931:469, *Kinixys zombensis, Kinixys zombensis zombensis*
Type locality: "Zomba, Nyassaland" [Malawi].

Kinixys belliana zuluensis Hewitt 1931:471, *Kinixys zuluensis*
Type locality: "Richards Bay, Zululand" [South Africa].

Kinixys zombensis domerguei (Vuillemin 1972b) (12:35)
Madagascan Hinge-back Tortoise

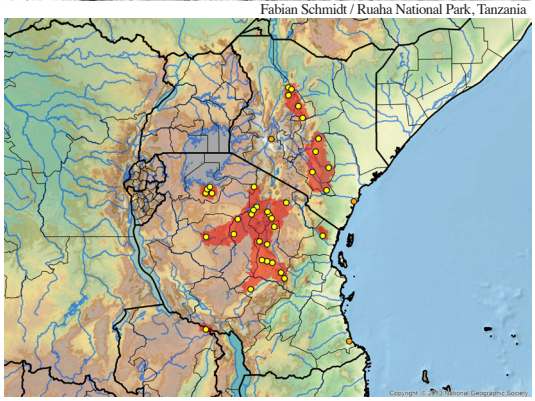

Thomas E.J. Leuteritz / CRM 6 / Nosy Faly, Madagascar

Madagascar (prehistoric introduction?)
Madakinixys domerguei Vuillemin 1972b:169, *Kinixys belliana domerguei, Kinixys zombensis domerguei*
Type locality: "Madagascar". Restricted to "canton d'Antsakoamanondro, N.W. de Madagascar" by Bour (1985:60).

Malacochersus Lindholm 1929
Testudo (Malacochersus) Lindholm 1929:285
Type species: *Testudo (Malacochersus) tornieri* [= *Testudo tornieri* Siebenrock 1903b], by original designation.

Malacochersus tornieri (Siebenrock 1903b)
Pancake Tortoise

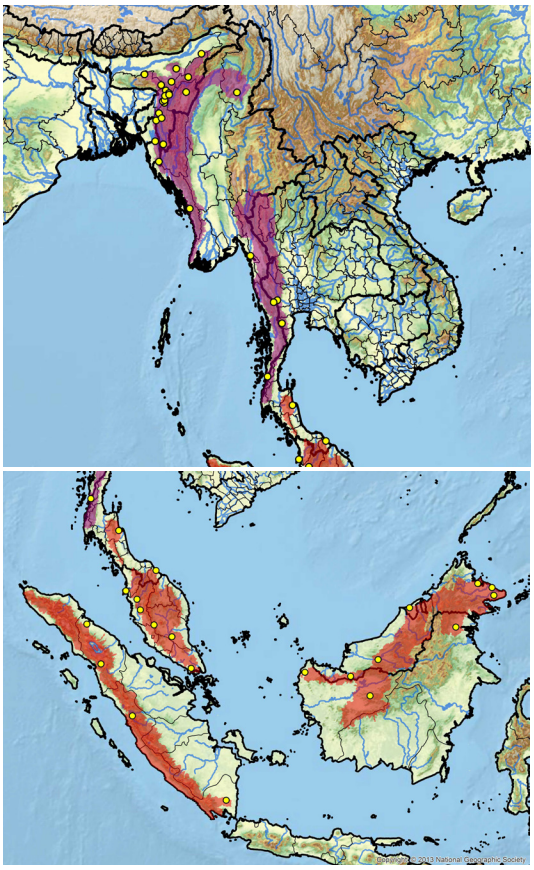

Fabian Schmidt / Ruaha National Park, Tanzania


(orange dots = possible trade)

Kenya, Tanzania, Zambia
IUCN Red List: Vulnerable A1bd (1996)
TFTSG Draft Red List: Critically Endangered (2013)
CITES: Appendix II, as Testudinidae spp.
Testudo tornieri Siebenrock 1903b:443, *Testudo (Malacochersus) tornieri, Malacochersus tornieri*
Type locality: "Bussisia am Viktoria Nyanza" [Tanzania]. Restricted to "Bussisia, Süden des Victoria-Sees, Tanganyika-Territorium" [Tanzania] by Mertens and Wermuth (1955:374).
Testudo loveridgii Boulenger 1920:263, *Malacochersus loveridgii*
Type locality: "Afrique orientale à Dodoma, entre Kilossa et Tabora" [Tanzania]. Restricted to "Dodoma, Ugogo, Tanganyika Territory" [Tanzania] by Fritz and Havaš (2007:287).

Manouria Gray 1854a
Manouria Gray 1854a:133
Type species: *Manouria fusca* Gray 1854a [= subjective synonym of *Testudo emys* Schlegel and Müller 1840], by original monotypy.
Teleopus Le Conte 1854:187
Type species: *Teleopus luxatus* Le Conte 1854 [= subjective synonym of *Testudo emys* Schlegel and Müller 1840], by monotypy.
Scapia Gray 1869a:167
Type species: *Testudo (Scapia) falconeri* Gray 1869 [= subjective synonym of *Testudo emys* Schlegel and Müller 1840 or *Testudo phayrei* Blyth 1854], by monotypy.

Manouria emys (Schlegel and Müller 1840)
Asian Giant Tortoise


(subspecies: *emys* = red, *phayrei* = purple)

Bangladesh, Brunei, India (Assam, Meghalaya, Mizoram, Nagaland), Indonesia (Kalimantan, Sumatra), Malaysia (Peninsular, East), Myanmar, Singapore (extirpated), Thailand
CBFTT Account: Stanford, Wanchai, Schaffer, Schaffer, and Thirakhupt (2015)
IUCN Red List: Endangered A1cd+2cd (2000); Previously: Vulnerable (1996)
TFTSG Draft Red List: Critically Endangered (2011)
CITES: Appendix II, as Testudinidae spp.

Manouria emys emys (Schlegel and Müller 1840)
Asian Brown Giant Tortoise


Chuck Schaffer / CBFTT / Tabin Wildlife Reserve, Sabah, Malaysia (East)

Brunei, Indonesia (Kalimantan, Sumatra), Malaysia (Peninsular, East), Singapore (extirpated), Thailand

Testudo emys Schlegel and Müller 1840:pl.4, *Manouria emys, Manouria emys emys, Geochelone emys, Geochelone emys emys, Testudo emys emys*
Type locality: "Sumatra" [Indonesia].

Testudo emydoides Duméril and Bibron *in* Duméril and Duméril 1851:4 (*nomen novum*), *Manouria emydoides*

Manouria fusca Gray 1854a:134
Type locality: "Singapore."

Teleopus luxatus Le Conte 1854:187, *Manouria luxata*
Type locality: "Java" [Indonesia] (in error).

Testudo (Scapia) falconeri Gray 1869a:169 (*partim, nomen dubium*), *Testudo falconeri, Scapia falconeri*
Type locality: "India?"

Manouria emys phayrei (Blyth 1854) [(65)]
Burmese Black Giant Tortoise


Craig B. Stanford / CBFTT / Kaeng Krachan National Park, Thailand

Bangladesh, India (Assam, Meghalaya, Mizoram, Nagaland), Myanmar, Thailand

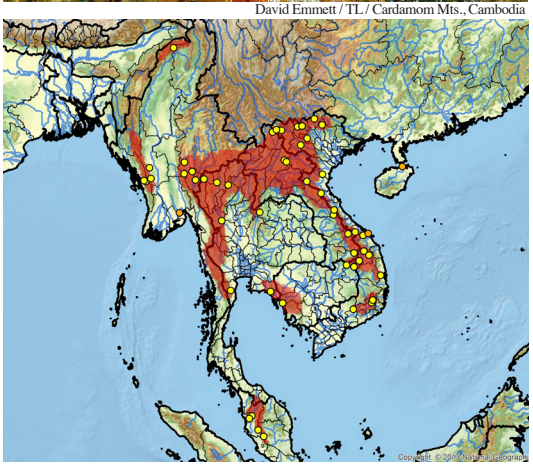
Testudo phayrei Blyth 1854:639 [(65)], *Scapia phayrei, Manouria emys phayrei*
Type locality: "Arakan; Tenasserim Provinces...Burma" [Myanmar].

Testudo (Scapia) falconeri Gray 1869a:169 (*partim, nomen dubium*), *Testudo falconeri, Scapia falconeri*
Type locality: "India?"

Testudo nutapundi Reimann and Nutaphand *in* Nutaphand 1979:193, *Geochelone nutapundi, Manouria emys nutapundi, Geochelone emys nutapundi, Manouria nutapundi*
Type locality: "Northern Thailand (Tak Province) and western Central Region (Kanchanaburi Province); Assam, Burma". Restricted to "Nord-Thailand, Tak-Provinz" by Obst (1983:253).

Manouria impressa (Günther 1882)
Impressed Tortoise


David Emmett / TL / Cardamom Mts., Cambodia


(orange dots = probable trade)

Cambodia, China (Yunnan), Laos, Malaysia (Peninsular), Myanmar, Thailand, Vietnam

IUCN Red List: Vulnerable A1acd, B1+2acd (2000); Previously: Vulnerable (1996)

TFTSG Draft Red List: Endangered (2011)

CITES: Appendix II, as Testudinidae spp.

Geoemyda impressa Günther 1882:343, *Testudo impressa, Geochelone impressa, Manouria impressa*
Type locality: "Siam" [Thailand].

Geoemyda latinuchalis Vaillant 1894:68, *Testudo latinuchalis*
Type locality: "la rivière Noire, Tonkin" [Vietnam].

Testudo pseudemys Boulenger 1903a:144
Type locality: "Batang Padang district, South Perak (1,000 feet to 2,000 feet)" [Malaysia].

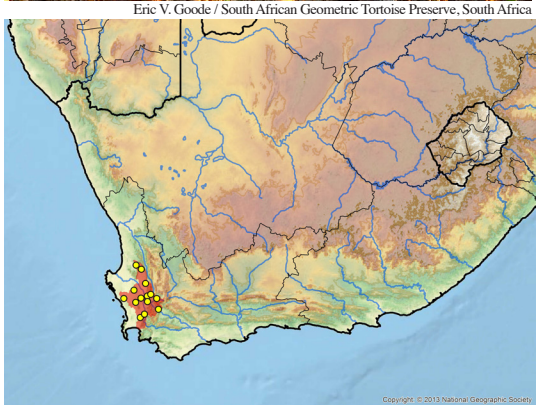
Psammobates Fitzinger 1835

Psammobates Fitzinger 1835:113
Type species: *Psammobates geometricus* Fitzinger [= *Testudo geometrica* Linnaeus 1758], by subsequent designation by Fitzinger (1843:29).

Peltastes (*Chersinella*) Gray 1870c:8
Type species: *Chersinella geometrica* [= *Testudo geometrica* Linnaeus 1758], by subsequent designation by Hewitt (1933:259). Lindholm (1929:286) previously designated *Testudo graeca* Linnaeus 1758 as type species, but it was not originally included in *Chersinella* by Gray (1870c), so therefore has no validity as type.

Psammobates geometricus (Linnaeus 1758)
Geometric Tortoise


Eric V. Goode / South African Geometric Tortoise Preserve, South Africa



South Africa
IUCN Red List: Critically Endangered A2acde+4acde (2015); Previously: Endangered (1996)
CITES: Appendix I

Testudo geometrica Linnaeus 1758:199, *Chersine geometrica, Hydrone geometrica, Psammobates geometricus, Peltastes geometricus, Peltastes geometrica, Peltastes (Chersinella) geometrica, Chersinella geometrica, Psammobates geometrica, Geochelone geometrica*
Type locality: "Asia." Restricted to "southwestern Cape Province, South Africa" by Baard (1991:9).

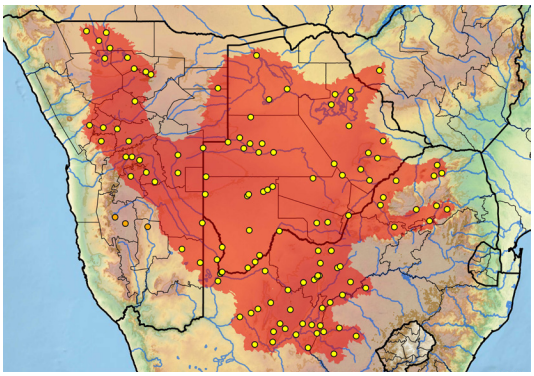
Testudo luteola Daudin 1801:277
Type locality: Not known.

Peltastes geographicus Gray 1869a:173 (*nomen novum*), *Testudo geographica*

Testudo strauchi Lidth de Jeude 1893:312, *Chersinella strauchi*
Type locality: "Cape of Good Hope" [South Africa].

Psammobates oculifer (Kuhl 1820)
Serrated Tent Tortoise, Kalahari Tent Tortoise


William R. Branch / Botswana


(orange dots = trade or possible misidentified)

Botswana, Namibia, South Africa, Zimbabwe
IUCN Red List: Least Concern [Not Listed] (1996)
SARCA Draft: Least Concern (2010)
TFTSG Draft Red List: Least Concern (2013)
CITES: Appendix II, as Testudinidae spp.

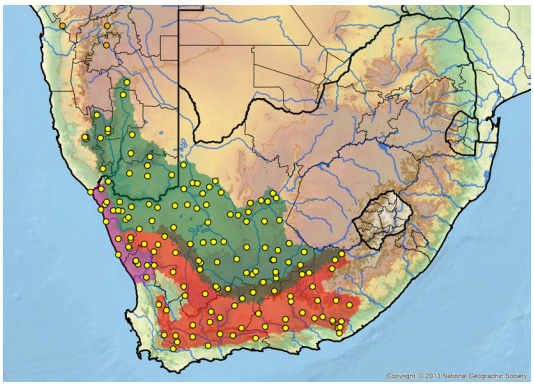
Testudo oculifera Kuhl 1820:77, *Emys oculifera, Clemmys oculifera, Chersinella oculifera, Psammobates oculifera, Psammobates oculifer, Psammobates oculiferus*
Type locality: "Cap" [Cape of Good Hope, South Africa] [in error].

Emys occilifera Kuhl *in* Gray 1830e:9 (*nomen novum*)

Emys kuhlii Gray 1831d:73 (*nomen dubium*)
Type locality: Not known.

Testudo semiserrata Smith 1839a:Reptilia, pl.6, *Peltastes semiserratus*
Type locality: "districts between Latakoo and the Tropic of Capricorn" [South Africa].

Psammobates tentorius (Bell 1828a) [61]
Tent Tortoise


(subspecies: *tentorius* = red, *trimeni* = purple, *verroxii* = green; overlap = intergrades; orange dots = possible trade or misidentified)

Namibia, South Africa
IUCN Red List: Least Concern (2017); Previously: Least Concern [Not Listed] (1996)
CITES: Appendix II, as Testudinidae spp.

Psammobates tentorius tentorius (Bell 1828a)
Southern Tent Tortoise, Common Tent Tortoise



Victor J.T. Loehr / nr. Prince Albert, Western Cape, South Africa

South Africa

Testudo tentoria Bell 1828a:420, *Testudo geometrica tentoria, Peltastes tentorius, Peltastes (Chersinella) tentoria, Chersinella tentoria, Chersinella tentoria tentoria, Psammobates tentoria, Psammobates tentoria tentoria, Psammobates tentorius, Psammobates tentorius tentorius, Testudo tentoria tentoria*
Type locality: "Africâ?"

Testudo geometrica nigriventris Gray 1856b:8
Type locality: "South Africa."

Chersinella tentoria albanica Hewitt 1933b:266, *Psammobates tentoria albanica*
Type locality: "neighbourhood of farm Mayfair, Albany District" [South Africa].

Chersinella tentoria tentorioides Hewitt 1933b:268, *Psammobates tentoria tentorioides*
Type locality: "Bowden Hall, Middelburg district, C.P." [Cape Province, South Africa].

Chersinella tentoria piscatella Hewitt 1933b:269, *Psammobates tentoria piscatella*
Type locality: "Little Fish River, Somerset East district" [South Africa].

Chersinella tentoria subsulcata Hewitt 1933b:270
Type locality: "farm "Brighton" near Steytlerville" [South Africa].

Chersinella tentoria karuica Hewitt 1933b:272, *Psammobates tentoria karuica*
Type locality: "farm "Drogekloof" near Klaarstroom, Prince Albert district" [South Africa].

Chersinella tentoria duerdeni Hewitt 1933b:279, *Psammobates tentoria duerdeni*
Type locality: "Graaff Reinet, C.P." [Cape Province, South Africa].

Chersinella tentoria lativittata Hewitt 1933b:281
Type locality: "Willowmore" [South Africa].

Chersinella tentoria karuella Hewitt 1933b:283
Type locality: "Uniondale, C.P." [Cape Province, South Africa].

Chersinella tentoria hexensis Hewitt 1933b:286
Type locality: "Hex River, Worcester district" [Cape Province, South Africa].

Psammobates tentorius trimeni (Boulenger 1886a)
Western Tent Tortoise



William R. Branch / Groenrivier, South Africa / male

Namibia (?), South Africa
TFTSG Draft Red List: Endangered (2013)

Testudo trimeni Boulenger 1886a:541, *Chersinella trimeni, Psammobates trimeni, Psammobates tentorius trimeni, Testudo tentoria trimeni, Psammobates tentoria trimeni*
Type locality: "Mouth of the Orange River" [Little Namaqualand, South Africa].

Psammobates tentorius verroxii (Smith 1839)
Northern Tent Tortoise



Victor J.T. Loehr / nr. Beaufort West, Northern Cape, South Africa

Namibia, South Africa

Testudo verroxii Smith 1839b:Reptilia,pl.8, *Peltastes verroxii, Chersinella verroxii, Chersinella verroxii verroxii, Psammobates tentorius verroxii, Testudo tentoria verroxii, Psammobates tentoria verroxii, Testudo tentorius verroxii*
Type locality: "South Africa, near the sources of the Garriep or Orange River." Restricted to "somewhere north of Aliwal North, between the Orange and Caledon Rivers...roughly 260 miles east of Niekirk's Hope" [South Africa] by Power (1932:466).

Peltastes verreauxii Gray 1870b:656 (*nomen novum*), *Testudo verreauxii, Psammobates verreauxii*

Testudo fiski Boulenger 1886a:542, *Testudo tentoria fiski, Chersinella fiski, Chersinella fiski fiski, Psammobates fiski, Psammobates fiski fiski*
Type locality: "De Aar, not far from Hopetown" [South Africa].

Testudo smithi Boulenger 1886a:542, *Chersinella verroxii smithi, Testudo smithi smithi, Testudo verroxii smithi*
Type locality: "S. Africa" [South Africa].

Testudo seimundi Boulenger 1903b:216, *Chersinella fiski seimundi*
Type locality: "3 miles east of Deelfontein" [Richmond District, Cape Province, South Africa].

Testudo boettgeri Siebenrock 1904a:194 (junior homonym, not = *Testudo graeca boettgeri* Mojsisovics 1889 = *Testudo (Chersine) hermanni boettgeri*), *Chersinella verroxii*

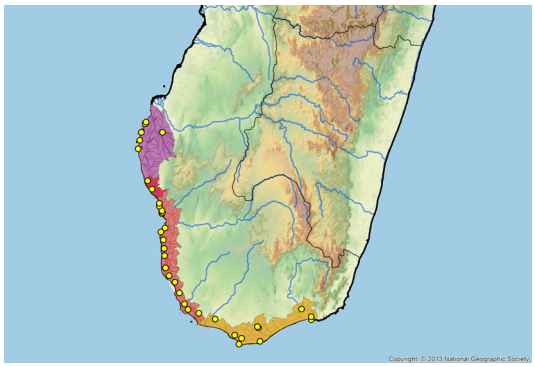
boettgeri, Chersinella boettgeri
Type locality: "Groß-Namaland in Südwestafrika" [Great Namaqualand, Namibia].
Homopus bergeri Lindholm 1906:348 (*partim*), *Testudo bergeri, Chersinella verroxii bergeri, Testudo smithi bergeri, Testudo verroxii bergeri*
Type locality: "nach Gibeon in Deutsch-Südwestafrika...möglicherweise weiter im Innern Südafrikas" [Namibia or South Africa].
Testudo oscarboettgeri Lindholm 1929:295 (*nomen novum*)
Chersinella schonlandi Hewitt 1934:303
Type locality: "Namaqualand, C.P." [Little Namaqualand, Cape Province, South Africa].
Chersinella fiski cronwrighti Hewitt 1934:317, *Psammobates fiski cronwrighti*
Type locality: "Hanover, C.P." [Cape Province, South Africa].
Chersinella fiski orangensis Hewitt 1934:319
Type locality: "between Philipstown and Petrusville district" [Cape Province, South Africa].
Chersinella fiski colesbergensis Hewitt 1934:321, *Psammobates fiski colesbergensis*
Type locality: "Colesberg" [Cape Province, South Africa].
Chersinella fiski grica Hewitt 1934:323
Type locality: "Marydale, situated about midway between Prieska and Kenhardt" [Prieska District, Cape Province, South Africa].
Chersinella fiski gricoides Hewitt 1934:326
Type locality: "Niekerks Hope, about midway between Griquatown and Prieska, C.P." [Niekerkshoop, Hay District, Cape Province, South Africa].
Chersinella fiski amasensis Hewitt 1934:333
Type locality: "Ukamas district" [Cape Province, South Africa].
Psammobates depressa FitzSimons 1938:154
Type locality: "8 miles west of Aus, Great Namaqualand" [Namibia].

Pyxis Bell 1827

Pyxis Bell 1827:395
Type species: *Pyxis arachnoides* Bell 1827, by original monotypy.
Acinixys Siebenrock 1902b:12
Type species: *Acinixys planicauda* [= *Testudo planicauda* Grandidier 1867], by original monotypy.
Bellemys Williams 1950:512 (*nomen novum*)
Pyxoides Vuillemin and Domergue 1972:193
Type species: *Pyxoides brygooi* Vuillemin and Domergue 1972, by original monotypy.

Pyxis arachnoides Bell 1827

Spider Tortoise



(subspecies: *arachnoides* = red, *brygooi* = purple, *oblonga* = orange)
Madagascar
IUCN Red List: Critically Endangered A4cd, E (2008); Previously: Vulnerable (1996)
CITES: Appendix I

Pyxis arachnoides arachnoides Bell 1827 (07:70)

Spider Tortoise, Common Spider Tortoise



Michael Ogle / Anakao, Madagascar

Madagascar
Pyxis arachnoides Bell 1827:395, *Testudo (Pyxis) arachnoides, Testudo arachnoides, Pyxis arachnoidea, Bellemys arachnoides, Pyxis arachnoides arachnoides*
Type locality: Not known. Restricted to "Soalara (Baie de Saint-Augustin), sud-ouest de Madagascar" by Bour (1979:153).
Testudo (Pyxis) aranoides Gray 1830e:6 (*nomen novum*), *Pyxis aranoides*
Pyxis madagascariensis Lesson 1831a:120
Type locality: "Madagascar."

Pyxis arachnoides brygooi (Vuillemin and Domergue 1972)

Northern Spider Tortoise



Roger Bour / Salary, nr. Forêt des Mikea, Madagascar

Madagascar
Pyxoides brygooi Vuillemin and Domergue 1972:193, *Pyxis arachnoides brygooi*
Type locality: "la côte Sud-Ouest, entre Morombe et Tuléar, aux alentours du lac Ihotry, dans la forêt des Mikea" [Madagascar]. Restricted to "Ampanonga (N.-W. Lac Ihotry), sud-ouest de Madagascar" by Bour (1979:153).

Pyxis arachnoides oblonga Gray 1869a

Southern Spider Tortoise



Anders G.J. Rhodin / TCC / CRM 6 / Berenty, Madagascar

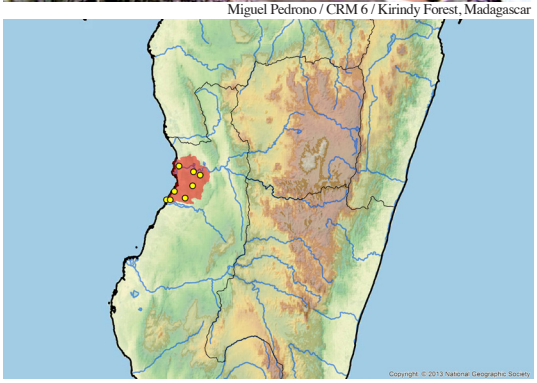
Madagascar

Pyxis arachnoidea oblonga Gray 1869a:173, *Pyxis arachnoides oblonga*
Type locality: Not known. Restricted to "Asia" by Gray (1873j:14); to "Madagascar; Mauritius" by Boulenger (1889:145); and to "Cap Sainte-Marie, province de Tuléar (Toliara), sud du Madagascar" by Bour (1982b:30).

Pyxis arachnoides matzi Bour 1979:143
Type locality: "Cap Sainte-Marie (Province de Tuléar), extrême sud du Madagascar."

Pyxis planicauda (Grandidier 1867)
Flat-tailed Tortoise, Flat-shelled Spider Tortoise


Miguel Pedrono / CRM 6 / Kirindy Forest, Madagascar



Madagascar
IUCN Red List: Critically Endangered A4acd (2008); Previously: Endangered (1996)
CITES: Appendix I

Testudo planicauda Grandidier 1867:223, *Acinixys planicauda, Pyxis (Acinixys) planicauda, Pyxis planicauda*
Type locality: "Mouroundava...cote sud-ouest de Madagascar" [Morondava].

Testudo morondavaensis Vuillemin 1972a:127
Type locality: "Morondava (côte sud-ouest de Madagascar)."

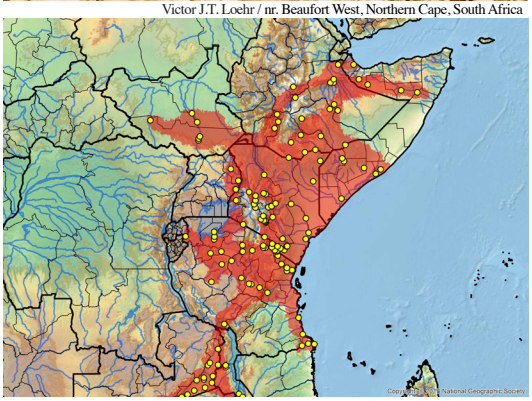
Stigmochelys Gray 1873j (07:52, 10:26)

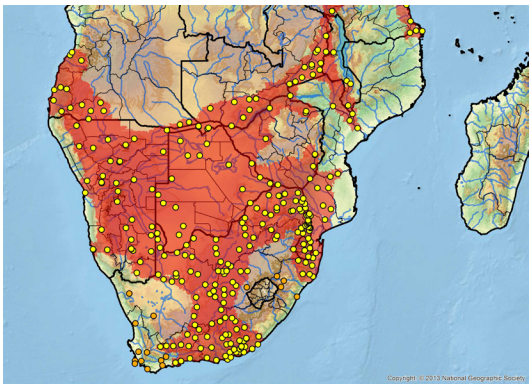
Testudo (Stigmochelys) Gray 1873j:5
Type species: *Testudo (Stigmochelys) pardalis* Bell 1828a, by original monotypy.

Megachersine Hewitt 1933b:257
Type species: *Megachersine pardalis* [= *Testudo pardalis* Bell 1828a], by original designation.

Stigmochelys pardalis (Bell 1828a) (07:71, 10:27)
Leopard Tortoise


Victor J.T. Loehr / nr. Beaufort West, Northern Cape, South Africa





(orange dots = introduced or questionable)

Angola, Botswana, Burundi, Ethiopia, Kenya, Malawi, Mozambique, Namibia, Rwanda, Somalia, South Africa, South Sudan, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe
IUCN Red List: Least Concern (2015); Previously: Least Concern [Not Listed] (1996)
CITES: Appendix II, as Testudinidae spp.

Testudo pardalis Bell 1828a:420, *Geochelone (Geochelone) pardalis, Geochelone pardalis, Testudo (Stigmochelys) pardalis, Megachersine pardalis, Testudo pardalis pardalis, Geochelone pardalis pardalis, Stigmochelys pardalis, Centrochelys pardalis, Centrochelys pardalis pardalis, Stigmochelys pardalis pardalis, Psammobates pardalis*
Type locality: "Promont. Bonae Spei" [Cape of Good Hope, South Africa].

Testudo biguttata Cuvier 1829:10 (*nomen nudum*)
Testudo armata Boie *in* Gray 1830e:4 (*nomen nudum*)
Testudo bipunctata Gray 1830e:4 (*nomen nudum*)
Testudo pardalis babcocki Loveridge 1935:4 (10:27), *Geochelone pardalis babcocki, Geochelone babcocki, Stigmochelys pardalis babcocki*

Type locality: "western slopes of Mount Debasien, Karamoja, Uganda at 5,500 feet."

Testudo Linnaeus 1758 (07:72) (**56, 70**)

Testudo Linnaeus 1758:197
Type species: *Testudo graeca* Linnaeus 1758 [= subjective synonym of *Testudo ibera* Pallas 1814], by subsequent designation by Fitzinger (1843:29) and Lindholm (1929:284); not *Testudo graeca* Auct. [= subjective synonym of *Testudo hermanni* Gmelin 1789] by earlier designation by Bell (1828c:514).

Chersine Merrem 1820:29 (09:40)
Type species: "*T. graeca* »L.« auct. = *T. hermanni* Gmelin" [= *Testudo hermanni* Gmelin 1789], by subsequent designation by Lindholm (1929:286).

Chersini Merrem *in* Gray 1825:210 (*nomen novum*)

Chersus Wagler 1830b:138
Type species: *Chersus marginatus* [*Testudo marginata* Schoepff 1793], by monotypy.

Cherseus Gray 1856b:10 (*nomen novum*)

Peltastes Gray 1869a:167,171 (junior homonym, not = *Peltastes* Illiger 1807 [= Hymenoptera] or *Peltastes* Agassiz 1838 [= Echinodermata] or *Peltastes* Fischer-Waldheim 1839 [= Orthoptera])
Type species: *Testudo graeca* Linnaeus 1758 [= *Peltastes graecus* sensu Gray 1869] [= subjective synonym of *Testudo ibera* Pallas 1814], by subsequent designation by Lindholm (1929:286).

Peltonia Gray 1872c:4 (*nomen novum*)

Testudo (Medaestia) Wussow 1916:170 (09:40)
Type species: *Medaestia graeca* sensu Wussow 1916 [= subjective synonym of *Testudo hermanni* Gmelin 1789] by subsequent designation by Mertens (1949:232).

Testudo (Pseudotestudo) Loveridge and Williams 1957:166, 276
Type species: *Testudo (Pseudotestudo) kleinmanni* [= *Testudo kleinmanni* Lortet 1883], by original designation.

Protestudo Chkhikvadze 1970:245
Type species: *Protestudo bessarabica* [= *Testudo bessarabica* † Riabinin 1918], by original designation.

Furculachelys Highfield 1990:1
Type species: *Furculachelys nabeulensis* Highfield 1990 [= *Testudo graeca nabeulensis*], by subsequent designation by Fritz and Havaš (2007:295).

Eurotestudo Lapparent de Broin, Bour, Parham, and Perälä 2006a:803
Type species: *Eurotestudo hermanni* [= *Testudo hermanni* Gmelin 1789], by original designation.

Testudo (Testudo) Linnaeus 1758 (07:72) (**70**)

Testudo Linnaeus 1758:197
Type species: *Testudo graeca* Linnaeus 1758 [= subjective synonym of *Testudo ibera* Pallas 1814], by subsequent designation by Fitzinger (1843:29) and Lindholm (1929:284); not *Testudo graeca* Auct. [= subjective synonym of *Testudo hermanni* Gmelin 1789] by earlier designation by Bell (1828c:514).

Chersus Wagler 1830b:138
Type species: *Chersus marginatus* [*Testudo marginata* Schoepff 1793], by monotypy.

Cherseus Gray 1856b:10 (*nomen novum*)

Peltastes Gray 1869a:167,171 (junior homonym, not = *Peltastes* Illiger 1807 [= Hymenoptera] or *Peltastes* Agassiz 1838 [= Echinodermata] or *Peltastes* Fischer-Waldheim 1839 [= Orthoptera])
Type species: *Testudo graeca* Linnaeus 1758 [= *Peltastes graecus* sensu Gray 1869] [= subjective synonym of *Testudo ibera* Pallas 1814], by subsequent designation by Lindholm (1929:286).

Peltonia Gray 1872c:4 (*nomen novum*)

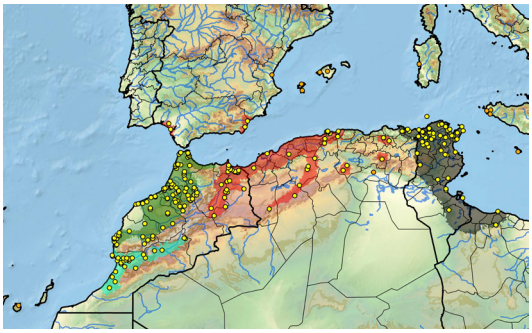
Testudo (Pseudotestudo) Loveridge and Williams 1957:166, 276
Type species: *Testudo (Pseudotestudo) kleinmanni* [= *Testudo kleinmanni* Lortet 1883], by original designation.

Protestudo Chkhikvadze 1970:245
Type species: *Protestudo bessarabica* [= *Testudo bessarabica* † Riabinin 1918], by original designation.

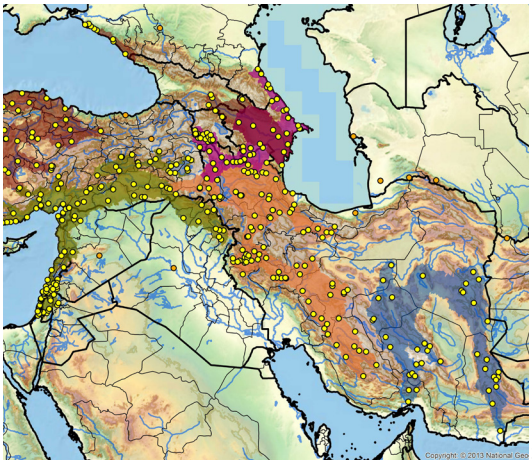
Furculachelys Highfield 1990:1
Type species: *Furculachelys nabeulensis* Highfield 1990 [= *Testudo graeca nabeulensis*], by subsequent designation by Fritz and Havaš (2007:295).

Testudo (Testudo) graeca Linnaeus 1758 (07:73, 11:12, 12:36, 14:35) (**71, 72**)

Spur-thighed Tortoise, Greek Tortoise, Moorish Tortoise


1


2


3

(subspecies [map #]: *graeca* = red [1], *armeniaca* = purple [3], *buxtoni* = orange [3], *cyrenaica* = pink [2], *ibera* = brown [2,3], *marokkensis* = green [1], *nabeulensis* = gray [1], *soussensis* = tourmaline [1], *terrestris* = olive [2,3], *zarudnyi* = blue [3]; overlap = intergrades [2,3]; orange dots = uncertain, possible or probable trade, or introduced)

Afghanistan (?), Algeria, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Iran (Alborz, Ardabil, Chahar Mahal Va Bakhtiari, East Azarbaijan, Esfahan, Fars, Gilan, Hamedan, Hormozgan, Ilam, Kerman, Kermanshah, Khorasan Razavi, Kohgiluyeh Va Boyer Ahmad, Kordestan, Lorestan, Markazi, Qazvin, Qom, Sistan Va Baluchestan,

South Khorasan, Tehran, West Azarbaijan, Yazd, Zanjan), Iraq, Israel, Jordan, Kosovo, Lebanon, Libya, Macedonia, Moldova, Morocco, Pakistan (?), Palestine (West Bank), Romania, Russia (Chechnya [?], Dagestan, Krasnodarskiy), Serbia, Spain, Syria, Tunisia, Turkey (Asian, European), Turkmenistan (?)

Introduced: Egypt, France, Italy (Continental, Sardinia [prehistoric], Sicily), Malta (?), Spain (Continental, Balearic Islands)

IUCN Red List: Global: Vulnerable A1cd (1996); Regional: Europe: Vulnerable A2bcde+4bcde (2004)

CITES: Appendix II, as Testudinidae spp.

Testudo (Testudo) graeca graeca Linnaeus 1758 (09:41)

Mediterranean Spur-thighed Tortoise



Chris Leone / Morocco [captivity]

Algeria, Morocco, Spain

Introduced: Spain (Balearic Islands)

Testudo graeca Linnaeus 1758:198, *Testudo graeca graeca, Peltastes graecus*
Type locality: "Africa." Restricted to "Santa Cruz in Barbarie" [Algeria] by Leven (1764:56), emended to "Santa-Cruz (alte spanische Festung bei Oran in der Algérie)" by Strauch (1862:67).

Testudo pusilla Linnaeus 1758:199 (senior homonym, not = *Testudo pusilla* † Bergounioux 1936), *Chersine pusilla*
Type locality: "India." Restricted to "Santa-Cruz (alte spanische Festung bei Oran in der Algérie)" by Strauch (1862:67).

Testudo mauritanica Duméril and Bibron 1835:44, *Testudo graeca mauritanica, Chersus mauritanicus, Peltastes mauritanicus, Testudo ibera mauritanica*
Type locality: "Mauritanie..[&]..les côtes occidentales de la mer Caspienne..[&]..les environs d'Alger." Restricted to "Umgebung von Algier" [Algeria] by Mertens and Wermuth (1955:378).

Testudo whitei Bennett *in* White 1836:361 (09:41), *Peltastes marginatus whitei, Testudo marginata whitei, Furculachelys whitei, Testudo graeca whitei*
Type locality: Not known. Restricted to "Algiers and its environs, Algeria" by Highfield and Martin (1989a:21).

Testudo (Testudo) graeca armeniaca Chkhikvadze and Bakradze 1991 (11:12)

Araxes Tortoise



Pavel Široký / Kuzeh Rash, West Azarbaijan Prov., Iran

Armenia, Azerbaijan, Georgia, Iran (Ardabil, East Azarbaijan, West Azarbaijan), Russia (Dagestan), Turkey

Testudo graeca pallasi Chkhikvadze 1989:67 (*nomen nudum*)

Testudo graeca armeniaca Chkhikvadze 1989:67 (*nomen nudum*)

Testudo graeca armeniaca Chkhikvadze and Bakradze 1991:60, *Testudo armeniaca, Testudo terrestris armeniaca*
Type locality: "Мегри, ЮВ Армянской ССР" [Megri, SE Armenian SSR] [Armenia].

Testudo graeca pallasi Chkhikvadze and Bakradze 2002:276, *Testudo pallasi*, *Testudo marginata pallasi*
Type locality: "Дагестан, окрестности села Гиляры-Даг" [Dagestan, near the village of Gilyary-Dag]. Emended here to "Gilyar, near Gilyary-Dag mountain, Magaramkent District, Dagestan, Russia (41.558499 N, 48.257204 E)."

Testudo dagestanica Chkhikvadze, Mazanaeva, and Shammakov 2011:337 (11:12), *Testudo graeca dagestanica*
Type locality: "Папас (Южный Дагестан)" [Papas (Southern Dagestan)] [Russia].

Testudo (Testudo) graeca buxtoni Boulenger 1921 (10:28)

Buxton's Tortoise



Pavel Široký / Dehlili, Kermanshah Prov., Iran

Iran (Alborz, Ardabil, Chahar Mahal Va Bakhtiari, East Azarbaijan, Esfahan, Fars, Gilan, Hamedan, Ilam, Kermanshah, Kordestan, Lorestan, Markazi, Qazvin, Tehran, West Azarbaijan, Zanjan), Turkey

Testudo ecaudata Pallas 1814:19 (10:28) (*nomen dubium* and junior homonym, not = *Testudo ecaudata* Daudin 1801 = *Mauremys caspica*)
Type locality: "nemorosis Persiae mari caspio conterminis" [forests of Persia along the Caspian Sea] [Iran].

Testudo buxtoni Boulenger 1921:251, *Testudo terrestris*

buxtoni, Testudo ibera buxtoni, Testudo graeca buxtoni
Type locality: "Manjil, between Resht and Kasuin, South Coast of the Caspian Sea, on a hill-side about 7,000–7,500 feet...northern Persia" [Iran].

Testudo perses Perälä 2002c:81, *Testudo graeca perses, Testudo ibera perses*
Type locality: "vicinity of Lalabad village, some 25 mi NW Kermānshāh, Kermānshāhān province, W Iran...34°27'N 46°50'E."

Testudo (Testudo) graeca cyrenaica Pieh and Perälä 2002
Cyrenaican Spur-thighed Tortoise


Chris Leone / Libya [captivity]

Libya

Testudo graeca cyrenaica Pieh and Perälä 2002:8, *Testudo cyrenaica*
Type locality: "Derna 32°46'N, 22°39'E (= Darnah, Cyrenaika Ostlibyen" [Libya].

Testudo (Testudo) graeca ibera Pallas 1814 (11:12)
Asia Minor Tortoise


Alexander A. Inozemtsev / CCB / TCF / nr. Novorossiysk, Krasnodarskiy, Russia

Albania (?), Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Kosovo, Macedonia, Moldova, Romania, Russia (Krasnodarskiy), Serbia, Turkey

IUCN Red List: The currently synonymized taxon *Testudo graeca nikolskii* listed as Critically Endangered A1abcde+2bcde (1996)

Testudo ibera Pallas 1814:18, *Chersus iberus, Cherseus iberus, Medaestia ibera, Testudo graeca ibera, Testudo ibera ibera, Testudo terrestris ibera*
Type locality: "Caucasi meridionalibus..&..convallibus orae meridionalis montosae Chersonesi tauricae" [southern Caucasus ..&.. steep mountainous southern coast of Crimea]. Restricted to "Iberia, haud pro cul a Tiflisio" [Tbilisi, Georgia] by Eichwald (1831:196); to "das Gebiet des mittleren Kura-Tales im Kaukasus" [Georgia] by Mertens (1946:113); and to "Tbilissi (Tiflis), Géorgie, URSS" [Georgia] by Bour (1987a:112).

Testudo georgicana Güldenstedt *in* Pallas 1814:18 (*nomen nudum*)

Testudo iberia Blyth 1854:642 (64) (*nomen novum*)

Testudo ibera bicaudalis Venzmer 1920:289
Type locality: "cilicischen Taurus in der kleinasiatischen Türkei" [Taurus Mts., Cilicia, Turkey].

Testudo ibera racovitzai Calinescu 1931:169
Type locality: "Turtucaia (jud. Durostor)" [Romania] [now Tutrakan, Silistra, Bulgaria].

Testudo graeca nikolskii Chkhikvadze and Tuniyev 1986:618, *Testudo ibera nikolskii, Testudo terrestris nikolskii, Testudo nikolskii*
Type locality: "Поселок Небуг Туапсинского района (Краснодарский край)" [Nebug Settlement, Tuapse Co., Krasnodar District] [Russia].

Testudo graeca pontica Khosatzky 1987:58 (*nomen nudum*)

Testudo (Testudo) graeca marokkensis Pieh and Perälä 2004 (09:42)
Morocco Tortoise


Chris Leone / Fez, Morocco [captivity]

Morocco

Introduced: Spain

Testudo graeca marokkensis Pieh and Perälä 2004:22 (09:42)
Type locality: "Tarmilete (33°23'N 6°04'W)" [Morocco].

Testudo graeca lamberti Pieh and Perälä 2004:33 (09:42)
Type locality: "22 km nördlich von Tetuan (= Tetouan; Tétuan 35°34'N 5°22'W)" [Morocco].

Testudo (Testudo) graeca nabeulensis (Highfield 1990)
Nabeul Tortoise


Norbert Halasz / Nabeul, Tunisia [captivity]

Libya, Tunisia

Introduced: Italy (Sardinia, Sicily)

Testudo flavominimaralis Highfield and Martin 1989b:[9] (*nomen dubium*), *Testudo graeca flavominimaralis*
Type locality: "North Africa." Restricted to "Libya" by Highfield (1990:41).

Furculachelys nabeulensis Highfield 1990:32, *Testudo nabeulensis, Testudo graeca nabeulensis*
Type locality: "forested area in the region of Nabeul, Tunisia." Restricted to "Waldgebiet 7–8 km nordwestlich von Nabeul Richtung Grombalia (Tunesien)" [Tunisia] by Pieh and Perälä (2004:42).

Testudo graeca sarda Ballasina 1995:166 (*nomen nudum*)

Testudo graeca sardinia van der Kuyl, Ballasina, Dekker, Maas, Willemsen, and Goudsmit 2002:180 (*nomen nudum*)

Testudo (Testudo) graeca soussensis Pieh 2001
Souss Valley Tortoise



Andreas Nöllert / east of Taroudannt, Morocco

Morocco

Testudo graeca soussensis Pieh 2001:211, *Testudo soussensis*
Type locality: "Umgebung von Agadir 30°28'N, 9°55'W, Sousstal, Südwest-Marokko" [Morocco].

Testudo (Testudo) graeca terrestris Forskål 1775 (10:29) (72)
Mesopotamian Tortoise



Norbert Halasz / Aleppo, Syria [captivity]

Iraq, Israel, Jordan, Lebanon, Palestine (West Bank), Syria, Turkey

Testudo terrestris Forskål 1775:viii,12 (10:13) (junior homonym, not = *Testudo terrestris* Garsault 1764 = *Emys orbicularis orbicularis* or *Testudo terrestris* Fermin 1765 = *Chelus fimbriata*; *nomen conservandum*, ICZN 1963), *Testudo graeca terrestris, Testudo terrestris terrestris, Testudo ibera terrestris*
Type locality: "Lohajae..&..Kahirae..&..Aleppo..&..Libanon" [Al Luhayyah..&..Cairo..&..Aleppo..&..Mount Lebanon]. Restricted to "Arabien" [Saudi Arabia] by Wermuth (1956:402); to "Libanon-Gebirge, Israel" by Wermuth (1958:152); and to "Aleppo (Alep, Halab; 36°12' N, 37°09' E), Syria (Syrian Arab Republic)" by neotype designation by Perälä and Bour (2004:117).

Testudo zolhafa Forskål *in* Gray 1830e:5 (*nomen nudum*)

Testudo floweri Bodenheimer 1935:197 (72), *Testudo graeca floweri, Testudo terrestris floweri, Testudo ibera floweri*
Type locality: "the Negeb...Palestine" [Israel]. Restricted to "Negev, Palestine (environs de Gaza, Israël)" [Israel] by Bour (1989:14).

Testudo graeca anamurensis Weissinger 1987:14, *Testudo ibera anamurensis, Testudo terrestris anamurensis, Testudo anamurensis*
Type locality: "Strand von Anamurum, 7 km westlich von Anamur, SW–Küste der Türkei" [Turkey].

Testudo antakyensis Perälä 1996:16, *Testudo graeca antakyensis, Testudo terrestris antakyensis, Testudo ibera antakyensis*
Type locality: "mountains to the east of Antakya in southern Turkey."

Testudo (Testudo) graeca zarudnyi Nikolsky 1896
Iranian Tortoise



Asghar Mobaraki / Saravan, Sistan Va Baluchestan, Iran [captivity]

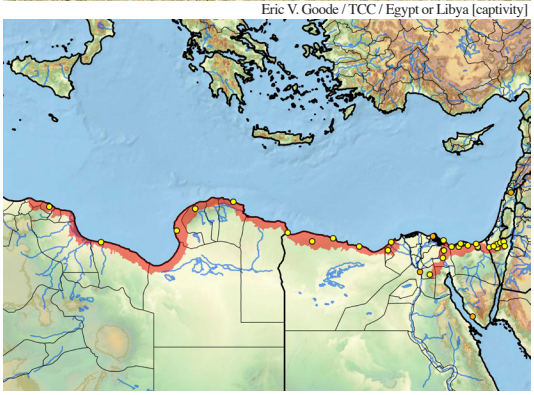
Afghanistan (?), Iran (Esfahan, Fars, Hormozgan, Kerman, Khorasan Razavi, Sistan Va Baluchestan, South Khorasan, Yazd), Pakistan (?), Turkmenistan (?)

Testudo zarudnyi Nikolsky 1896:369, *Testudo graeca zarudnyi, Testudo ibera zarudnyi, Testudo terrestris zarudnyi*
Type locality: "Persia orientali" [Iran]. Restricted to "montibus provinciae Birdschan in Persiae orientali" [Iran] by Nikolsky (1897:308); and to "Birjand in Khorāsan province, NE Iran (32º53' N 59º03' E)" by lectotype designation by Perälä (2002c:84).

Testudo (Testudo) kleinmanni Lortet 1883 (07:74) (73)
Egyptian Tortoise



Eric V. Goode / TCC / Egypt or Libya [captivity]



(orange dots = probable trade or extirpated)

Egypt, Israel, Libya, Palestine? (Gaza? [extirpated])

IUCN Red List: Critically Endangered A2abcd+3d (2003); Previously: Endangered (1996)

CITES: Appendix I

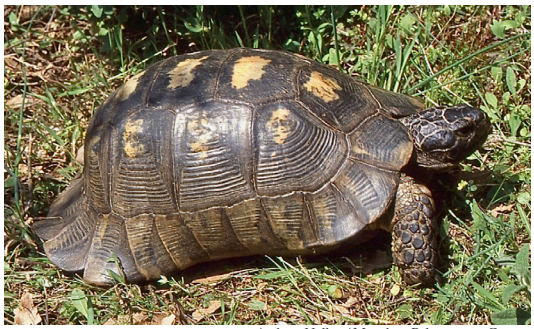
Testudo leithii Günther 1869:502 (junior homonym, not = *Testudo leithii* † Carter 1852), *Peltastes leithii, Medaestia leithii*
Type locality: "Sindh" [Pakistan] [in error].

Testudo kleinmanni Lortet 1883:188, *Pseudotestudo kleinmanni, Testudo kleinmanni kleinmanni*

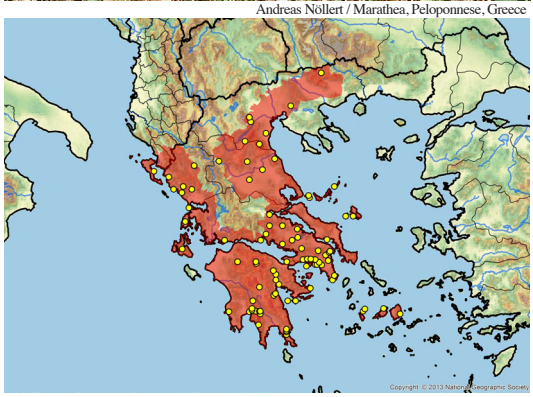
Type locality: "la basse Égypte, surtout dans les environs d'Alexandrie" [Egypt].

Testudo werneri Perälä 2001:570 (07:74), *Testudo kleinmanni werneri*
Type locality: "Northern Negev desert, Israel (14 km south of Be'er Sheva)."

Testudo (Testudo) marginata Schoepff 1793 (07:75, 11:12, 11:13)
Marginated Tortoise



Andreas Nöllert / Marathea, Peloponnese, Greece



Albania, Greece
Introduced: Cyprus, Italy (Continental, Sardinia [prehistoric])
IUCN Red List: Least Concern (2004); Previously: Least Concern [Not Listed] (1996)
CITES: Appendix II, as Testudinidae spp.

Testudo tabulata campanulata Walbaum 1782:124 (*unavailable name*)

Testudo marginata Schoepff 1793:52, *Chersine marginata, Chersus marginatus, Peltastes marginatus, Peltastes marginata, Testudo marginata marginata*
Type locality: Not known. Restricted to "Morea oggi Pelopponneso, Grecia" [Greece] by Bruno (1986:238), and "Greece, probably province of Attica, Stereá Eláda" by Bour (1987a:111).

Testudo graja Hermann *in* Schoepff 1793:52
Type locality: Not designated. Restricted to "Griechenland" [Greece] by Mertens and Wermuth (1955:380).

Testudo campanulata Walbaum *in* Gray 1830e:4 (*nomen nudum*)

Testudo graji Gray 1830e:4 (*nomen novum*)

Testudo campanulata Walbaum *in* Strauch 1862:65
Type locality: "Griechenland" [Greece].

Peltastes marginatus melas Gray 1870c:10
Type locality: "Greece."

Testudo nemoralis Schreiber 1875:557
Type locality: "Griechenland und Süditalien" [Greece and Italy]. Restricted to "Griechenland" [Greece] by Mertens and Wermuth (1955:380).

Testudo marginata cretensis † Bachmayer, Brinkerink, and Symeonidis 1975:111 [Pleistocene, Greece (Crete)]
Type locality: "Nordküste der Insel Kreta in der Nähe von Rethymnon" [Greece].

Testudo marginata sarda Mayer 1992:95
Type locality: "Olbia...Sardinia" [Italy].

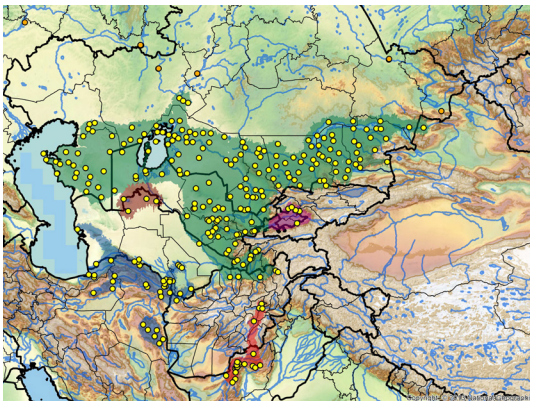
Testudo weissingeri Bour 1996:30, *Testudo marginata weissingeri*
Type locality: "Kardamili, Messénie, Grèce" [Greece].

Testudo (Agrionemys) Khosatzky and Mlynarski 1966
(07:72, 09:40) (**70**)

Testudinella Gray 1870c:12 (junior homonym, not = *Testudinella* Bory de Saint-Vincent 1822 [= Rotatoria])
Type species: *Testudinella horsfieldii* [= *Testudo horsfieldii* Gray 1844], by original monotypy.

Agrionemys Khosatzky and Mlynarski 1966:123 (*nomen novum*)
Type species: *Agrionemys horsfieldi* [= *Testudo horsfieldii* Gray 1844], by original designation.

Testudo (Agrionemys) horsfieldii Gray 1844 (07:77, 08:15, 09:43, 10:30, 14:38)
Central Asian Tortoise, Steppe Tortoise, Horsfield's Tortoise



(subspecies: *horsfieldii* = red, *bogdanovi* = purple, *kazachstanica* = green, *kuznetzovi* = brown, *rustamovi* = blue; orange dots = uncertain, possible trade, or introduced)
Afghanistan, China (Xinjiang), Iran (Golestan, Khorasan Razavi, North Khorasan, Semnan, South Khorasan), Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkmenistan, Uzbekistan
Introduced: Latvia
IUCN Red List: Vulnerable A2d (1996)
CITES: Appendix II, as Testudinidae spp.

Testudo (Agrionemys) horsfieldii horsfieldii Gray 1844 (10:30)
Central Asian Tortoise, Steppe Tortoise, Horsfield's Tortoise
Afghanistan, Pakistan

Testudo horsfieldii Gray 1844:7, *Testudinella horsfieldii, Homopus horsfieldii, Testudo (Homopus) horsfieldii, Medaestia horsfieldii, Agrionemys horsfieldii, Testudo horsfieldi, Testudo horsfieldii horsfieldii, Agrionemys horsfieldii horsfieldii*
Type locality: "India, Affghanistan [p.7]...Cabul [p.vi]." Restricted to "Afghanistan" by Günther (1864:7).

Homopus burnesii Blyth 1854:642 (**65**)
Type locality: "Afghanistan."

Testudo baluchiorum Annandale 1906:75 (10:28), *Agrionemys horsfieldii baluchiorum*
Type locality: "Baluchistan" [Pakistan].

Testudo (Agrionemys) horsfieldii bogdanovi Chkhikvadze *in* Chkhikvadze, Brushko, and Kubykin 2008 (10:30)
Fergana Valley Steppe Tortoise
Kyrgyzstan, Tajikistan, Uzbekistan

Agrionemys bogdanovi Chkhikvadze *in* Chkhikvadze, Brushko, and Kubykin 2008:100, *Testudo horsfieldii bogdanovi, Agrionemys horsfieldii bogdanovi*
Type locality: "Узбекистан (Окрестности городов Бухара, Самарканд, Карши), Восточный Туркменистан (окрестности Чарджоу) и Киргизстан (Чуйская долина и окрестности города Ош)" [Uzbekistan (vicinity of the cities of Bukhara, Samarkand, Karshy), East Turkmenistan (near Chardzhou) and Kyrgyzstan (Chuy valley and vicinity of Osh)]. Restricted to "Ферганская долина" [Ferghana Valley] [Uzbekistan] by Chkhikvadze et al. (2009:49).

Testudo (Agrionemys) horsfieldii kazachstanica Chkhikvadze 1988 (09:43, 10:30, 14:38)
Kazakhstan Steppe Tortoise


Shi Haitao / Huocheng Nature Reserve, Xinjiang, China

Afghanistan, China (Xinjiang), Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan
Agrionemys horsfieldi kazachstanica Chkhikvadze 1988:110, *Testudo horsfieldii kazachstanica, Agrionemys horsfieldii kazachstanica, Agrionemys kazachstanica*
Type locality: "Южное Прибалхашье, поселок Каратал" [southern Pribalkhashye (= Balkash), Karatal village]" [Kazakhstan].
Agrionemys kazachstanica terbishi Chkhikvadze 2009:60 (10:30, 14:38), *Testudo horsfieldii terbishi, Agrionemys horsfieldii terbishi*
Type locality: "Монголия, г. Кобдо" [Mongolia, g. Kobdo] [probable trade specimen].

Testudo (Agrionemys) horsfieldii kuznetzovi Chkhikvadze, Ataev, Shammakov, and Zatoka *in* Chkhikvadze, Ataev, and Shammakov 2009 (10:30)
Turkmenistan Steppe Tortoise
Turkmenistan, Uzbekistan
Agrionemys kazachstanica kuznetzovi Chkhikvadze, Ataev, Shammakov, and Zatoka *in* Chkhikvadze, Ataev, and Shammakov 2009:52, *Testudo horsfieldii kuznetzovi, Agrionemys horsfieldii kuznetzovi*
Type locality: "впадины Акчакая (Северный Туркменистан, к западу от г. Дашогуз – бывш. Ташауз)" [Akchakai depression (North Turkmenistan, west of the city of Dashoguz – prev. Tashauz)].

Testudo (Agrionemys) horsfieldii rustamovi Chkhikvadze, Amiranashvili, and Ataev 1990 (09:43, 10:30)
Kopet-Dag Steppe Tortoise


Andreas Nöllert / Kara-Kum Desert, N. of Ashgabat, Turkmenistan

Afghanistan, Iran (Golestan, Khorasan Razavi, North Khorasan, Semnan), Turkmenistan
Agrionemys horsfieldi rustamovi Chkhikvadze, Amiranashvili, and Ataev 1990:73, *Agrionemys horsfieldii rustamovi, Testudo horsfieldii rustamovi, Agrionemys rustamovi*
Type locality: "село Мадау (Кизыл-Атрекский район), Юго-Западный Туркменистан" [Madau Village, Kizyl Atrek Region, south-western Turkmenistan].

Testudo (Chersine) Merrem 1820 (07:72, 09:40) (**70**)

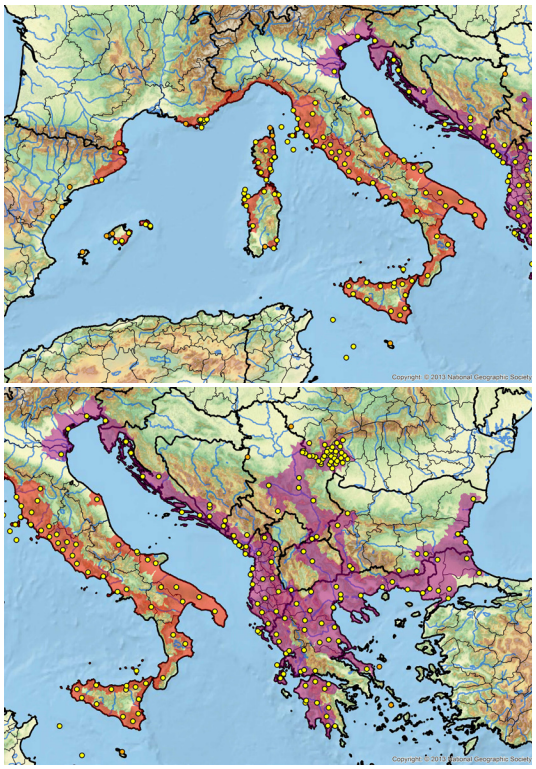
Chersine Merrem 1820:29 (09:40)
Type species: "*T. graeca* »L.« auct. = *T. hermanni* Gmelin" [= *Testudo hermanni* Gmelin 1789], by subsequent designation by Lindholm (1929:286).

Chersini Merrem *in* Gray 1825:210 (*nomen novum*)

Testudo (Medaestia) Wussow 1916:170 (09:40)
Type species: *Medaestia graeca* sensu Wussow 1916 [= subjective synonym of *Testudo hermanni* Gmelin 1789] by subsequent designation by Mertens (1949:232).

Eurotestudo Lapparent de Broin, Bour, Parham, and Perälä 2006a:803
Type species: *Eurotestudo hermanni* [= *Testudo hermanni* Gmelin 1789], by original designation.

Testudo (Chersine) hermanni Gmelin 1789 (14:36) (**74**)
Hermann's Tortoise



(subspecies: *hermanni* = red, *boettgeri* = purple; orange dots = probable introduced or trade)

Albania, Bosnia and Herzegovina, Bulgaria, Croatia, France (Continental, Corsica), Greece, Italy (Continental, Kosovo, Sardinia [prehistoric introduction], Sicily), Macedonia, Montenegro, Romania, Serbia, Slovenia, Spain (Continental, Balearic Islands [prehistoric introduction]), Turkey (European)

Introduced: Malta (?), Spain (Balearic Islands)

CBFTT Account: Bertolero, Cheylan, Hailey, Livoreil, and Willemsen (2011)

IUCN Red List: Near Threatened (2004); Previously: Near Threatened (1996)

CITES: Appendix II, as Testudinidae spp.

Testudo (Chersine) hermanni hermanni Gmelin 1789 (07:76, 14:36)
Western Hermann's Tortoise



Albert Bertolero / CBFTT / Albera, Catalonia, Spain

France (Continental, Corsica), Italy (Continental, Sicily), Spain (Continental)

Introduced: Italy (Sardinia [prehistoric introduction]), Spain (Balearic Islands)

IUCN Red List: Endangered B1+2abcde (1996)

Testudo hermanni Gmelin 1789:1041, *Testudo hermanni hermanni, Protestudo hermanni, Agrionemys hermanni, Eurotestudo hermanni, Chersine hermanni, Chersine hermanni hermanni*
Type locality: Not designated. Restricted to "Collobrières, massif de Maures, Var, France" by Bour (1987a:116).

Testudo graeca bettai Lataste 1881:396
Type locality: Not known.

Testudo globosa † Portis 1890:3 (14:37) [Early Pleistocene, Villafranchian, Italy (mainland)]
Type locality: "le Ville...Valdarno Superiore...Toscana" [Italy].

Testudo oriens † Portis 1890:9 (14:37) [Early Pleistocene, Villafranchian, Italy (mainland)]
Type locality: "le Mignaie...Valdarno Superiore...Toscana" [Italy].

Testudo seminota † Portis 1890:10 (14:37) [Early Pleistocene, Villafranchian, Italy (mainland)]
Type locality: "il Tasso...Valdarno Superiore...Toscana" [Italy].

Testudo hermanni robertmertensi Wermuth 1952:162
Type locality: "Gebirge nördlich von Arta, Mallorca, Balearen" [mountains north of Arta, Mallorca, Balearic Islands] [Spain].

Testudo (Chersine) hermanni boettgeri Mojsisovics 1889
Eastern Hermann's Tortoise



Adrian Hailey / CBFTT / Greece

Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Italy (?) (Continental), Kosovo, Macedonia, Montenegro, Romania, Serbia, Slovenia, Turkey (European)

Testudo graeca boettgeri Mojsisovics 1889:242 (senior homonym, not = *Testudo boettgeri* Siebenrock 1904a

= *Psammobates tentorius verroxii*), *Testudo hermanni boettgeri, Testudo boettgeri, Testudo boettgeri boettgeri, Eurotestudo boettgeri, Chersine hermanni boettgeri*
Type locality: "Orsova...Cernathal...Süd-Ungarn" [Romania]. Restricted to "Orsova, Banat" [Romania] by Boettger (1893:11).

Testudo graeca hercegovinensis Werner 1899:818, *Testudo hercegovinensis, Testudo boettgeri hercegovinensis, Testudo hermanni hercegovinensis, Eurotestudo hercegovinensis*
Type locality: "Trebinje...Hercegovina" [Bosnia and Herzegovina].

Testudo enriquesi Parenzan 1932:1160
Type locality: "Conca di Elbassan, nella vallata dello Skumbi, in Albania Centrale."

TRIONYCHOIDEA Gray 1825

Trionicidae Gray 1825:212
Trionychoidea Fitzinger 1826:5
Trionychia Hummel 1929:362

CARETTOCHELYIDAE Boulenger 1887a

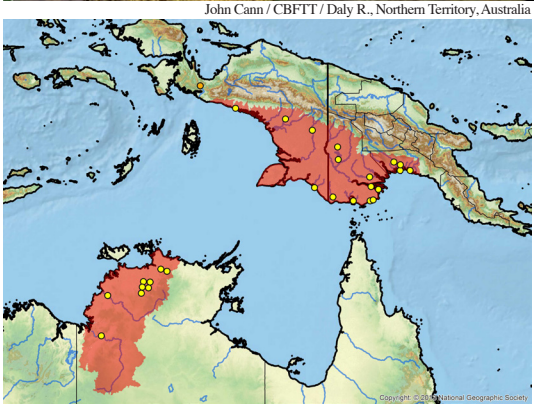
Carettochelydidae Boulenger 1887a:171
Carettochelydes Baur 1891a:190
Carettochelyidae Baur 1891c:637

Carettochelys Ramsay 1886

Carettochelys Ramsay 1886:158
Type species: *Carettochelys insculpta* Ramsay 1886, by original monotypy.

Carettochelys insculpta Ramsay 1886 (07:78, 08:10)
Pig-Nosed Turtle, Fly River Turtle


John Cann / CBFTT / Daly R., Northern Territory, Australia


(orange dot = introduced or trade)

Australia (Northern Territory), Indonesia (Papua), Papua New Guinea (Southern)

CBFTT Account: Georges, Doody, Eisemberg, Alacs, and Rose (2008)

IUCN Red List: Vulnerable A1bd (2000); Previously: Vulnerable (1996)
TFTSG Draft Red List: Endangered (2011)
CITES: Appendix II

Carettocchelys insculptus Ramsay 1886:158, *Carettochelys insculptus, Carettochelys insculpta, Carettochelys insculpta insculpta*
Type locality: "Fly River, New Guinea." Restricted to "Strickland River...upper right hand branch of the Fly River" by Waite (1905:110); and to "Turtle Camp, Strickland River [Papua New Guinea] [6º25'30" S, 142º04'30" W]" by Mackay (2003:39).

Carettochelys insculpta canni Wells 2002a:1 (07:78, 08:10, 10:43) (*unavailable name*), *Carettochelys canni*
Type locality: "near Ooloo Crossing, Daly River, Northern Territory [Australia]"

TRIONYCHIDAE Gray 1825

Amydae Oppel 1811:9 (*partim*)
Trionyces Schmid 1819:18
Trionicidae Gray 1825:212
Trionychoidea Fitzinger 1826:5
Trionychidae Bell 1828c:515
Trionycidae Bonaparte 1831:63
Trionychidi Portis 1890:22

CYCLANORBINAE Lydekker 1889

Cyclanosteina Gray 1864b:94
Cyclanorbinae Lydekker 1889:x

Cyclanorbis Gray 1854a

Cryptopus Duméril and Bibron 1835:499 (junior homonym, not = *Cryptopus* Latreille 1829 [= Crustacea])
Type species: *Cryptopus senegalensis* Duméril and Bibron 1835, by subsequent designation by Bour et al. (1995:82).

Cyclanorbis Gray 1854a:135
Type species: *Cyclanorbis petersii* Gray 1854a [= subjective synonym of *Cryptopus senegalensis* Duméril and Bibron 1835], by original monotypy.

Cryptopodus Duméril 1856:374 (*nomen novum*)

Cyclanosteus Gray 1856a:201
Type species: *Cyclanosteus senegalensis* [= *Cryptopus senegalensis* Duméril and Bibron 1835], by subsequent designation by Günther (1865:108).

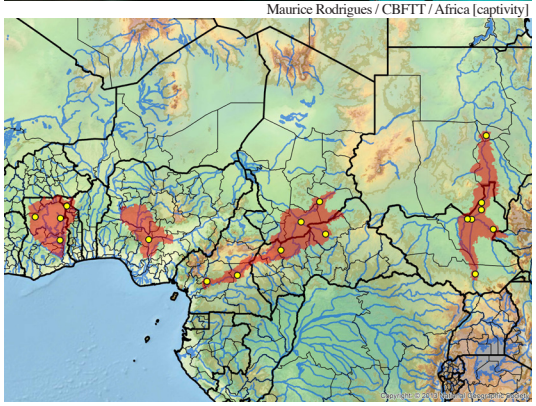
Tetrathyra Gray 1865a:205
Type species: *Tetrathyra baikii* Gray 1865a [= subjective synonym of *Cryptopus senegalensis* Duméril and Bibron 1835], by original monotypy.

Baikiea Gray 1869a:215
Type species: *Baikiea elegans* Gray 1869a, by original monotypy.

Cyclanorbis elegans (Gray 1869a)
Nubian Flapshell Turtle



Maurice Rodrigues / CBFTT / Africa [captivity]



Benin (?), Cameroon, Central African Republic, Chad, Ethiopia (?), Ghana, Nigeria, South Sudan, Sudan, Togo

CBFTT Account: Baker, Diagne, and Luiselli (2015)

IUCN Red List: Near Threatened (1996)

TFTSG Draft Red List: Critically Endangered (2016)

CITES: Appendix II, as *Cyclanorbis* spp.

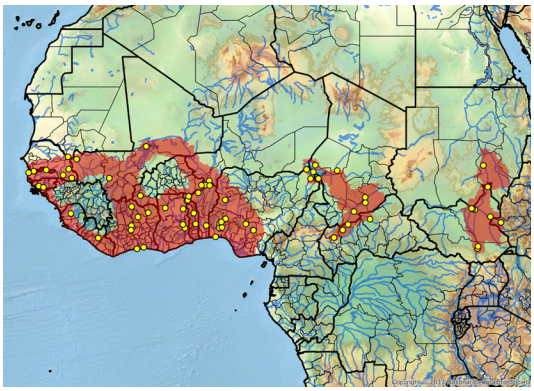
Baikiea elegans Gray 1869a:222, *Cyclanorbis elegans, Cyclanosteus elegans*
Type locality: "Africa." Restricted to "West Africa" by Gray (1873j:86); and to "Niger River drainage in west Africa" by lectotype designation by Webb (1975:349).

Cyclanorbis oligotylus Siebenrock 1902c:810
Type locality: "Nubien...oberen Nil" [Nubia...upper Nile] [Sudan].

Cyclanorbis senegalensis (Duméril and Bibron 1835) [75]
Senegal Flapshell Turtle, Sahelian Flapshell Turtle



William R. Branch / Northern Prov., Sierra Leone



Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Ethiopia, Gambia, Ghana, Guinea (?), Guinea-Bissau, Ivory Coast, Liberia, Mali, Mauritania (extirpated?), Niger, Nigeria, Senegal, Sierra Leone, South Sudan, Sudan, Togo

IUCN Red List: Near Threatened (1996)

TFTSG Draft Red List: Vulnerable (2016)

CITES: Appendix II, as *Cyclanorbis* spp.

Cryptopus senegalensis Duméril and Bibron 1835:504, *Emyda senegalensis, Cyclanosteus senegalensis, Cyclanorbis senegalensis*
Type locality: "Sénégal."

Cyclanorbis petersii Gray 1854a:135, *Cyclanosteus petersii, Cycloderma petersii*
Type locality: "West Africa, River Gambia" [The Gambia].

Cycloderma senegalense Duméril 1861a:168 (justified emendation)

Tetrathyra baikii Gray 1865a:205
Type locality: "West Africa, River Niger?" Restricted to "Niger River drainage in west Africa" by lectotype designation by Webb (1975:350).

Cyclanosteus senegalensis equilifera Gray 1865b:425
Type locality: "the Niger" [Niger River, West Africa].

Cyclanosteus senegalensis normalis Gray 1865b:425
Type locality: "the Niger" [Niger River, West Africa].

Cyclanosteus senegalensis callosa Gray 1865b:425
Type locality: "the Niger" [Niger River, West Africa].

Tetrathyra vaillantii Rochebrune 1884:36
Type locality: "Sénégambie" [Senegal and The Gambia].

Cycloderma Peters 1854

Cycloderma Peters 1854:216
Type species: *Cycloderma frenatum* Peters 1854, by original monotypy.

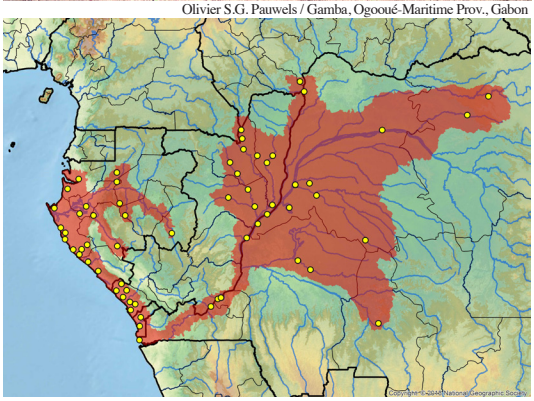
Heptathyra Cope 1860:294
Type species: *Heptathyra aubryi* [= *Cryptopodus aubryi* Duméril 1856], by original monotypy.

Aspidochelys Gray 1860a:6
Type species: *Aspidochelys livingstonii* Gray 1860a [= subjective synonym of *Cycloderma frenatum* Peters 1854], by original monotypy.

Cycloderma aubryi (Duméril 1856) (10:31)
Aubry's Flapshell Turtle

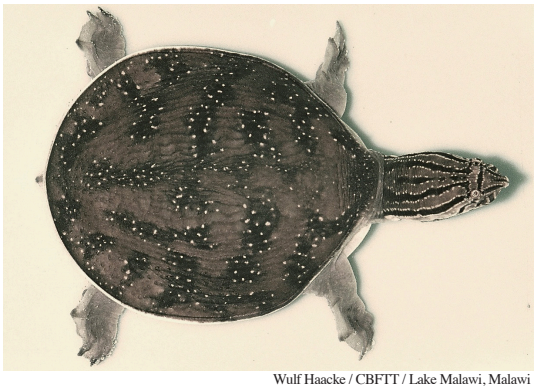


Olivier S.G. Pauwels / Gamba, Ogooué-Maritime Prov., Gabon

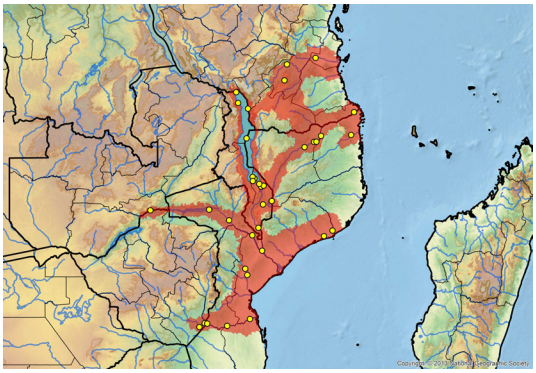


Angola (Cabinda), Cameroon, Central African Republic, Congo (DRC), Congo (ROC), Gabon
IUCN Red List: Not Listed [Least Concern 1996]
TFTSG Draft Red List: Vulnerable (2016)
CITES: Appendix II, as *Cycloderma* spp.
Cryptopodus aubryi Duméril 1856:374 (10:31), *Cryptopus aubryi, Cycloderma aubryi, Heptathyra aubryi*
Type locality: "Gabon."

Cycloderma frenatum Peters 1854
Zambezi Flapshell Turtle



Wulf Haacke / CBFTT / Lake Malawi, Malawi



Malawi, Mozambique, Tanzania, Zambia, Zimbabwe
CBFTT Account: Broadley and Sachsse (2011)
IUCN Red List: Near Threatened (1996)
TFTSG Draft Red List: Endangered (2016)
CITES: Appendix II, as *Cycloderma* spp.
Cycloderma frenatum Peters 1854:216, *Cyclanosteus frenatus, Heptathyra frenata*
Type locality: "In fluminibus Zambeze et Licuare..[&]..Tette et Sena..[&]..terra Boror" [Mozambique]. Restricted to "Sambesi bei Tete" [Mozambique] by lectotype designation by Fritz et al. (1994:169).
Aspidochelys livingstonii Gray 1860a:6, *Heptathyra livingstonii*
Type locality: "Mozambique in tributaries of River Zambesi?"

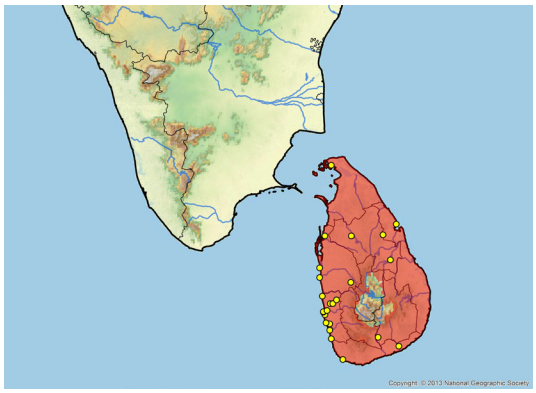
Lissemys Smith 1931 (11:14)

Emyda Gray 1830e:19 (10:7) (junior homonym, not = *Emyda* Rafinesque 1815 = *Emys*)
Type species: *Emyda punctata* [= *Testudo punctata* Lacepède 1788] [= *Testudo punctata* Bonnaterre 1789], by original monotypy.
Lissemys Smith 1931:xxviii, 154 (*nomen novum*)
Type species: *Lissemys punctata* [= *Testudo punctata* Lacepède 1788] [= *Testudo punctata* Bonnaterre 1789], by original designation.

Lissemys ceylonensis (Gray 1856a) (11:14)
Sri Lankan Flapshell Turtle



Anslem de Silva / Udawalawe National Park, Sri Lanka

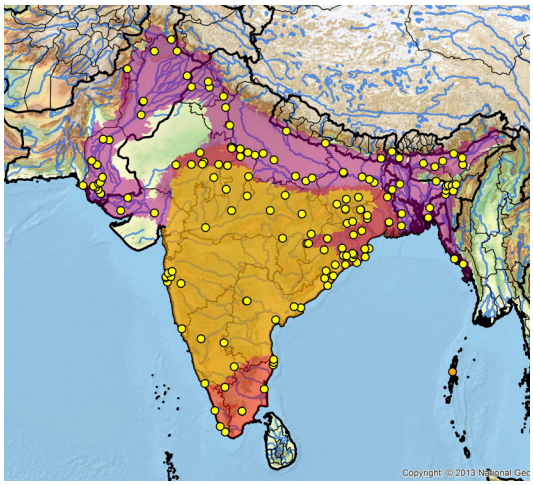


Sri Lanka
IUCN Red List: Not Evaluated
CITES: Appendix II [as part of *Lissemys punctata*]

Emyda ceylonensis Gray 1856a:201, *Emyda granosa ceylonensis*, *Lissemys ceylonensis*, *Lissemys punctata ceylonensis*
Type locality: "Ceylon" [Sri Lanka].

Lissemys punctata sinhaleyus † Deraniyagala 1953:5 [Late Pleistocene, Ratnapura Beds, Sri Lanka]
Type locality: "near Ratnapura...Ceylon" [Sri Lanka].

Lissemys punctata (Bonnaterre 1789) (09:44, 11:14)
Indian Flapshell Turtle



(subspecies: *punctata* = red, *andersoni* = purple, *vittata* = orange; overlap = intergrades; orange dot = introduced)

Bangladesh, India (Andhra Pradesh, Bihar, Goa, Gujarat, Kerala, Madhya Pradesh, Odisha, Punjab, Tamil Nadu, West Bengal), Myanmar, Nepal, Pakistan
Introduced: India (Andaman Islands)
CBFTT Account: Bhupathy, Webb, and Praschag (2014)
IUCN Red List: Least Concern (2000); Previously: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2011)
CITES: Appendix II

Lissemys punctata punctata (Bonnaterre 1789) (11:14)
Southern Indian Flapshell Turtle



Indraneil Das / CBFTT / Mamallapuram, Tamil Nadu, India

India (Kerala, Tamil Nadu)

Testudo punctata Lacepède 1788:171, synopsis[table] (09:6) (senior homonym, not = *Testudo punctata* Schoepff 1792 = *Clemmys guttata*; *nomen suppressum*, ICZN 2005a)
Type locality: "les grandes Indes" [India]. Restricted to "Pondicherry, South Arcot (district), Tamil Nadu (state), India" by Webb (1980a:552).

Testudo punctata Bonnaterre 1789:30 (senior homonym, not = *Testudo punctata* Schoepff 1792 = *Clemmys guttata*), *Trionyx (Emyda) punctatus*, *Trionyx punctatus*, *Emyda punctata*, *Trionyx punctata*, *Lissemys punctata*, *Lissemys punctata punctata*, *Trionyx punctatus punctatus*
Type locality: "les grandes Indes" [India]. Restricted to "Pondicherry, South Arcot (district), Tamil Nadu (state), India" by Webb (1980a:552).

Testudo sonnerati Meyer 1790:83 (09:8) (*nomen novum et oblitum*)

Testudo granulosa Suckow 1798:48 (*nomen novum*)

Testudo scabra Latreille *in* Sonnini and Latreille 1801:164 (*nomen novum* and junior homonym, not = *Testudo scabra* Linnaeus 1758 = *Rhinoclemmys punctularia punctularia*)

Testudo granosa Schoepff 1801:127, *Trionyx granosus*, *Cryptopus granosus*, *Emyda granosa*, *Emyda granosa granosa*, *Lissemys punctata granosa*, *Trionyx punctatus granosus*
Type locality: "Coromandeliae" [India].

Testudo granulata Daudin 1801:81 (*nomen novum*)

Trionyx coromandelicus Geoffroy Saint-Hilaire 1809b:16 (*nomen novum*)

Emyda dura Buchanan-Hamilton *in* Anderson 1876:514 (*nomen nudum*)

Lissemys punctata andersoni Webb 1980a (11:14)
Spotted Northern Indian Flapshell Turtle



Shailendra Singh / CBFTT / Ghaghra R., Uttar Pradesh, India

Bangladesh, India (Assam, Bihar, Haryana, Jammu, Madhya Pradesh, Meghalaya, Rajasthan, Sikkim, Uttar Pradesh, West Bengal), Myanmar, Nepal, Pakistan

Introduced: India (Andaman Islands)

Lissemys punctata andersoni Webb 1980a:554, *Lissemys andersoni*
Type locality: "Belbari, Terai, southeastern Nepal, elevation 210 m."

Lissemys punctata vittata (Peters 1854) [(11:14)]
Central Indian Flapshell Turtle


Shailendra Singh / CBFTT / Mahanadi River, Odisha, India

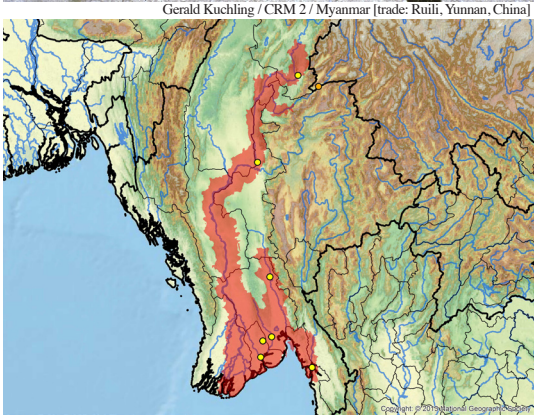
India (Andhra Pradesh, Chhattisgarh?, Goa, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan)

Emyda vittata Peters 1854:216, *Emyda granosa vittata, Lissemys punctata vittata*
Type locality: "India orientalis, Goa."

Emyda granosa intermedia Annandale 1912a:171
Type locality: "Near Purulia, Manbhum Dist." [India].

Lissemys scutata (Peters 1868) [(11:14)]
Burmese Flapshell Turtle


Gerald Kuchling / CRM 2 / Myanmar [trade: Ruili, Yunnan, China]


(orange dot = trade)

Myanmar

IUCN Red List: Data Deficient (2000); Previously: Data Deficient (1996)

TFTSG Draft Red List: Near Threatened (2011)

CITES: Appendix II

Emyda scutata Peters 1868:449, *Emyda granosa scutata, Lissemys punctata scutata, Trionyx punctatus scutatus, Lissemys scutata*
Type locality: "Pegú" [Myanmar].

Emyda fuscomaculata Gray 1873c:308
Type locality: Not designated. Restricted to "Asia, Pegu?" [Myanmar] by Gray (1873j:89).

Trionychinae Gray 1825

Amydae Oppel 1811:9 (*partim*)
Trionyces Schmid 1819:18
Trionicidae Gray 1825:212
Trionychoidea Fitzinger 1826:5
Trionychinae Lydekker 1889:4

Amyda Schweigger *in* Geoffroy Saint-Hilaire 1809a

Amyda Schweigger *in* Geoffroy Saint-Hilaire 1809a:365
Type species: *Amyda javanica* Schweigger *in* Geoffroy Saint-Hilaire 1809a [= subjective synonym of *Testudo cartilaginea* Boddaert 1770], by original monotypy.

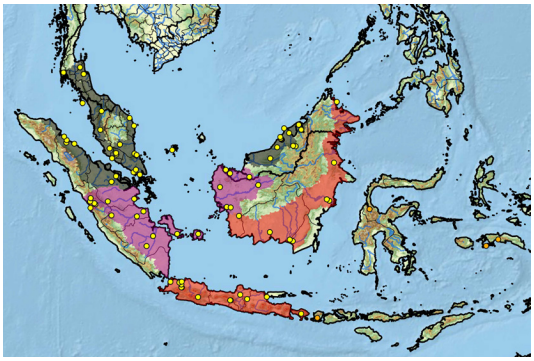
Amida Duméril and Bibron 1834:416 (*nomen novum*)

Potamochelys Fitzinger 1843:30
Type species: *Aspidonectes (Potamochelys) javanica* Wagler [= *Amyda javanica* Schweigger *in* Geoffroy Saint-Hilaire 1809a] [= subjective synonym of *Testudo cartilaginea* Boddaert 1770], by original monotypy.

Aspilus Gray 1864b:83 (junior homonym, not = *Aspilus* Schaum 1848 [= Coleoptera])
Type species: *Aspilus cariniferus* [= *Trionyx cariniferus* Gray 1856b] [= subjective synonym of *Testudo cartilaginea* Boddaert 1770], by original designation.

Ida Gray 1873h:55 (junior homonym, not = *Ida* Gray 1838 [= Sauria] or *Ida* Gray 1840 [= Gastropoda] or *Ida* Robineau-Desvoidy 1863 [= Diptera])
Type species: *Ida ornata* [= *Trionyx ornatus* Gray 1861a] [= subjective synonym of *Testudo cartilaginea* Boddaert 1770], by original monotypy.

Amyda cartilaginea (Boddaert 1770) [(76)]
Malayan Softshell Turtle, Asiatic Softshell Turtle


(subspecies: *cartilaginea* = red, *maculosa* = purple, unassigned *A. cartilaginea* sensu lato = gray; orange dots = probable trade)

Brunei, Indonesia (Bali, Java, Kalimantan, Sumatra), Malaysia (Peninsular, East), Singapore, Thailand (?)

Introduced or Trade: Indonesia (Lesser Sundas, Moluccas, Sulawesi)

CBFTT Account: Auliya, van Dijk, Moll, and Meylan (2016) [includes *Amyda ornata*]

IUCN Red List: Vulnerable A1cd+2cd (2000); Previously: Vulnerable (1996)

TFTSG Draft Red List: Vulnerable (2011)

CITES: Appendix II

Amyda cartilaginea cartilaginea (Boddaert 1770) [(76)]
South Sundas Softshell Turtle



Mark Auliya / Java, Indonesia [trade]

Indonesia (Bali, Java, Kalimantan), Malaysia (East)
Introduced or Trade: Indonesia (Lesser Sundas [Lombok]), Moluccas [Ambon, Seram]), Sulawesi)

Testudo cartilaginea Boddaert 1770:1, *Gymnopus cartilaginea, Trionyx cartilagineus, Aspidonectes cartilagineus, Potamochelys cartilagineus, Amyda cartilaginea, Amyda cartilaginea cartilaginea*
Type locality: Not known. Restricted to "Java" [Indonesia] by Baur (1893a:220).

Testudo membranacea Blumenbach 1779:257 (*nomen dubium*)

Testudo boddaerti Schneider 1787:12 (*nomen novum*), *Trionyx boddaerti, Testudo boddarti*

Testudo striata Suckow 1798:37 (*partim, nomen novum*)

Amyda javanica Schweigger *in* Geoffroy Saint-Hilaire 1809a:365 (senior homonym, not = *Trionyx javanicus* Gray 1830e = *Nilssonia gangetica* or *Nilssonia leithii*), *Trionyx javanicus, Trionyx iavanicus, Tyrse javanica, Aspidonectes javanicus, Trionyx stellatus javanica, Aspilus javanicus, Potamochelys javanicus*
Type locality: "Java et les îles voisines" [Indonesia].

Trionyx stellatus Geoffroy Saint-Hilaire 1809a:365 (*nomen novum*), *Potamochelys stellatus*

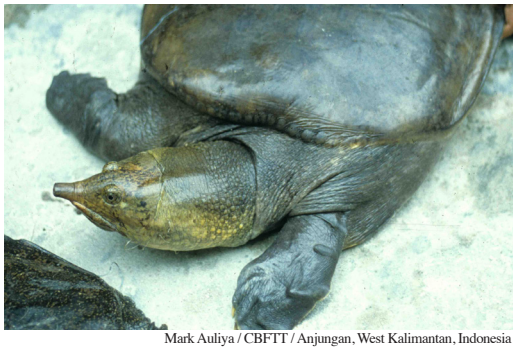
Trionyx cariniferus Gray 1856b:67, *Aspilus cariniferus, Trionyx carinifera*
Type locality: "Moluccas" [Indonesia].

Aspilus punctulatus Gray 1864b:84
Type locality: "Amboina or Ceram" [Indonesia].

Trionyx jeudi Gray 1869a:217
Type locality: "Java?" [Indonesia].

Trionyx trinilensis † Jaekel 1911:78 [Pleistocene, *Pithecanthropus* Trinil Beds, Indonesia (Java)]
Type locality: "Pithecanthropus-schichten...Java...Trinil" [Indonesia].

Amyda cartilaginea maculosa Fritz, Gemel, Kehlmaier, Vamberger, and Praschag 2014a [(76)]
North Sundas Softshell Turtle

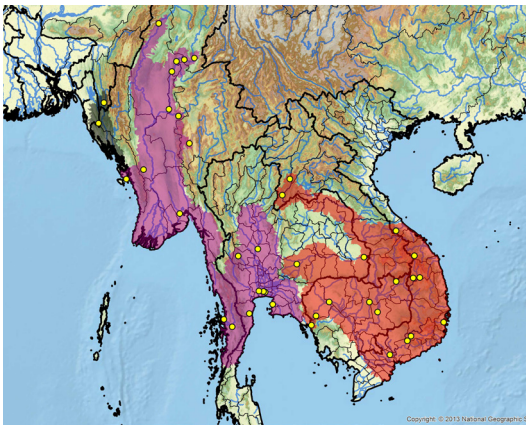


Mark Auliya / CBFTT / Anjungan, West Kalimantan, Indonesia

Brunei (?), Indonesia (Kalimantan, Sumatra), Malaysia (East, Peninsular?), Thailand (?)

Amyda cartilaginea maculosa Fritz, Gemel, Kehlmaier, Vamberger, and Praschag 2014a:240
Type locality: "Nanga Badau, Kalimantan, Indonesia ("Nanga Bandang, Borneo")."

Amyda cartilaginea (Boddaert 1770) [(76)] **or**
Amyda ornata (Gray 1861a)
Southeast Asian Softshell Turtle



(subspecies: *ornata* = red, *phayrei* = purple; unassigned *A. ornata* sensu lato = gray)

Bangladesh, Cambodia, India (Mizoram), Laos, Myanmar, Thailand, Vietnam
Introduced: Indonesia (Lesser Sundas, Sulawesi)
CBFTT Account: Auliya, van Dijk, Moll, and Meylan (2016) [as part of *Amyda cartilaginea*]
IUCN Red List: Vulnerable A1cd+2cd (2000), as part of *Amyda cartilaginea*; Previously: Vulnerable (1996), as part of *A. cartilaginea*
TFTSG Draft Red List: Vulnerable (2015)
CITES: Appendix II, as part of *A. cartilaginea*

Amyda cartilaginea ornata (Gray 1861) [(76)] **or**
Amyda ornata ornata (Gray 1861)
Indochinese Softshell Turtle


David Emmett / CBFTT / Cardamom Mountains region, Cambodia

Cambodia, Laos, Thailand, Vietnam

Trionyx ornatus Gray 1861a:41, *Aspilus ornatus, Ida ornata, Amyda ornata, Amyda ornata ornata, Amyda cartilaginea ornata*
Type locality: "Camboja" [Cambodia].

Amyda cartilaginea phayrei (Theobald 1868b) [(76)] **or**
Amyda ornata phayrei (Theobald 1868b)
Burmese Softshell Turtle


Gerald Kuchling / Dokhtawady R., Myanmar

Bangladesh (?), India (?) (Mizoram), Malaysia (Peninsular), Myanmar, Thailand

Trionyx phayrei Theobald 1868b:18, *Aspidonectes phayrei, Amyda ornata phayrei, Amyda cartilaginea ornata*
Type locality: "montium Arakanensium, prope Bassein" [Arakan Hills, Bassein, Myanmar].

Trionyx ephippium Theobald 1875:177
Type locality: "Tenasserim" [Myanmar].

Trionyx phayrii Boulenger 1889:ix (*nomen novum*), *Amyda phayrii*

Trionyx nakornsrithammarajensis Nutaphand 1979:8, *Amyda nakornsrithammarajensis*
Type locality: "Nakorn Sri Thammaraj Province... Thailand."

Trionyx cartilageneus nakorn Nutaphand 1990:[8] (*nomen novum*), *Trionyx cartilagineus nakorn*

Apalone Rafinesque 1832

Aplaxia Rafinesque 1817:166 (*nomen oblitum*)
Type species: *Aplaxia nasica* Rafinesque 1817 (*nomen nudum*) [= *Trionyx nasica* Rafinesque 1822 (*nomen suppressum*] [= subjective synonym of *Trionyx spiniferus* LeSueur 1827], by original monotypy.

Apalone Rafinesque 1832:64
Type species: *Apalone hudsonica* Rafinesque 1832 [= subjective synonym of *Trionyx spiniferus* LeSueur 1827], by original monotypy.

Mesodeca Rafinesque 1832:64
Type species: *Mesodeca bartrami* [= *Testudo bartrami* Daudin 1801] [= subjective synonym of *Testudo ferox* Schneider 1783], by original monotypy.

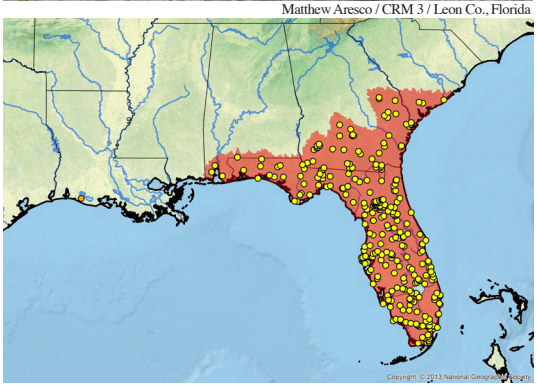
Trionyx (Platypeltis) Fitzinger 1835:109
Type species: *Platypeltis ferox* Fitzinger [= *Testudo ferox* Schneider 1783], by subsequent designation by Fitzinger (1843:30).

Callinia Gray 1869a:221
Type species: *Callinia spinifera* [= *Trionyx spiniferus* LeSueur 1827], by subsequent designation by Stejneger (1907:514).

Euamyda Stejneger 1944:7
Type species: *Euamyda mutica* [= *Trionyx muticus* LeSueur 1827], by original monotypy.

Apalone ferox (Schneider 1783)
Florida Softshell Turtle


Matthew Aresco / CRM 3 / Leon Co., Florida


(orange dot = introduced)

USA (Alabama, Florida, Georgia, South Carolina)

IUCN Red List: Least Concern (2010); Previously: Least Concern [Not Listed] (1996)

CITES: Appendix III (USA)

Testudo ferox Schneider 1783:330, *Emydes ferox, Trionyx ferox, Amyda ferox, Aspidonectes ferox, Platypeltis ferox, Amyda ferox ferox, Trionyx ferox ferox, Apalone ferox*
Type locality: "Savannach und Alatama..&..Ost-Florida" [USA]. Restricted to "Savannah River (at Savannah), Georgia" [USA] by Schwartz (1956b:8).

Testudo mollis Lacepède 1788:137, synopsis[table] [(09:6)] (*nomen suppressum*, ICZN 2005a)
Type locality: "sud de la Caroline, rivières de Savannah & d'Alatamaha..&..la Floride orientale" [USA].

Testudo mollis Bonnaterre 1789:25

Type locality: "rivières de Savannah, d'Alatamaha, de la Floride, & de la Caroline méridionale" [USA].

Testudo (ferox) verrucosa Schoepff 1795:90 (senior homonym, not = *Testudo verrucosa* Suckow 1798 = *Rhinoclemmys punctularia punctularia*)
Type locality: "Floridae Orientalis" [USA]. Restricted to "Halfway Pond...between...Palatka and Gainesville, Fla...somewhere in southwestern Putnam County" [Florida, USA] by Harper (1940:717) by restriction of *nomen novum* replacement name *Testudo bartrami* Daudin 1801.

Testudo bartrami Daudin 1801:74 (*nomen novum*), *Chelys bartrami, Trionyx bartrami, Mesodeca bartrami*
Type locality: "la Floride orientale" [Florida, USA]. Restricted to "Halfway Pond...between...Palatka and Gainesville, Fla...somewhere in southwestern Putnam County" [Florida, USA] by Harper (1940:717).

Trionyx georgianus Geoffroy Saint-Hilaire 1809a:367 (*nomen novum*)

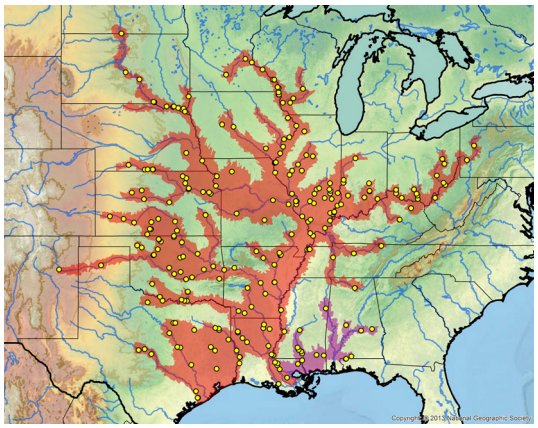
Trionyx carinatus Geoffroy Saint-Hilaire 1809b:14, *Aspidonectes carinatus*
Type locality: Not known. Restricted to "Savannah River, Georgia" [USA] by Schmidt (1953:108).

Trionyx georgicus Geoffroy Saint-Hilaire 1809b:17 (*nomen novum*)

Trionyx brongniarti Schweigger 1812:288 (*nomen novum*), *Testudo brongniarti, Platypeltis brongniarti*
Type locality: Not known. Restricted to "Savannah River, Georgia" [USA] by Schmidt (1953:109).

Trionyx harlani Bell *in* Harlan 1835:159
Type locality: "East Florida" [USA].

Apalone mutica (LeSueur 1827)
Smooth Softshell Turtle



(subspecies: *mutica* = red, *calvata* = purple)

USA (Alabama, Arkansas, Florida, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Nebraska, New Mexico, North Dakota, Ohio, Oklahoma, Pennsylvania [extirpated], South Dakota, Tennessee, Texas, West Virginia, Wisconsin)

IUCN Red List: Least Concern (2010); Previously: Least Concern [Not Listed] (1996)

CITES: Appendix III (USA)

Apalone mutica mutica (LeSueur 1827)
Midland Smooth Softshell Turtle



Peter V. Lindeman / Scioto R., Pike Co., Ohio

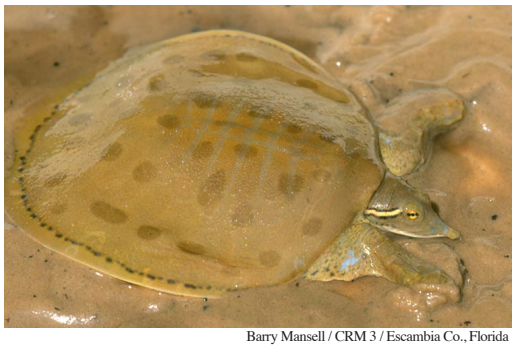
USA (Alabama, Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Nebraska, New Mexico, North Dakota, Ohio, Oklahoma, Pennsylvania [extirpated], South Dakota, Tennessee, Texas, West Virginia, Wisconsin)

Trionyx pusilla Rafinesque 1822:3 (*nomen dubium et suppressum*, ICZN 1984)
Type locality: "United States" [USA].

Trionyx muticus LeSueur 1827:263, *Aspidonectes muticus, Gymnopus muticus, Amyda mutica, Euamyda mutica, Trionyx muticus, Trionyx muticus muticus, Apalone mutica, Apalone muticus, Apalone mutica mutica*
Type locality: "Newharmony, sur le Wabash, à peu de distance de son embouchure dans l'Ohio...l'Etat de l'Indiana" [USA].

Potamochelys microcephalus Gray 1864b:87, *Callinia microcephala, Potamochelys microcephala*
Type locality: "Sarawak" [Malaysia] [in error]. Emended to "___?" [not known] by Boulenger (1889:262); restricted to "New Harmony, Indiana" [USA] by Schmidt (1953:110).

Apalone mutica calvata (Webb 1959) [77]
Gulf Coast Smooth Softshell Turtle

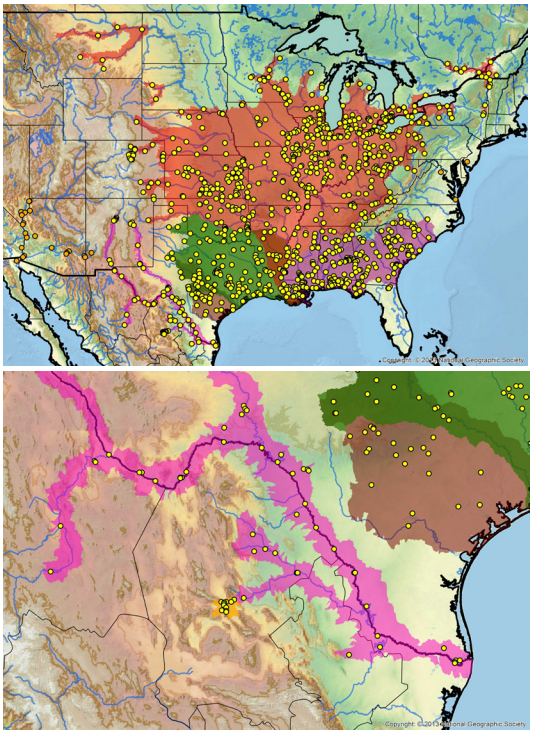


Barry Mansell / CRM 3 / Escambia Co., Florida

USA (Alabama, Florida, Louisiana, Mississippi)

Trionyx muticus calvatus Webb 1959:519, *Apalone mutica calvata, Apalone calvata*
Type locality: "Pearl River, Roses Bluff, 14 miles northeast Jackson, Rankin County, Mississippi" [USA].

Apalone spinifera (LeSueur 1827) [(12:37)]
Spiny Softshell Turtle



(subspecies: *spinifera* = red, *aspera* = purple, *atra* = orange, *emoryi* = pink, *guadalupensis* = brown, *pallida* = green; overlap = intergrades; orange dots = introduced)

Canada (Ontario, Québec), Mexico (Chihuahua, Coahuila, Nuevo Leon, Tamaulipas), USA (Alabama, Arkansas, Colorado, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Vermont, Virginia, West Virginia, Wisconsin, Wyoming)

Introduced: USA (Arizona, California, Hawaii, Nevada, New Jersey, Utah, Virginia)

IUCN Red List: Least Concern (2010); Previously: Least Concern [Not Listed] (1996)

CITES: Appendix III (USA)

Apalone spinifera spinifera (LeSueur 1827) [(08:22)]
Northern Spiny Softshell Turtle



John B. Iverson / Muscatine, Muscatine Co., Nebraska / female

Canada (Ontario, Québec), USA (Arkansas, Colorado, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Dakota, Tennessee, Vermont, Virginia, West Virginia, Wisconsin, Wyoming)

Aplaxia nasica Rafinesque 1817:166 (*nomen nudum*)

Trionyx nasica Rafinesque 1822:3 (*nomen suppressum,* ICZN 1984)

Type locality: "western streams...United States" [USA].

Trionyx spiniferus LeSueur 1827:258, *Gymnopus spiniferus, Gymnopodus spiniferus, Aspidonectes spinifer, Gymnopus spinifer, Trionyx spinifer, Callinia spicifera, Callinia spinifera, Platypeltis spinifer, Tyrse spinifera, Amyda spinifera, Platypeltis spinifera, Amyda spinifer, Amyda spinifera spinifera, Trionyx spinifera, Trionyx spinifera spinifera, Amyda ferox spinifera, Trionyx ferox spinifera, Trionyx spinifer spinifer, Trionyx spiniferus spiniferus, Apalone spinifera, Apalone spiniferus, Apalone spinifera spinifera*

Type locality: "Newharmony, sur le Wabash, à peu de distance de son embouchure dans l'Ohio...l'Etat de l'Indiana" [USA].

Trionyx ocellatus LeSueur 1827:261 (senior homonym, not = *Trionyx ocellatus* Gray 1832a = *Nilssonia hurum*)

Type locality: "Newharmony, sur le Wabash, à peu de distance de son embouchure dans l'Ohio...l'Etat de l'Indiana" [USA].

Apalone hudsonica Rafinesque 1832:64

Type locality: "River Hudson between the falls of Hadley, Glen and Baker, and further up to the source" [USA]. Restricted to "Hudson River, near Baker's Falls, Saratoga County, New York" [USA] by Webb (1962:491).

Trionyx annulifer Wied 1839:140 (*nomen novum*)

Tyrse argus Gray 1844:48, *Trionyx argus*

Type locality: "West Africa, Sierra Leone?" [in error]. Emended to "___?" [not known] by Boulenger (1889:260); restricted to "New Harmony, Indiana" [USA] by Schmidt (1953:110).

Trionyx annulatus Gray 1856b:69 (*nomen novum*)

Aspidonectes nuchalis Agassiz 1857a:402,406, *Platypeltis nuchalis*

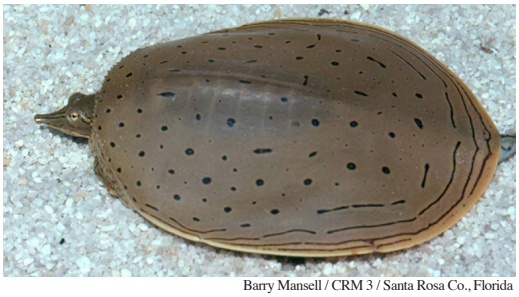
Type locality: "Cumberland River..[&]..head waters of the Tennessee River" [USA]. Restricted to "Cumberland River near Nashville, Tennessee" [USA] by Schmidt (1953:110).

Gymnopus olivaceus Wied 1865:55 (*nomen novum*)

Amyda spinifera hartwegi Conant and Goin 1948:1 [(08:22)], *Amyda ferox hartwegi, Trionyx ferox hartwegi, Trionyx spinifer hartwegi, Trionyx spiniferus hartwegi, Apalone spinifera hartwegi*

Type locality: "Wichita, Sedgwick County, Kansas" [USA].

Apalone spinifera aspera (Agassiz 1857a)
Gulf Coast Spiny Softshell Turtle



Barry Mansell / CRM 3 / Santa Rosa Co., Florida

USA (Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee)

Aspidonectes asper Agassiz 1857a:402,405, *Platypeltis asper, Amyda spinifera aspera, Amyda ferox aspera, Trionyx ferox aspera, Trionyx spinifer asper, Trionyx spiniferus*

asper, Trionyx spiniferus asperus, Apalone spinifera asper, Apalone spinifera aspera
Type locality: "Mississippi" [USA]. Restricted to "Lake Concordia, La." [Louisiana, USA] by Baur (1893:220) and Schmidt (1953:109); and to "Pearl River at Columbus, Marion County, Mississippi" [USA] by lectotype designation by Webb (1960:7).

Platypeltis agassizii Baur 1888c:1122, *Trionyx agassizii, Pelodiscus agassizii, Aspidonectes agassizii, Trionyx spiniferus agassizii, Amyda agassizii, Amyda ferox agassizii, Trionyx ferox agassizii*
Type locality: Not designated. Restricted to "Savannah, Savannah River" [Georgia, USA] by Schwartz (1956b:17).

Apalone spinifera atra (Webb and Legler 1960) (07:79, 08:23, 12:37)
Black Spiny Softshell Turtle, Cuatro Cienegas Softshell


Suzanne E. McGaugh / CBFTT / Tío Cándido, Cuatrociénegas Basin, Coahuila, Mexico

Mexico (Coahuila)
CBFTT Account: Cerdá-Ardura, Soberón-Mobarak, McGaugh, and Vogt (2008)
IUCN Red List: Critically Endangered A1ace+2c (1996), originally listed as *Apalone ater*
CITES: Appendix I

Trionyx ater Webb and Legler 1960:21, *Trionyx spinifer ater, Trionyx spiniferus ater, Apalone spinifera ater, Apalone ater, Apalone spiniferus ater, Apalone spinifera atra, Apalone (Apalone) atra, Apalone atra*
Type locality: "16 kilometers south of Cuatro Ciénegas, Coahuila... Mexico." Emended to "Poza del Tío Cándido, 16 km southwest of Cuatrociénegas de Carranza, central Coahuila, México" by Cerdá-Ardura et al. (2008:2).

Apalone spinifera emoryi (Agassiz 1857a) (12:37)
Texas Spiny Softshell Turtle

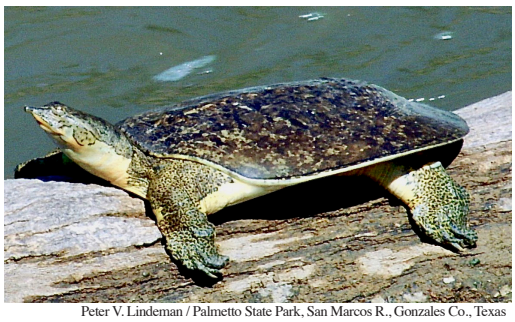

Vincenzo Ferri / Texas [captivity]

Mexico (Chihuahua, Coahuila, Nuevo Leon, Tamaulipas), USA (Texas)

Aspidonectes emoryi Agassiz 1857a:392,407, *Trionyx emoryi, Platypeltis emoryi, Amyda emoryi, Amyda ferox emoryi, Trionyx ferox emoryi, Trionyx spinifer emoryi, Trionyx spiniferus emoryi, Apalone spinifera emoryi, Trionyx spiniferus emoryi, Apalone spinifera emoryi*
Type locality: "lower Rio Grande of Texas, near Brownsville" [USA].

Aspidonectes emyda Gray 1870c:95 (*nomen novum*)
Aspidonectes georgii Gray 1870c:109 (*nomen novum*)

Apalone spinifera guadalupensis (Webb 1962)
Guadalupe Spiny Softshell Turtle


Peter V. Lindeman / Palmetto State Park, San Marcos R., Gonzales Co., Texas

USA (Texas)

Trionyx spinifer guadalupensis Webb 1962:517, *Trionyx spiniferus guadalupensis, Apalone spinifera guadalupensis*
Type locality: "15 miles northeast Tilden, McMullen County, Texas" [USA].

Apalone spinifera pallida (Webb 1962)
Pallid Spiny Softshell Turtle


Stanley E. Trauth / nr. Horatio, Sevier Co., Arkansas

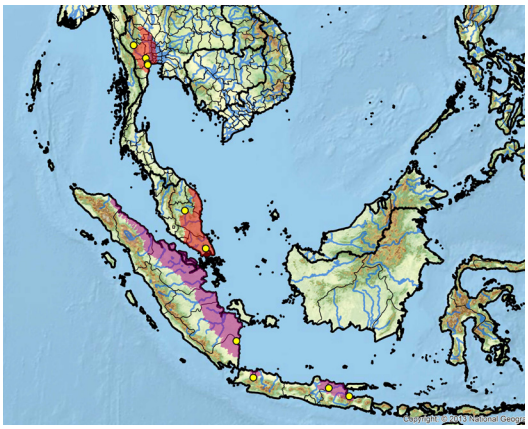
USA (Arkansas, Louisiana, Oklahoma, Texas)

Trionyx spinifer pallidus Webb 1962:522, *Trionyx pallidus, Trionyx spiniferus pallidus, Apalone spinifera pallida, Apalone spinifera pallidus*
Type locality: "Lake Caddo, Caddo Parish, Louisiana" [USA].

Chitra Gray 1844

Chitra Gray 1844:49
Type species: *Chitra indica* [= *Trionyx indicus* Gray 1830e], by original monotypy.

Chitra chitra Nutaphand 1986
Asian Narrow-headed Softshell Turtle



(subspecies: *chitra* = red, *javanensis* = purple)
Indonesia (Java, Sumatra), Malaysia (Peninsular), Thailand
IUCN Red List: Critically Endangered A1cd, B1+2c (2000); Previously: Critically Endangered (1996)
TFTSG Draft Red List: Critically Endangered (2011)
CITES: Appendix I

Chitra chitra chitra Nutaphand 1986
Siamese Narrow-headed Softshell Turtle



Chris Tabaka / TCC / Thailand [captivity]

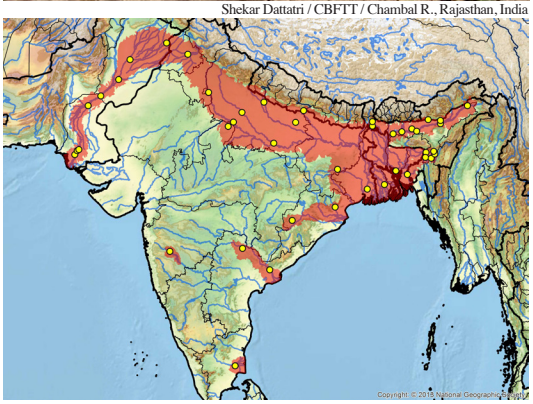
Malaysia (Peninsular), Thailand
Chitra chitra Nutaphand 1986:64 (*nomen conservandum*, ICZN 2005b), *Chitra chitra chitra*
Type locality: "Khwae Noi and Khwae Yai rivers of Kanchanaburi Province and in the Mae Klong river of Ratburi Province" [Thailand]. Restricted to "[Mae Klong in Ratburi and Khwae River in Kanchanaburi]" by Nutaphand (1990:113); and to "Kanburi (= Kanchanaburi), where the Khwae Noi and the Khwae Yai Rivers join to form the Mae Klong River in Kanchanaburi Province, Thailand" by McCord and Pritchard (2003:18).

Chitra chitra javanensis McCord and Pritchard 2003
Javanese Narrow-headed Softshell Turtle
Indonesia (Java, Sumatra)
Chitra selenkae † Jaekel 1911:80 (*nomen suppressum*, ICZN 2005b) [Pleistocene, *Pithecanthropus* Trinil Beds, Indonesia (Java)]
Type locality: "Pithecanthropus-schichten...Java...Trinil" [Indonesia].
Chitra chitra javanensis McCord and Pritchard 2003:41, *Chitra chitra javanica*
Type locality: "Pasuruan River drainage, near Pasuruan, Probolinggo District, East Java, Indonesia." Emended to "Bengawan (= river) Solo, between Kalitidu and Padangan, Bojonegoro District, East Java" [Indonesia] by Iskandar (2004:129).

Chitra indica (Gray 1830e) (10:7)
Indian Narrow-headed Softshell Turtle



Shekar Dattatri / CBFTT / Chambal R., Rajasthan, India

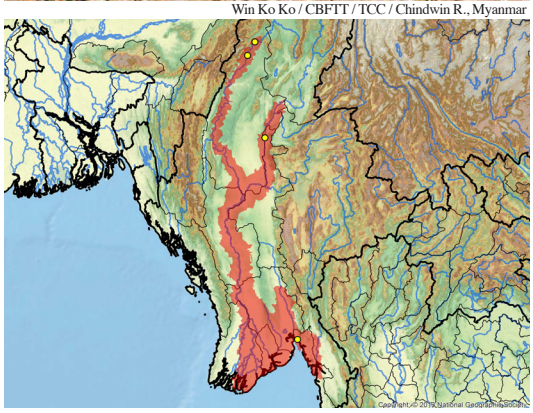


Bangladesh, India (Andhra Pradesh, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal), Nepal, Pakistan
CBFTT Account: Das and Singh (2009)
IUCN Red List: Endangered A1cd+2cd (2000); Previously: Vulnerable (1996)
TFTSG Draft Red List: Endangered (2011)
CITES: Appendix II, as *Chitra* spp.
Trionyx indicus Gray 1830e:18 (10:7), *Trionyx egyptiacus indicus, Trionyx aegyptiacus indica, Chitra indica, Gymnopus indicus, Trionyx aegyptianus indicus, Aspidonectes indicus*
Type locality: "India." Restricted to "Fatehgahr, Ganges" [India] by Smith (1931:162).
Testudo chitra Buchanan-Hamilton *in* Gray 1831d:47 (*nomen nudum*)
Gymnopus lineatus Duméril and Bibron 1835:491, *Trionyx lineatus*
Type locality: "le Gange" [India].

Chitra vandijki McCord and Pritchard 2003
Burmese Narrow-headed Softshell Turtle



Win Ko Ko / CBFTT / TCC / Chindwin R., Myanmar



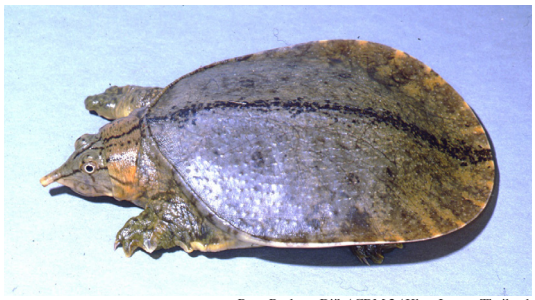
Myanmar
CBFTT Account: Platt, Platt, Win Ko Ko, and Rainwater (2014)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Critically Endangered (2011)
CITES: Appendix I

Chitra burmanica Jaruthanin 2002:40 (*nomen nudum*)
Chitra vandijki McCord and Pritchard 2003:39
Type locality: "Khayansat Kone Village (23°16.30'N; 95°58.99'E) on the Ayeyarwaddy River...Myanmar."

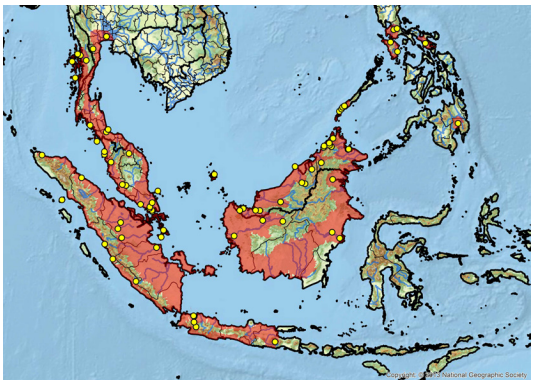
Dogania Gray 1844

Dogania Gray 1844:49
Type species: *Dogania subplana* [= *Trionyx subplanus* Geoffroy Saint-Hilaire 1809b], by original monotypy.
Sarbieria Gray 1869a:211
Type species: *Sarbieria frenata* [= *Trionyx frenatus* Gray 1856b] [= subjective synonym of *Trionyx subplanus* Geoffroy Saint-Hilaire 1809b], by original monotypy.

Dogania subplana (Geoffroy Saint-Hilaire 1809b)
Malayan Softshell Turtle



Peter Paul van Dijk / CRM 2 / Khao Luang, Thailand



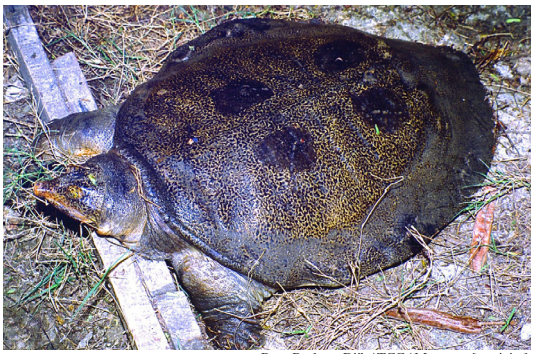
Brunei, Indonesia (Java, Kalimantan, Sumatra), Malaysia (Peninsular, East), Myanmar, Philippines (Luzon, Mindanao, Mindoro, Palawan), Singapore, Thailand
IUCN Red List: Least Concern (2000); Previously: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2011)
CITES: Appendix II

Trionyx subplanus Geoffroy Saint-Hilaire 1809b:11, *Gymnopus subplanus, Amyda subplana, Dogania subplana, Dogania subplanus*
Type locality: Not known.
Trionyx frenatus Gray 1856b:67, *Potamochelys frenatus, Sarbieria frenata*
Type locality: "Singapore."
Gymnopus javanicus Bibron *in* Gray 1856b:67 (*nomen nudum*)
Dogania guentheri Gray 1862c:265, *Trionyx guentheri, Trionyx güntheri, Dogania güntheri*
Type locality: "India."
Trionyx dillwynii Gray 1873c:306
Type locality: "Borneo" [Malaysia or Indonesia].
Trionyx vertebralis Strauch 1890:113
Type locality: "Flusse Gabon im aequatorialen West-Afrika" [in error]. Restricted to "Süd-Asien" by Wermuth and Mertens (1961:255).
Trionyx pecki Bartlett 1895a:30
Type locality: "Borneo" [Sarawak, Malaysia].

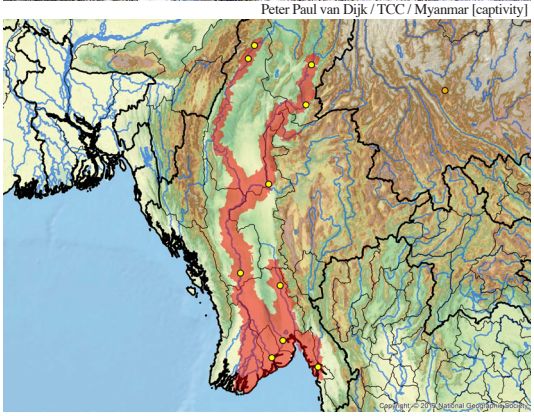
Nilssonia Gray 1872a (07:80, 11:15) (**78**)

Nilssonia Gray 1872a:332
Type species: *Nilssonia formosa* [= *Trionyx formosus* Gray 1869a], by original monotypy.
Isola Gray 1873h:51
Type species: *Isola peguensis* [= *Trionyx peguensis* Gray 1870c] [= subjective synonym of *Trionyx formosus* Gray 1869a], by original monotypy.
Aspideretes Hay 1904:274
Type species: *Aspideretes gangeticus* [= *Trionyx gangeticus* Cuvier 1825], by original designation.

Nilssonia formosa (Gray 1869a)
Burmese Peacock Softshell Turtle



Peter Paul van Dijk / TCC / Myanmar [captivity]



(orange dot = probably introduced)

China (?) (Yunnan [?]), Myanmar
IUCN Red List: Endangered A1cd+2d, B1+2c (2000); Previously: Vulnerable (1996)
TFTSG Draft Red List: Critically Endangered (2011)
CITES: Appendix II

Trionyx formosus Gray 1869a:217, *Nilssonia formosa, Aspidonectes formosus, Isola formosa, Trionyx formosa, Amyda formosus, Amyda formosa*
Type locality: "Pegu" [Myanmar].

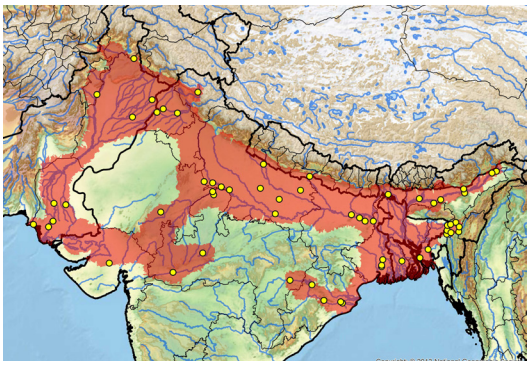
Trionyx peguensis Gray 1870c:99, *Isola peguensis*
Type locality: "Pegu" [Myanmar].

Trionyx grayii Theobald 1875:176
Type locality: "neighbourhood of Thayet-myo...Irawadi valley" [Myanmar].

Nilssonia gangetica (Cuvier 1825) [(12:38)]
Indian Softshell Turtle



B.C. Choudhury / CRM 2 / India



Afghanistan, Bangladesh, India (Bihar, Gujarat, Jammu, Madhya Pradesh, Odisha, Punjab, Rajasthan, Uttar Pradesh), Nepal, Pakistan
IUCN Red List: Vulnerable A1d+2d (2000); Previously: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Endangered (2011)
CITES: Appendix I, as *Aspideretes gangeticus*

Trionyx gangeticus Cuvier 1825:186,203, *Aspidonectes gangeticus, Tyrse gangetica, Isola gangetica, Aspideretes gangeticus, Trionyx gangeticus, Amyda gangetica, Nilssonia gangetica*
Type locality: "du Gange" [India].

Trionyx javanicus Gray 1830e:19 [(10:7)] (*partim*, junior homonym, not = *Amyda javanica* Schweigger *in* Geoffroy Saint-Hilaire 1809a = *Amyda cartilaginea cartilaginea*), *Tyrse javanica*
Type locality: "Java and India."

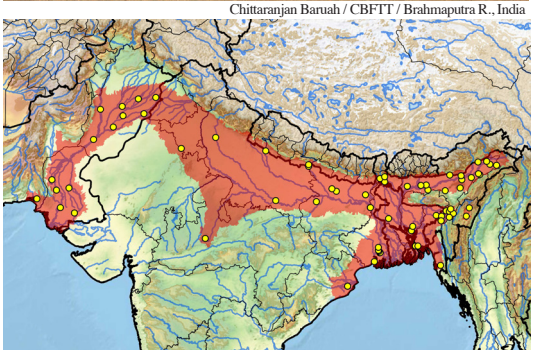
Gymnopus duvaucelii Duméril and Bibron 1835:487 (*partim, nomen novum*)

Trionyx gangeticus mahanaddicus Annandale 1912b:262
Type locality: "Sambalpur and Cuttack, Orissa" [India]. Restricted to "Cuttack, Orissa" [India] by Smith (1931:167).

Nilssonia hurum (Gray 1830e) [(10:7)]
Indian Peacock Softshell Turtle



Chittaranjan Baruah / CBFTT / Brahmaputra R., India



Bangladesh, India (Assam, Bihar, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh, West Bengal), Nepal, Pakistan
CBFTT Account: Das, Basu, and Singh (2010)

IUCN Red List: Vulnerable A1cd+2d (2000); Previously: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Endangered (2011)
CITES: Appendix I, as *Aspideretes hurum*

Trionyx occellatus Gray 1830d:pl.78 (*nomen oblitum*)
Type locality: "India." Restricted to "Barrackpore, India" by Webb (1980b:71).

Trionyx hurum Gray 1830e:18 (10:7), *Isola hurum, Aspideretes hurum, Aspidonectes hurum, Tyrse hurum, Amyda hurum, Nilssonia hurum*
Type locality: "India." Restricted to "Barrackpore, India" by Webb (1980b:71).

Testudo chim Buchanan-Hamilton *in* Gray 1831d:47 (*nomen nudum*)

Trionyx ocellatus Gray 1832a:directions (*nomen novum* and junior homonym, not = *Trionyx ocellatus* LeSueur 1827 = *Apalone spinifera spinifera*), *Testudo ocellata, Gymnopus ocellatus*

Gymnopus duvaucelii Duméril and Bibron 1835:487 (*partim, nomen novum*)

Trionyx sewaare Gray 1872a:336
Type locality: "Bengal" [India or Bangladesh].

Trionyx bellii Gray 1872a:337
Type locality: "Asia."

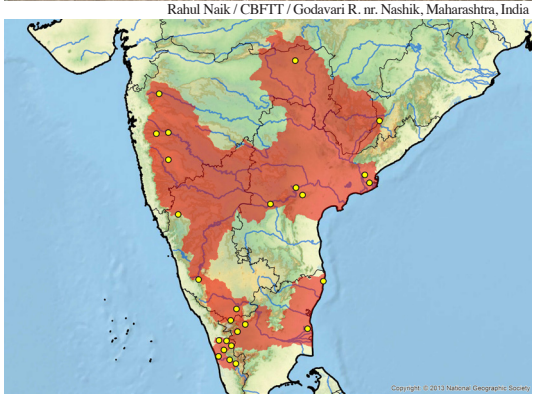
Trionyx buchanani Theobald 1874:78
Type locality: "Bengal" [India or Bangladesh].

Trionyx hurum sivalensis † Lydekker 1889:9 [Late Pliocene to Early Pleistocene, Siwaliks, India (Punjab)], *Trionyx sivalensis*
Type locality: "India...Siwalik Hills."

Nilssonia leithii (Gray 1872a)
Leith's Softshell Turtle



Rahul Naik / CBFTT / Godavari R. nr. Nashik, Maharashtra, India



India (Andhra Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Tamil Nadu)
CBFTT Account: Das, Sirsi, Vasudevan, and Murthy (2014)
IUCN Red List: Vulnerable A1c (2000); Previously: Near Threatened (1996)
TFTSG Draft Red List: Critically Endangered (2011)
CITES: Appendix II

Trionyx javanicus Gray 1830e:19 (10:7) (*partim*, junior homonym, not = *Amyda javanica* Schweigger *in* Geoffroy Saint-Hilaire 1809a = *Amyda cartilaginea cartilaginea*), *Tyrse javanica*
Type locality: "Java and India."

Testudo gotaghol Buchanan-Hamilton *in* Gray 1831d:48 (*nomen nudum*)

Trionyx leithii Gray 1872a:334, *Isola leithii, Aspideretes leithii, Amyda leithii, Nilssonia leithii*
Type locality: "Poonah" [India].

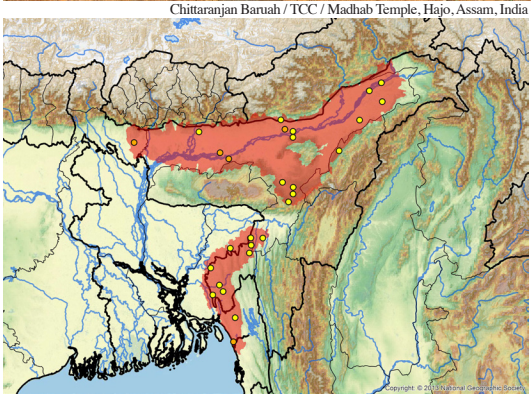
Aspilus gataghol Gray 1872a:339, *Trionyx gataghol, Trionyx gatajhal*
Type locality: "India."

Trionyx sulcifrons Annandale 1915b:341
Type locality: "Nagpur,...Central Provinces of India."

Nilssonia nigricans (Anderson 1875) (07:81) (**78**)
Black Softshell Turtle, Bostami Softshell



Chittaranjan Baruah / TCC / Madhab Temple, Hajo, Assam, India



(orange dots = temple ponds)
Bangladesh, India (Assam, Tripura, West Bengal)
IUCN Red List: Extinct in the Wild (2002); Previously: Critically Endangered (2000), Critically Endangered (1996)
TFTSG Draft Red List: Critically Endangered (2011)
CITES: Appendix I, as *Aspideretes nigricans*

Trionyx nigricans Anderson 1875:284, *Amyda nigricans, Aspideretes nigricans, Nilssonia nigricans*
Type locality: "Chittagong, Bengal" [Bangladesh].

Palea Meylan 1987

Palea Meylan 1987:77

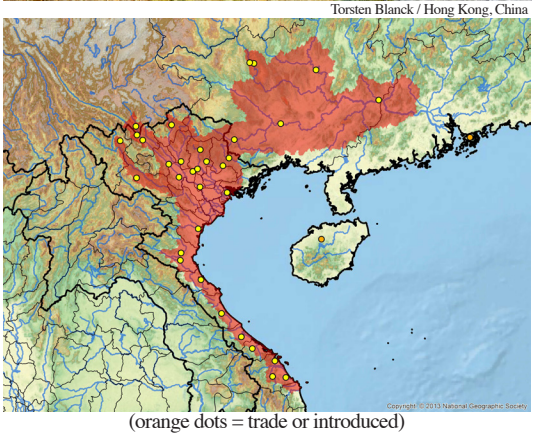
Type species: *Palea steindachneri* [= *Trionyx steindachneri* Siebenrock 1906a], by original designation.

Palea steindachneri (Siebenrock 1906a)

Wattle-necked Softshell Turtle



Torsten Blanck / Hong Kong, China



(orange dots = trade or introduced)

China (Guangdong, Guizhou, Yunnan), Vietnam

Introduced: China (Hong Kong), Mauritius, USA (Hawaii [Kauai])

IUCN Red List: Endangered A1cd+2cd (2000); Previously: Near Threatened (1996)

TFTSG Draft Red List: Endangered (2011)

CITES: Appendix II

Aspidonectes californiana Rivers 1889:233 (*nomen suppressum,* ICZN 1982), *Pelodiscus californianus*

Type locality: "Sacramento River, near the city of Sacramento... California" [USA] [in error, trade specimen].

Trionyx steindachneri Siebenrock 1906a:579 (*nomen conservandum,* ICZN 1982), *Amyda steindachneri, Palea steindachneri, Pelodiscus steindachneri*

Type locality: "Kau-Kongriver...Insel Hainan" [China].

Pelochelys Gray 1864b

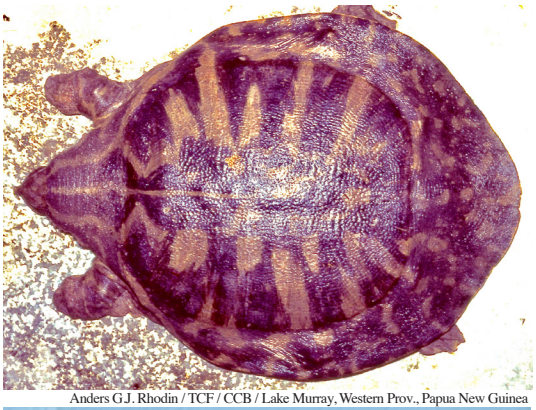
Pelochelys Gray 1864b:89

Type species: *Pelochelys cantorii* Gray 1864b, by subsequent designation by Günther (1865:108).

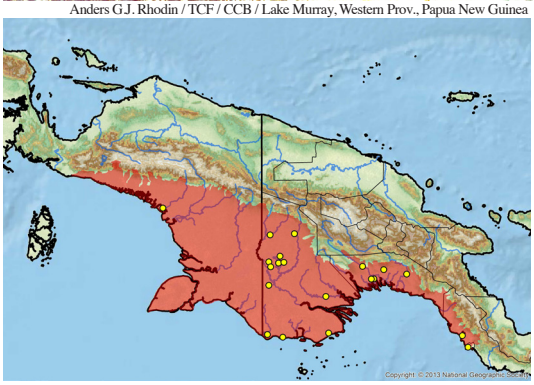
Pelochelys (Ferepelochelys) Hoser 2014a:62 (unavailable name pending ICZN decision; Rhodin et al. 2015) [4,79]

Pelochelys bibroni (Owen 1853)

New Guinea Giant Softshell Turtle



Anders G.J. Rhodin / TCF / CCB / Lake Murray, Western Prov., Papua New Guinea



Indonesia (Papua), Papua New Guinea (Southern)

IUCN Red List: Vulnerable A1cd+2cd (2000); Previously: Vulnerable (1996)

TFTSG Draft Red List: Vulnerable (2011)

CITES: Appendix II, as *Pelochelys* spp.

Trionyx (Gymnopus) bibroni Owen 1853:185, *Trionyx bibroni, Pelochelys bibroni, Pelochelys (Ferepelochelys) bibroni, Ferepelochelys bibroni*

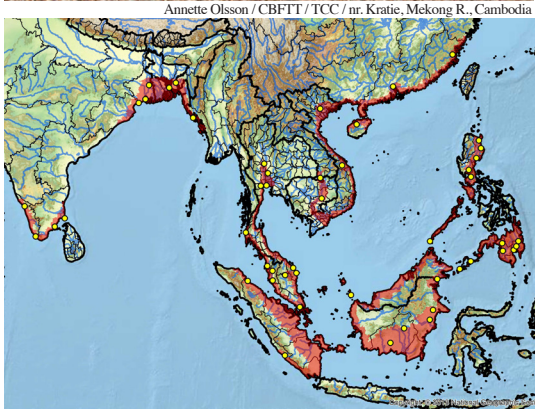
Type locality: "Australian." Restricted to "Laloki River, Astrolabe Range, 40 miles [ca. 65 km] from its entry into Redscar Bay (9°20'S 147°14'E), Central District, Papua New Guinea" by neotype designation by Webb (1995a:302).

Pelochelys cantorii Gray 1864b [79]

Asian Giant Softshell Turtle, Cantor's Giant Softshell Turtle



Annette Olsson / CBFTT / TCC / nr. Kratie, Mekong R., Cambodia



Bangladesh, Brunei (?), Cambodia, China (Fujian, Guangdong, Guangxi, Hainan, Zhejiang), India (Kerala, Odisha, Tamil Nadu, West Bengal), Indonesia (Kalimantan, Sumatra), Laos, Malaysia (Peninsular, East), Myanmar, Philippines (Luzon, Mindanao, Palawan), Singapore (extirpated), Thailand, Vietnam

CBFTT Account: Das (2008)

IUCN Red List: Endangered A1cd+2cd (2000); Previously: Vulnerable (1996)

TFTSG Draft Red List: Critically Endangered (2011)

CITES: Appendix II, as *Pelochelys* spp.

Pelochelys cantorii Gray 1864b:90

Type locality: "Malacca" [Malaysia].

Pelochelys cumingii Gray 1864b:90, *Chitra indica cumingii*

Type locality: "Philippines."

Pelochelys cantoris Boulenger 1889:ix (*nomen novum*)

Pelochelys poljakowii Strauch 1890:118

Type locality: "Fu-tschau" [China]. Emended to "Fu-tschau [Fuzhou Shi], Fujian Province, China" by Fritz and Havaš (2008:317).

Chitra minor † Jaekel 1911:80 [Pleistocene, *Pithecanthropus* Trinil Beds, Indonesia (Java)]

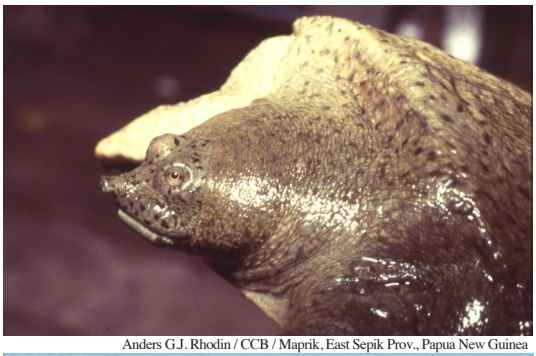
Type locality: "Pithecanthropus-schichten...Java...Trinil" [Indonesia].

Pelochelys clivepalmeri Hoser 2014a:62 (unavailable name pending ICZN decision; Rhodin et al. 2015) [4,79]

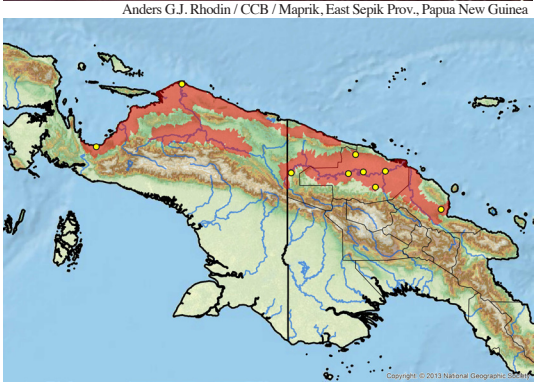
Pelochelys telstraorum Hoser 2014a:62 (unavailable name pending ICZN decision; Rhodin et al. 2015) [4,79]

Pelochelys signifera Webb 2003

Northern New Guinea Softshell Turtle



Anders G.J. Rhodin / CCB / Maprik, East Sepik Prov., Papua New Guinea



Indonesia (Papua), Papua New Guinea (Northern)

IUCN Red List: Not Evaluated

TFTSG Draft Red List: Data Deficient (2011)

CITES: Appendix II, as *Pelochelys* spp.

Pelochelys signifera Webb 2003:100, *Pelochelys (Ferepelochelys) signifera*, *Ferepelochelys signifera*

Type locality: "Wanggar River, Weyland Range, Geelvinck Bay, N. New Guinea (Papua Province, Indonesia)."

Pelodiscus Fitzinger 1835 (07:82, 10:32, 11:16)

Trionyx (Pelodiscus) Fitzinger 1835:110

Type species: *Aspidonectes (Pelodiscus) sinensis* [= *Trionyx (Aspidonectes) sinensis* Wiegmann 1834], by subsequent designation by Fitzinger (1843:30).

Landemania Gray 1869a:211

Type species: *Landemania irrorata* Gray 1869a [= subjective synonym of *Trionyx (Aspidonectes) sinensis* Wiegmann 1834], by original designation.

Psilognathus Heude 1880:24

Type species: *Psilognathus laevis* Heude 1880 [= subjective synonym of *Trionyx (Aspidonectes) sinensis* Wiegmann 1834], by original monotypy.

Temnognathus Heude 1880:25

Type species: *Temnognathus mordax* Heude 1880 [= subjective synonym of *Trionyx (Aspidonectes) sinensis* Wiegmann 1834], by original monotypy.

Gomphopelta Heude 1880:27

Type species: *Gomphopelta officinae* Heude 1880 [= subjective synonym of *Trionyx (Aspidonectes) sinensis* Wiegmann 1834], by original monotypy.

Coelognathus Heude 1880 :29

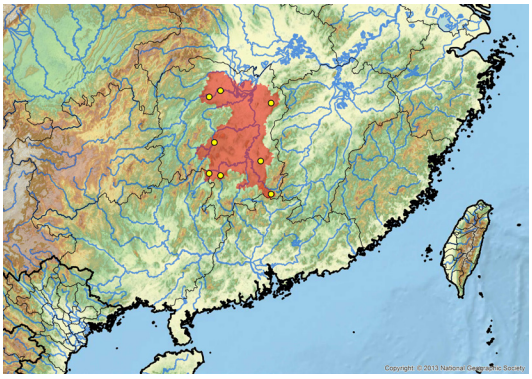
Type species: *Coelognathus novemcostatus* Heude 1880 [= subjective synonym of *Trionyx (Aspidonectes) sinensis* Wiegmann 1834], by original monotypy.

Tortisternum Heude 1880:31

Type species: *Tortisternum novemcostatum* Heude 1880 [= subjective synonym of *Trionyx (Aspidonectes) sinensis* Wiegmann 1834], by original monotypy.

Ceramopelta Heude 1880:33
Type species: *Ceramopelta latirostris* Heude 1880 [= subjective synonym of *Trionyx (Aspidonectes) sinensis* Wiegmann 1834], by original monotypy.
Coptopelta Heude 1880:34
Type species: *Coptopelta septemcostata* Heude 1880 [= subjective synonym of *Trionyx (Aspidonectes) sinensis* Wiegmann 1834], by original monotypy.
Cinctisternum Heude 1880:36
Type species: *Cinctisternum bicinctum* Heude 1880 [= subjective synonym of *Trionyx (Aspidonectes) sinensis* Wiegmann 1834], by original monotypy.

Pelodiscus axenaria (Zhou, Zhang, and Fang 1991) (10:32, 11:16)
Hunan Softshell Turtle

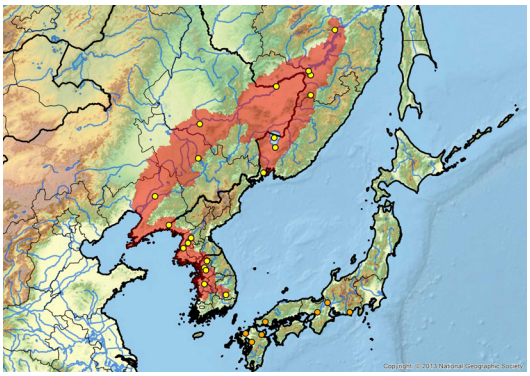


China (Guangxi, Hunan)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Data Deficient (2011)
CITES: Appendix II
Trionyx axenaria Zhou, Zhang, and Fang 1991:382, *Pelodiscus axenaria, Pelodiscus axenarius*
Type locality: "Taoyuan, Pingjiang, Rucheng, Lingling, Shaoyang Counties, Hunan Province, China" [in Chinese].

Pelodiscus maackii (Brandt 1857) (10:32, 11:16) (**80**)
Northern Chinese Softshell Turtle

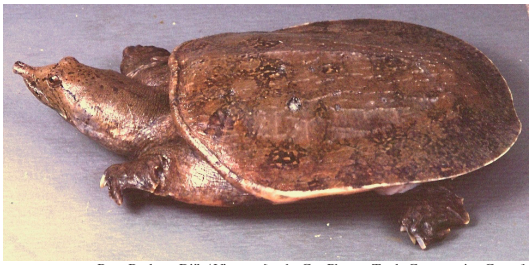


Shi Haitao / nr. Nagoya, Japan [captivity]

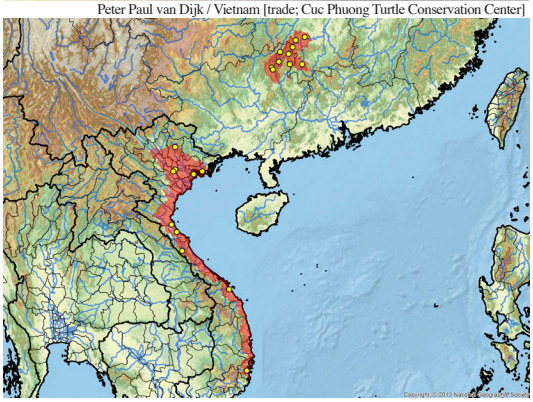


(orange dots = possibly native or historic introduction)
China (Heilongjiang, Jilin, Liaoning, Nei Monggu), North Korea, Russia (Amurskaya, Khabarovskiy, Primorskiy, Yevreyskaya), Japan (historic introduction?), South Korea
Introduced: USA (Hawaii [Oahu])
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Data Deficient (2011)
CITES: Appendix II
Trionyx maackii Brandt 1857:110, *Amyda maackii, Pelodiscus maackii*
Type locality: "in fluminibus australioribus lateralibus Amuris, nominatim in fluviis Sungari et Ussuri, nec non in ipsius fluminis Amuris parte inter fluvios modo dictos obvia" [in the more southern rivers next to the Amur, namely the Sungari and Ussuri rivers, and also in the part of the Amur river between these rivers] [Russia]. Restricted to "Southern Amur R. and Ussuri R." [Russia] by Stejneger (1907:529).

Pelodiscus parviformis Tang 1997 (10:32, 11:16)
Vietnamese Softshell Turtle



Peter Paul van Dijk / Vietnam [trade; Cuc Phuong Turtle Conservation Center]

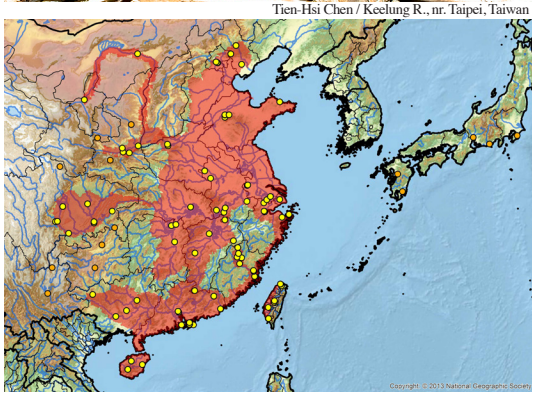


China (Guangxi, Hunan), Vietnam
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Data Deficient (2011)
CITES: Appendix II
Pelodiscus parviformis Tang 1997:13
Type locality: "Quanzhou, Xing'an, Guanyang, Ziyuan, Lingchuan counties of Guangxi Auto. Region; Dong'an, Qiyang, Daoxian counties of Hunan Province" [China].

Pelodiscus sinensis (Wiegmann 1834) (10:32, 11:16, 14:30) (**80, 81**)
Chinese Softshell Turtle



Tien-Hsi Chen / Keelung R., nr. Taipei, Taiwan



China (Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hainan, Hebei, Henan, Hong Kong, Hubei, Hunan, Jiangsu, Jiangxi, Nei Mongol, Shaanxi, Shandong, Shanxi, Sichuan, Yunnan, Zhejiang), Taiwan

Introduced: Brazil (Pará), Guam, Indonesia (Kalimantan, Sumatra, Timor), Iran, Japan (Bonin Islands, Honshu, Kyoshu, Ryukyu Archipelago, Shikoku), Laos, Malaysia (Peninsular, East), Northern Mariana Islands, Philippines (Bohol, Cebu, Latvia, Leyte, Luzon, Mindanao, Mindoro, Panay), Singapore, South Korea, Spain, Thailand, Timor-Leste, USA (Hawaii [Oahu]), Vietnam

IUCN Red List: Vulnerable A1d+2d (2000); Previously: Least Concern [Not Listed] (1996)

TFTSG Draft Red List: Vulnerable *or* Endangered (2011)

Testudo rostrata Thunberg 1787:179 (*nomen suppressum,* ICZN 1991), *Emydes rostrata*
Type locality: Not known.

Testudo striata Suckow 1798:37 (*partim, nomen novum*)

Testudo semimembranacea Hermann 1804:219 (*nomen suppressum,* ICZN 1963)
Type locality: "Japania" [Japan].

Trionyx stellatus var. *Japon* Temminck and Schlegel 1834:pls.5,7 (10:18, 14:30) (invalid vernacular name)

Trionyx (Aspidonectes) sinensis Wiegmann 1834:189 (81) (*nomen conservandum,* ICZN 1963, 1991), *Trionyx sinensis, Pelodiscus sinensis, Tyrse sinensis, Amyda sinensis, Trionyx sinensis sinensis, Amyda sinensis sinensis, Pelodiscus sinensis sinensis*
Type locality: "kleinen Insel im Tigerflusse, dicht bei Macao" [China].

Trionyx japonica Temminck and Schlegel 1838:139 (14:30), *Amyda japonica, Pelodiscus sinensis japonicus*
Type locality: "Japon" [Japan].

Trionyx tuberculatus Cantor 1842a:16 (82) (*nomen nudum*)

Trionyx tuberculatus Cantor 1842b:482 (82), *Potamochelys tuberculatus, Amyda tuberculata, Trionyx sinensis tuberculatus, Amyda sinensis tuberculata, Pelodiscus sinensis tuberculatus*
Type locality: "Chusan...Island" [Zhoushan Island, Zhejiang, China].

Tyrse perocellata Gray 1844:48, *Trionyx perocellatus, Potamochelys perocellatus, Landemania perocellata, Gymnopus perocellatus*
Type locality: "Canton, China" [Guangzhou Shi, Guandong, China].

Trionyx schlegelii Brandt 1857:111, *Amyda schlegelii*
Type locality: "China borealis...Pekingo" [Beijing, China].

Landemania irrorata Gray 1869a:216
Type locality: "Shanghai" [China].

Trionyx peroculatus Günther *in* Gray 1869a:216 (*nomen nudum*)

Gymnopus simonii David 1875:214 (*nomen nudum*)

Psilognathus laevis Heude 1880:24
Type locality: "la région montagneuse au sud de la ville de Ning-kouo fou" [Ningguo Co., Anhui, China].

Temnognathus mordax Heude 1880:26
Type locality: "environs de Chang-hai" [Shanghai, China].

Gomphopelta officinae Heude 1880:27
Type locality: "la Houai, vers l'endroit où cette rivière sort de la province du Ho-nan" [Huai River, Henan, China].

Coelognathus novemcostatus Heude 1880:29
Type locality: "l'extrémité orientale du lac Tch'ao" [Lake Chao, Anhui, China].

Tortisternum novemcostatum Heude 1880:31
Type locality: "lac Tch'ao, département de Lu-tcheou" [Lake Chao, Anhui, China].

Ceramopelta latirostris Heude 1880:33
Type locality: "environs de Ngan-k'ing fou" [Anqing Shi, Anhui, China].

Coptopelta septemcostata Heude 1880:35
Type locality: "lacs de Tong-lieou (Ngan-houé)" [Dongliu, Anhui, China].

Cinctisternum bicinctum Heude 1880:37
Type locality: "marais de Ngan-K'ing" [Anqing Shi, Anhui, China].

Trionyx cartilagineus newtoni Ferreira 1897:114, *Trionyx sinensis newtoni*
Type locality: "Timor" [Timor-Leste] [in error, trade specimen]

Amyda schlegelii haseri Pavlov 1932:27
Type locality: "Tzu ya ho, the river of Sien hien (central Chili)" [Ziya He, Xian Co., Hebei, China].

Amyda schlegelii licenti Pavlov 1932:28
Type locality: "Tientsin" [Tianjin, China].

Amyda schlegelii laoshanica Pavlov 1933:3
Type locality: "Chantong, Laoshan, near Tsingtao" [Qingdao Shi, Shandong, China].

Rafetus Gray 1864b

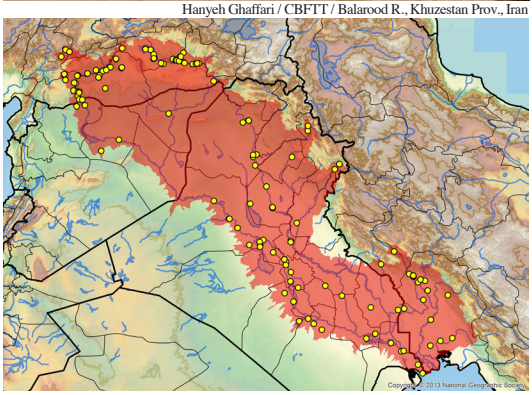
Rafetus Gray 1864b:81
Type species: *Rafetus euphraticus* [= *Testudo euphratica* Olivier *in* Daudin 1801], by original monotypy.

Oscaria Gray 1873g:157
Type species: *Oscaria swinhoei* Gray 1873g, by original monotypy.

Yuen Heude 1880:18
Type species: *Yuen leprosus* Heude 1880 [= subjective synonym of *Oscaria swinhoei* Gray 1873g], by subsequent designation by Stejneger (1907:514).

Rafetus euphraticus (Olivier *in* Daudin 1801) [83, 84]
Euphrates Softshell Turtle


Hanyeh Ghaffari / CBFTT / Balarood R., Khuzestan Prov., Iran



Iran (Ilam, Khuzestan, Lorestan), Iraq, Syria, Turkey
CBFTT Account: Taskavak, Atatür, Ghaffari, and Meylan (2016)
IUCN Red List: Endangered A1ac+2c (1996)
TFTSG Draft Red List: Endangered (2011)
CITES: Appendix II, as *Rafetus* spp.

Testudo euphratica Olivier *in* Daudin 1801:305 [83], *Trionyx euphraticus, Gymnopus euphraticus, Rafetus euphraticus, Pelodiscus euphraticus, Amyda euphratica, Tyrse euphratica*
Type locality: "le Tigre et l'Euphrate" [Tigris and Euphrates rivers, Iraq]. Restricted to "Euphrates (Al Firat), vicinity of Anah, Al-Anbar, Iraq" by Bour et al. (1995:85).

Testudo rafcht Olivier 1807:328
Type locality: "le Tigre..[&]..l'Euphrate" [Tigris and Euphrates rivers, Iraq].

Testudo rascht Gray 1830e:19 (*nomen novum*)

Tyrse rafeht Gray 1844:49 (*nomen novum*), *Trionyx rafeht, Testudo rafeht*

Rafetus swinhoei (Gray 1873g) [07:83, 10:33, 11:17] [85]
Red River Giant Softshell Turtle, Yangtze Giant Softshell Turtle, Swinhoe's Softshell Turtle


Timothy E.M. McCormack / TCC / nr. Hanoi, Vietnam



China (Anhui? [extirpated], Jiangsu? [extirpated], Yunnan, Zhejiang? [extirpated]), Vietnam
IUCN Red List: Critically Endangered A1cd+2cd (2000)
TFTSG Draft Red List: Critically Endangered (2011)
CITES: Appendix II

Oscaria swinhoei Gray 1873g:157, *Pelodiscus swinhoei, Trionyx swinhoei, Amyda swinhoei, Rafetus swinhoei*
Type locality: "neighbourhood of Shanghai" [China].

Yuen leprosus Heude 1880:20
Type locality: "le Houang-p'ou, à Chang-hai" [Huangpu Jiang, Shanghai, China].

Yuen maculatus Heude 1880:22, *Pelochelys maculatus*
Type locality: "le Houang-p'ou" [Huangpu Jiang, Shanghai, China].

Yuen elegans Heude 1880:23
Type locality: "Houang-p'ou" [Huangpu Jiang, Shanghai, China].

Yuen viridis Heude 1880:23
Type locality: "Grand Lac, à Sou-tcheou" [Tai Hu, Suzhou Shi, Jiangsu, China].

Yuen pallens Heude 1880:23
Type locality: "Grand Lac, près de Sou-tcheou" [Tai Hu, Suzhou Shi, Jiangsu, China].

Trionyx swinhonis Boulenger 1889:ix (*nomen novum*)

Pelochelys taihuensis † Zhang 1984:71 [Holocene, Neolithic, subfossil, China (Zhejiang)]
Type locality: "Luojiajiao Relics, Tongxiang County, Zhejiang" [China].

Trionyx liupani † Tao 1986:23 [Late Pleistocene, Taiwan]
Type locality: "Penghu Channel in the Taiwan Strait" [Taiwan, China].

Rafetus hoankiemensis Ha 1995:4 (*nomen nudum*)

Rafetus hoguomensis Ha 1995:4 (*nomen nudum*)

Rafetus leloii Ha 2000:104 [11:17]
Type locality: "Hoan Kiem Lake, Ha Noi" [Vietnam].

Rafetus vietnamensis Le, Le, Tran, Phan, Phan, Tran, Pham, Nguyen, Nong, Phan, Dinh, Truong, and Ha 2010:950 [10:33, 11:17]
Type locality: Not known; holotype from "Hung Ky Pagoda, Hanoi" [Vietnam].

Trionyx Geoffroy Saint-Hilaire 1809a

Trionyx Geoffroy Saint-Hilaire 1809a:363
Type species: *Trionyx* "tortue du Nil" [= *Trionyx egyptiacus* Geoffroy Saint-Hilaire 1809a] [= subjective synonym of *Testudo triunguis* Forskål 1775], by subsequent designation by Bory de Saint-Vincent (1828:77).

Aspidonectes Wagler 1830b:134
Type species: *Aspidonectes aegyptiacus* [= *Trionyx aegyptiacus* Geoffroy Saint-Hilaire 1809b] [= subjective synonym of *Testudo triunguis* Forsskål 1775), by subsequent designation by Fitzinger (1843:30).

Gymnopus Duméril and Bibron 1835:472 (*nomen novum*)

Tyrse Gray 1844:47

Type species: *Tyrse aegyptiacus* [= *Trionyx aegyptiacus* Geoffroy Saint-Hilaire 1809b] [= subjective synonym of *Testudo triunguis* Forskål 1775], by original designation.

Fordia Gray 1869a:219

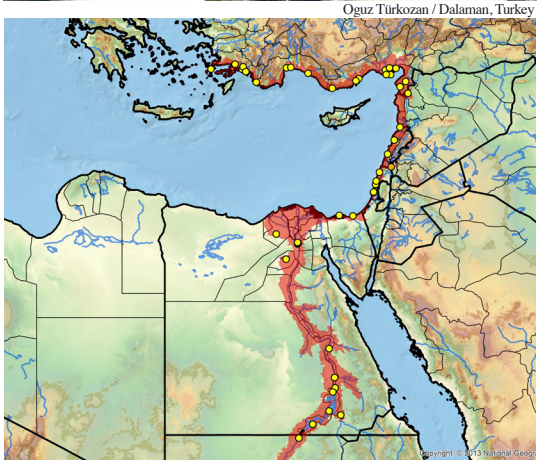
Type species: *Fordia africana* Gray 1869a [= subjective synonym of *Testudo triunguis* Forskål 1775], by original monotypy.

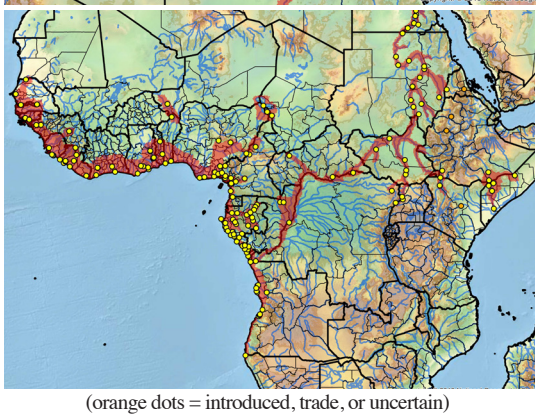
Trionyx triunguis (Forskål 1775) (10:29, 11:18)

African Softshell Turtle, Nile Softshell Turtle



Oguz Türkozan / Dalaman, Turkey





(orange dots = introduced, trade, or uncertain)

Angola, Benin, Cameroon, Central African Republic, Chad, Congo (DRC), Congo (ROC), Egypt, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Greece (vagrant), Guinea, Guinea-Bissau, Israel, Ivory Coast, Kenya, Lebanon, Liberia, Mauritania, Namibia, Niger, Nigeria, Senegal, Sierra Leone, Somalia, South Sudan, Sudan, Syria, Togo, Turkey, Uganda

Introduced: Israel (inland)

Mediterranean subpopulation: Egypt (extirpated), Greece, Israel, Lebanon, Syria, Turkey

IUCN Red List: Global: Least Concern [Not Listed] (1996); Subpopulations: Mediterranean: Critically Endangered C2a (1996)

TFTSG Draft Red List: Vulnerable (2013)

CITES: Appendix II, as *Trionyx* spp.

Testudo triunguis Forskål 1775:ix (10:29), *Amyda triunguis, Trionyx triunguis, Pelodiscus triunguis, Aspidonectes triunguis, Tyrse triunguis, Amyda triunguis triunguis*

Type locality: "Nilo" [Nile River, Egypt].

Testudo striata Suckow 1798:37 (*partim, nomen novum*)

Trionyx egyptiacus Geoffroy Saint-Hilaire 1809a:366

Type locality: "l'Egypte" [Egypt]. Restricted to "the lower Nile River drainage" [Egypt] by Bour et al. (1995:77).

Trionyx aegyptiacus Geoffroy Saint-Hilaire 1809b:12 (*nomen novum*), *Aspidonectes aegyptiacus, Gymnopodus aegyptiacus, Gymnopus aegyptiacus*

Trionyx niloticus Gray 1831d:46 (*nomen novum*), *Tyrse nilotica, Aspidonectes niloticus*

Trionyx labiatus Bell 1835:unnumbered, *Trionyx (Pelodiscus) labiatus*

Type locality: "Africâ occidentali...Sierra Leone."

Trionyx mortoni Hallowell 1844:120

Type locality: "Africa."

Aspidonectes aspilus Cope 1860:295, *Gymnopus aspilus*

Type locality: "Rembo and Ovenga rivers, tributaries of the Fernando Vas, Equatorial West Africa" [Gabon].

Fordia africana Gray 1869a:219

Type locality: "Upper Nile, Chartoum" [Sudan].

Trionyx triunguis rudolfianus Deraniyagala 1948:30, *Amyda triunguis rudolfianus*

Type locality: "Ferguson's Gulf, Lake Rudolf, Africa" [Kenya].

Pleurodira Cope 1864 (08:20)

Pleurodères Duméril and Bibron 1834:354

Pleurodera Lichtenstein 1856:2 (08:20)

Pleurodera Cope 1864:181

Pleurodira Cope 1865:186

Chelidae Gray 1825 (12:39) (86)

Chelides Cuvier 1816:14

Chelydes Schmid 1819:17

Chelidina Gray 1825:211

Chelydoidea Fitzinger 1826:7

Chelydae Gray 1831d:7

Chelydidae Gray 1831d:37

Hydraspidina Bonaparte 1836:3 (*partim*)

Chelina Bonaparte 1836:4

Hydraspididae Agassiz 1857a:249

Chelydidi Portis 1890:17

Chelyidae Baur 1893a:211

Chelodinidae Baur 1893a:211

Hydromedusidae Baur 1893a:211

Rhinemydidae Baur 1893a:212

Chelidae Lindholm 1929:289

Cheluidae Storr 1978:303 (86)

Chelinae Gray 1825 (12:39)

Chelides Cuvier 1816:14

Chelydes Schmid 1819:17

Chelidina Gray 1825:211

Chelina Bonaparte 1831:63

Chelidinae Georges, Birrell, Saint, McCord, and Donnellan 1998:235

Chelinae Turtle Taxonomy Working Group 2012:289

Acanthochelys Gray 1873c (14:39)

Acanthochelys Gray 1873c:305

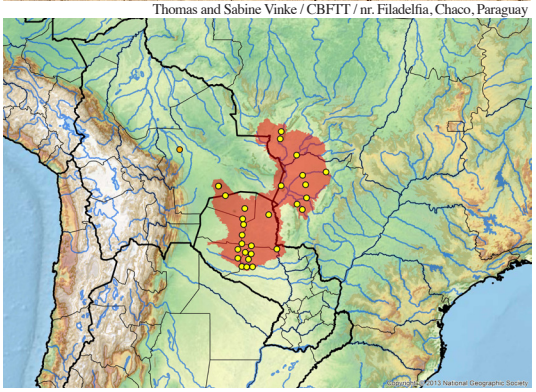
Type species: *Acanthochelys spixii* [= *Platemys spixii* Duméril and Bibron 1835], by original monotypy.

Acanthochelys macrocephala (Rhodin, Mittermeier, and McMorris 1984) (07:84)

Pantanal Swamp Turtle, Big-headed Pantanal Swamp Turtle



Thomas and Sabine Vinke / CBFTT / nr. Filadelfia, Chaco, Paraguay



(orange dot = probable trade)

Bolivia (Santa Cruz), Brazil (Mato Grosso, Mato Grosso do Sul), Paraguay

CBFTT Account: Rhodin, Métrailler, Vinke, Vinke, Artner, and Mittermeier (2009)

IUCN Red List: Near Threatened (1996)

TFTSG Draft Red List: Near Threatened **or** Least Concern (2012)

Phrynops schoepffii Fitzinger *in* Siebenrock 1904b:27 (*nomen nudum, partim*)

Platemys macrocephala Rhodin, Mittermeier, and McMorris 1984a:38, *Acanthochelys macrocephala*

Type locality: "Caiçara, Rio Paraguai, Mato Grosso, Brazil (16°03' S 57°43' W)."

Phrynops chacoensis Fritz and Pauler 1992:299 (07:84), *Acanthochelys chacoensis, Mesoclemmys chacoensis*

Type locality: "Paraguayanischer Chaco, 22°30'3" S, 59°44'30" W" [Paraguay].

Acanthochelys pallidipectoris (Freiberg 1945)

Chaco Side-necked Turtle



Thomas and Sabine Vinke / CBFTT / Boquerón, Paraguay



(orange dot = introduced)

Argentina (Chaco, Formosa, Salta, Santa Fe), Bolivia (Tarija), Paraguay

Introduced: Argentina (Mendoza)

CBFTT Account: Vinke, Vinke, Richard, Cabrera, Paszko, Marano, and Métrailler (2011)

IUCN Red List: Endangered A2cde+3cde+4cde; C1+2a(i) (2016); Previously: Vulnerable (1996)

Platemys pallidipectoris Freiberg 1945:19, *Acanthochelys pallidipectoris*

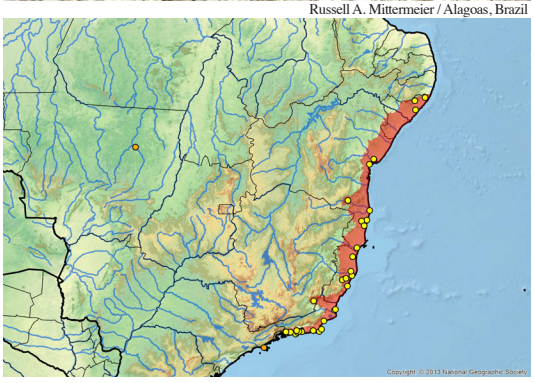
Type locality: "Pcia. [Presidencia] Roque Sáenz Peña, Chaco" [Argentina].

Acanthochelys radiolata (Mikan 1820) (14:39) (87)

Brazilian Radiolated Swamp Turtle



Russell A. Mittermeier / Alagoas, Brazil



(orange dots = misidentified or uncertain)

Brazil (Alagoas, Bahia, Espírito Santo, Minas Gerais, Rio de Janeiro, Sergipe)

IUCN Red List: Near Threatened (1996)

TFTSG Draft Red List: Data Deficient (2011)

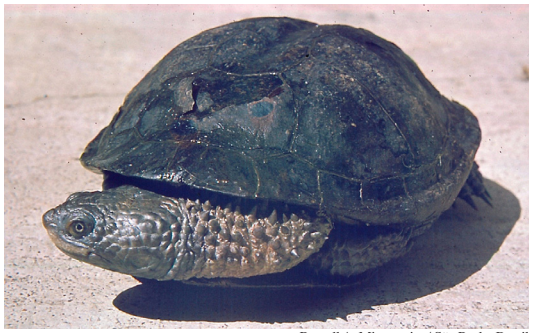
Emys radiolata Mikan 1820:[unpaginated], *Chelodina radiolata, Rhinemys radiolata, Chelys (Hydraspis) radiolata, Chelys radiolata, Hydraspis radiolata, Platemys radiolata, Platemys radiolata radiolata, Acanthochelys radiolata*

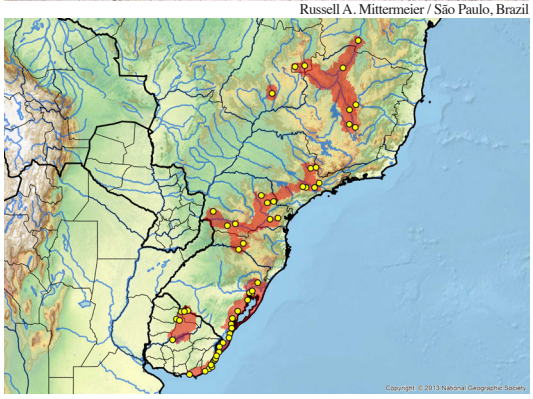
Type locality: "Sebastianopoli...Brasilia" [Rio de Janeiro, Brazil].

Platemys gaudichaudii Duméril and Bibron 1835:427,

Hydraspis gaudichaudii
Type locality: "Brésil" [Brazil].
Platemys werneri Schnee 1900:463
Type locality: "Umgebung von São Paulo" [Brazil].
Platemys radiolata quadrisquamosa Luederwaldt 1926:437, *Platemys quadrisquamosa*
Type locality: "Rio Doce (Est. do Espirito Santo)..[&] Belmonte (Bahia)" [Brazil].

Acanthochelys spixii (Duméril and Bibron 1835)
Black Spiny-necked Turtle, Spix's Sideneck Turtle


Russell A. Mittermeier / São Paulo, Brazil



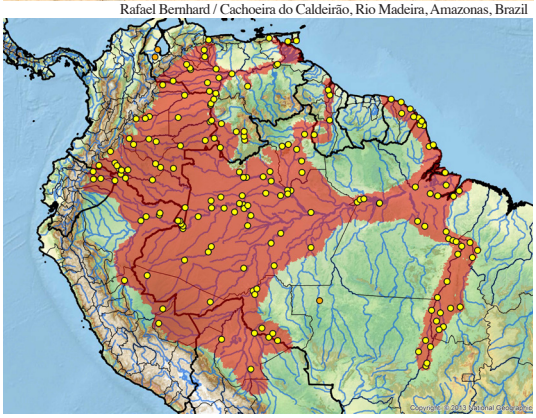
Brazil (Bahia, Goiás, Minas Gerais, Paraná, Rio Grande do Sul, Santa Catarina, São Paulo), Uruguay
IUCN Red List: Near Threatened (1996)
TFTSG Draft Red List: Near Threatened (2011)
Emys depressa Spix 1824:4 (junior homonym, not = *Emys depressa* Merrem 1820 = *Phrynops geoffroanus*)
Type locality: "provinciarum Rio de Janeiro et fluminis Sti Francisci" [Brazil]. Restricted to "Rio São Francisco, near Rio dos Pandeiros, Minas Gerais, Brazil" by Rhodin et al. (1984b:783) by restriction of *nomen novum* replacement name *Platemys spixii* Duméril and Bibron 1835.
Emys aspera Cuvier *in* Gray 1830e:16 [10:7] (*nomen oblitum*)
Type locality: "America." Restricted to "Brésil" [Brazil] by Bour and Pauler (1987:14).
Platemys spixii Duméril and Bibron 1835:409 (*nomen novum*), *Hydraspis spixii, Acanthochelys spixii, Platemys radiolata spixii*
Type locality: "Brésil" [Brazil]. Restricted to "Rio São Francisco, near Rio dos Pandeiros, Minas Gerais, Brazil" by Rhodin et al. (1984b:783).

Chelus Duméril 1805 [10:11]

Chelus Duméril 1805:76 [10:11]
Type species: *Chelus fimbriata* [= *Testudo fimbriata* Schneider 1783], by original monotypy.
Chelys Oppel 1811:6 (*nomen novum*)
Chelyda Rafinesque 1815:75 (*nomen novum*)
Matamata Merrem 1820:21 (*nomen novum*)

Chelus fimbriata (Schneider 1783) [88]
Matamata Turtle


Rafael Bernhard / Cachoeira do Caldeirão, Rio Madeira, Amazonas, Brazil


(orange dots = probable introduced or trade)

Bolivia (Beni, Pando, Santa Cruz), Brazil (Amapá, Amazonas, Goiás, Mato Grosso, Pará, Rondônia, Roraima, Tocantins), Colombia (Amazonas, Arauca, Caquetá, Casanare, Guainía, Meta, Putumayo, Vaupés, Vichada), Ecuador, French Guiana, Guyana, Peru (Loreto, Ucayali), Suriname, Trinidad, Venezuela (Amazonas, Anzoátegui, Apure, Barinas, Bolívar, Cojedes, Delta Amacuro, Guárico, Monagas, Sucre, Zulia)
CBFTT Account: Pritchard (2008)
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2011)
Testudo terrestris Fermin 1765:51 (junior homonym, not = *Testudo terrestris* Garsault 1764 = *Emys orbicularis orbicularis* or *Testudo terrestris* Forskål 1775 [*nomen conservandum*] = *Testudo (Testudo) graeca terrestris*; *nomen suppressum,* ICZN 1963)
Type locality: "Surinam."
Testudo fimbriata Schneider 1783:349 (*nomen conservandum,* ICZN 1963), *Chelus fimbriata, Chelys fimbriata, Matamata fimbriata, Chelus fimbriatus*
Type locality: "Surinam...von Aprouague..[&]..Remire."
Testudo fimbria Gmelin 1789:1043 (*nomen novum*), *Chelys fimbria*
Testudo matamata Bruguière 1792:257, *Emydes matamata, Chelus matamata, Chelys matamata*
Type locality: "Cayenne" [French Guiana].
Testudo bispinosa Ruiz de Xelva *in* Daudin 1801:94, *Chelys bispinosa, Matamata bispinosa*
Type locality: "Brésil" [Brazil].
Testudo rapara Gray 1831d:44 (*nomen nudum*)
Testudo raparara Gray 1844:44 (*nomen nudum*)
Chelys boulengerii Baur 1890b:968
Type locality: "Orinoco" [Venezuela].

Mesoclemmys Gray 1873c (07:100)

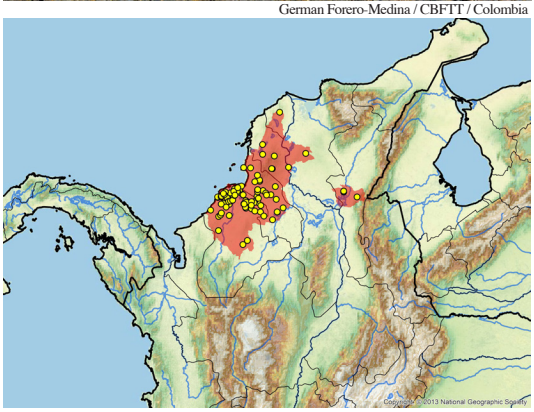
Mesoclemmys Gray 1873c:305
Type species: *Mesoclemmys gibba* [= *Emys gibba* Schweigger 1812], by original monotypy.
Batrachemys Stejneger 1909:126
Type species: *Batrachemys nasuta* [= *Emys nasuta* Schweigger 1812], by original monotypy.
Bufocephala McCord, Joseph-Ouni, and Lamar 2001:732
Type species: *Bufocephala vanderhaegei* [= *Phrynops tuberculatus vanderhaegei* Bour 1973], by original designation.
Ranacephala McCord, Joseph-Ouni, and Lamar 2001:732
Type species: *Ranacephala hogei* [= *Phrynops hogei* Mertens 1967], by original designation.

Mesoclemmys dahli (Zangerl and Medem 1958) (12:40)

Dahl's Toad-headed Turtle



German Forero-Medina / CBFTT / Colombia



Colombia (Atlántico, Bolívar, Cesar, Córdoba, Magdalena, Sucre)

CBFTT Account: Forero-Medina, Castaño-Mora, Cárdenas-Arevalo, and Medina-Rangel (2013)

IUCN Red List: Critically Endangered B1+2c (1996)

TFTSG Draft Red List: Endangered (2011)

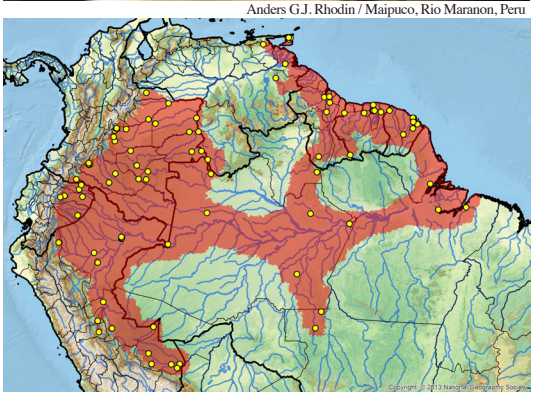
Phrynops (Batrachemys) dahli Zangerl and Medem 1958:376, *Phrynops dahli, Batrachemys dahli, Phrynops nasutus dahli, Mesoclemmys dahli*
Type locality: "Vicinity of Sincelejo, Bolivar, Colombia."

Mesoclemmys gibba (Schweigger 1812)

Gibba Turtle



Anders G.J. Rhodin / Maipuco, Rio Maranon, Peru



Bolivia, Brazil (Acre, Amapá, Amazonas, Mato Grosso, Pará, Roraima), Colombia (Amazonas, Arauca, Caquetá, Casanare, Guainía, Guaviare, Meta, Putumayo, Vaupés, Vichada), Ecuador, French Guiana, Guyana, Peru (Amazonas, Loreto, Madre de Dios, Puno, Ucayali), Suriname, Trinidad, Venezuela (Amazonas, Bolívar, Delta Amacuro, Monagas)

IUCN Red List: Least Concern [Not Listed] (1996)

TFTSG Draft Red List: Least Concern (2011)

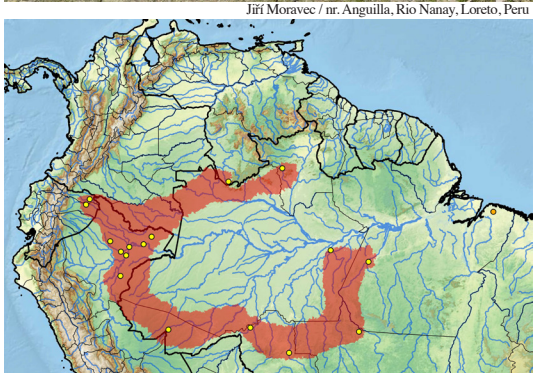
Emys gibba Schweigger 1812:299, *Rhinemys gibba, Hydraspis cayennensis gibba, Platemys gibba, Hydraspis (Podocnemis) gibba, Hydraspis gibba, Phrynops gibbus, Mesoclemmys gibba, Phrynops (Mesoclemmys) gibba, Mesoclemmys gibbus*
Type locality: Not known. Restricted to "Amérique méridional" by Duméril and Duméril (1851:20); and to "environs de Cayenne, Guyane française" [French Guiana] by Bour and Pauler (1987:7).
Emys stenops Spix 1824:12, *Hydraspis stenops*
Type locality: "fluminis Solimoëns" [Rio Solimões, Amazonas, Brazil]. Restricted to "l'Amazone entre Tefé et Tabatinga au Brésil (Amazonas)" [Brazil] by Bour and Pauler (1987:7).
Platemys miliusii Duméril and Bibron 1835:431, *Phrynops miliusii, Hydraspis miliusii*
Type locality: "Cayenne" [French Guiana].
Hydraspis gordoni Gray 1868:563
Type locality: "Trinidad, near the mountain of Tamana."
Hydraspis bicolor Gray 1873c:304
Type locality: "Demerara Falls" [Guyana].

Mesoclemmys heliostemma (McCord, Joseph-Ouni, and Lamar 2001) (07:101, 12:41)

Yellow-crowned Toad-headed Turtle



Jiří Moravec / nr. Anguilla, Rio Nanay, Loreto, Peru



(orange dot = trade)

Brazil (Acre, Amazonas, Mato Grosso, Pará, Rondônia, Roraima), Colombia (Amazonas, Caquetá, Guainía, Putumayo, Vaupés), Ecuador, Peru (Loreto), Venezuela (Amazonas)

IUCN Red List: Not Evaluated

TFTSG Draft Red List: Data Deficient (2011)

Batrachemys heliostemma McCord, Joseph-Ouni, and Lamar 2001:734, *Mesoclemmys heliostemma*

Type locality: "base of Pico da Neblina (situated on the Venezuela/Brazil border) on the left bank of Río Baria (= Río Mawarinuma) [4º95'N, 66º10'W], a tributary of the Rio Negro, Amazonas, Venezuela." GPS coordinates incorrect, emended here to 0º50'N, 66º10'W.

Mesoclemmys hogei (Mertens 1967)

Hoge's Side-necked Turtle



Russell A. Mittermeier / TCF / TCC / Espírito Santo, Brazil



(orange dot = probable erroneous type locality)

Brazil (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo?)

IUCN Red List: Critically Endangered A2bcd+4bcd (2016); Previously: Endangered (1996)

Phrynops hogei Mertens 1967:73, *Mesoclemmys hogei, Ranacephala hogei*

Type locality: "Rio Pequena, südwestlich von São Paulo, Brasilien" [Brazil] [in error]. Emended to "Rio Pequeno, southeast of São Paulo" [Brazil] [in error?] by Rhodin et al. (1982:179).

Mesoclemmys nasuta (Schweigger 1812)

Guyanan Toad-headed Turtle



Jérôme Maran / French Guiana



Brazil (Amapá), French Guiana, Suriname

IUCN Red List: Least Concern [Not Listed] (1996)

TFTSG Draft Red List: Data Deficient (2011)

Emys nasuta Schweigger 1812:298, *Rhinemys nasuta, Hydraspis (Rhinemys) nasuta, Hydraspis nasuta, Platemys nasuta, Batrachemys nasuta, Phrynops (Batrachemys) nasuta, Phrynops nasuta, Phrynops nasutus, Phrynops nasutus nasutus, Phrynops nasuta nasuta, Batrachemys nasutus, Mesoclemmys nasuta*

Type locality: Not known. Restricted to "Amérique méridionale" by Duméril and Bibron (1835:437); to "Guyanes et au nord-est de l'Amazonie" by Lescure and Fretey (1976:1318); and to "rivières Ouaqui et Inini, bassin du Maroni en amont de Maripasoula,

Guyane française" [French Guiana] by Bour and Pauler (1987:6).

Emys barbatula Gravenhorst 1829:15, *Hydraspis barbatula*
Type locality: Not known.

Platemys schweiggerii Duméril and Bibron 1835:435 (*nomen novum*)

Phrynops walbaumi Fitzinger *in* Siebenrock 1904b:20 (*nomen nudum*)

Mesoclemmys perplexa Bour and Zaher 2005
Cerrado Side-necked Turtle



Vinicius T. de Carvalho / Piauí, Brazil



Brazil (Ceará, Goiás, Piauí)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Data Deficient (2011)

Mesoclemmys perplexa Bour and Zaher 2005:298
Type locality: "the regions called "Olho d'Água da Santa" and "Baixão do Fausto", southern part of the Parque Nacional da Serra das Confusões, State of Piauí, Brasil" [Brazil].

Mesoclemmys raniceps (Gray 1856b) (12:41) **(89)**
Amazon Toad-headed Turtle



Richard C. Vogt / Iquitos, Peru [captivity]



Bolivia, Brazil (Acre, Amazonas, Rondônia, Roraima), Colombia (Amazonas, Caquetá, Guainía, Putumayo, Vaupés), Ecuador, Peru (Loreto, Madre de Dios, Pasco, Ucayali)
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Data Deficient (2011)

Hydraspis raniceps Gray 1856b:55, *Platemys raniceps, Phrynops raniceps, Batrachemys raniceps, Batrachemys raniceps raniceps, Mesoclemmys raniceps*
Type locality: "Brazils; Para" [Pará, Brazil].

Hydraspis maculata Gray 1873c:305 **(88)**
Type locality: "Tropical America." Restricted to "S. America" by Gray (1873j:65); and to "Venezuela" by Boulenger (1889:219) and Pritchard and Trebbau (1984:127) [in error, see Rivas et al. (2015)].

Phrynops wermuthi Mertens 1969b:132, *Phrynops tuberculatus wermuthi, Phrynops (Batrachemys) nasutus wermuthi, Phrynops nasutus wermuthi, Phrynops nasuta wermuthi, Batrachemys raniceps wermuthi*
Type locality: "Peru...zweifellos der amazonische Teil des Landes." Restricted to "Iquitos (3°50' S 73°15' W), Loreto, Peru" by Bour and Pauler (1987:8).

Mesoclemmys tuberculata (Luederwaldt 1926)
Tuberculate Toad-headed Turtle



Daniel O. Santana / CBFTT / Areia Branca, Sergipe, Brazil



Brazil (Alagoas, Bahia, Ceará, Maranhão, Minas Gerais, Paraíba, Pernambuco, Piauí, Rio Grande do Norte, Sergipe)

CBFTT Account: Santana, Marques, Vieira, Moura, Faria, and Mesquita (2016)

IUCN Red List: Least Concern [Not Listed] (1996)

TFTSG Draft Red List: Data Deficient (2011)

Rhinemys tuberculata Luederwaldt 1926:428, *Batrachemys tuberculata, Phrynops (Batrachemys) tuberculata, Phrynops tuberculata, Phrynops (Batrachemys) tuberculatus, Phrynops tuberculatus, Phrynops tuberculatus tuberculatus, Mesoclemmys tuberculata*

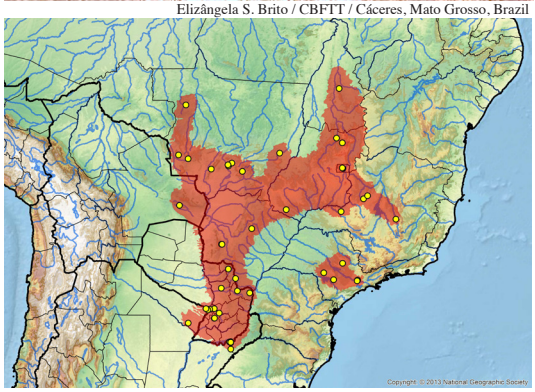
Type locality: "Brasil: Estado da Bahia e Pará" [Brazil]. Restricted to "Villa Nova, Bahia" by Mertens and Wermuth (1955:400); and to "Fortaleza, Ceará" [Brazil] by lectotype designation by Bour and Pauler (1987:9).

Mesoclemmys vanderhaegei (Bour 1973)

Vanderhaege's Toad-headed Turtle



Elizângela S. Brito / CBFTT / Cáceres, Mato Grosso, Brazil



Argentina (Corrientes, Formosa, Misiones), Bolivia, Brazil (Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraná, São Paulo, Tocantins), Paraguay

CBFTT Account: Marques, Böhm, Brito, Cabrera, and Verdade (2014)

IUCN Red List: Near Threatened (1996)

TFTSG Draft Red List: Data Deficient *or* Near Threatened (2012)

Phrynops schöpfii Fitzinger *in* Diesing 1839:237 (*nomen nudum*)

Phrynops schoepffii Fitzinger *in* Siebenrock 1904b:22 (*nomen nudum, partim*)

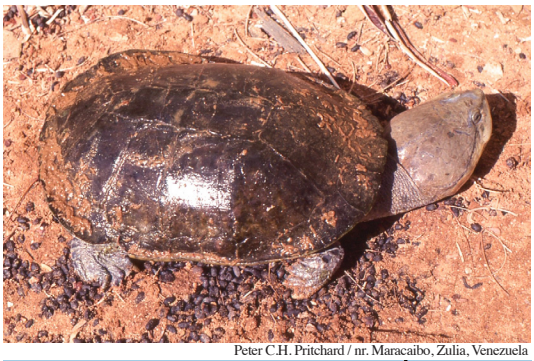
Phrynops paraguayensis Vanzolini *in* Donoso-Barros 1965:13 (*nomen nudum*)

Phrynops tuberculatus vanderhaegei Bour 1973:175, *Phrynops (Batrachemys) vanderhaegei, Phrynops vanderhaegei, Batrachemys vanderhaegei, Bufocephala vanderhaegei, Mesoclemmys vanderhaegei*

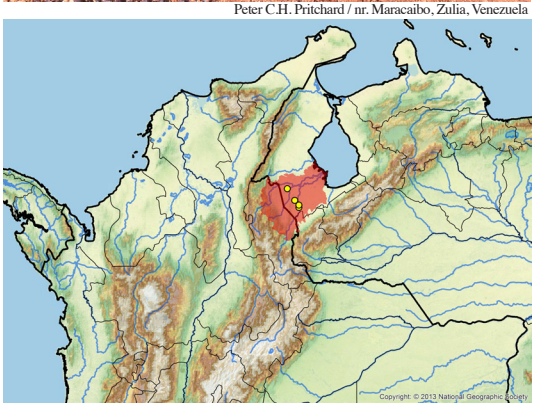
Type locality: "environs d'Asunción au Paraguay." Restricted to "Tobati (25°15' S, 57°04' W), La Cordillera, Paraguay" by Bour and Pauler (1987:10).

Mesoclemmys zuliae (Pritchard and Trebbau 1984) (12:40)

Zulia Toad-headed Turtle



Peter C.H. Pritchard / nr. Maracaibo, Zulia, Venezuela



Colombia (?) (Norte de Santander), Venezuela (Zulia)

IUCN Red List: Vulnerable B1+2c (1996)

TFTSG Draft Red List: Vulnerable (2011)

Phrynops (Batrachemys) zuliae Pritchard and Trebbau 1984:135, *Phrynops zuliae, Batrachemys zuliae, Mesoclemmys zuliae*

Type locality: "Caño Madre Vieja near El Guayabo, Distrito Colón, Edo. Zulia, Venezuela (8°53' N, 72°30' W)."

Phrynops Wagler 1830b (07:100)

Phrynops Wagler 1830b:135

Type species: *Phrynops geoffroanus* [= *Emys geoffroana* Schweigger 1812], by original monotypy.

Spatulemys Gray 1872b:463

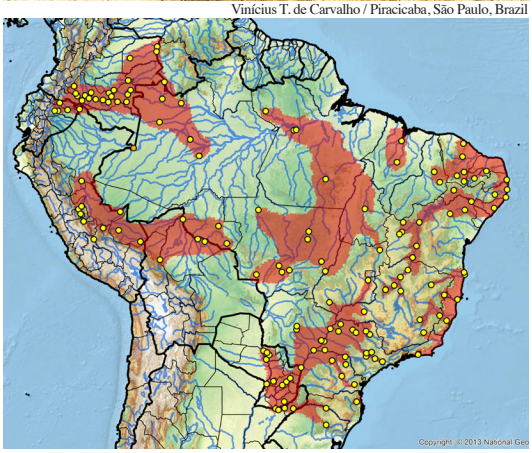
Type species: *Spatulemys lasalae* [= subjective synonym of *Platemys hilarii* Duméril and Bibron 1835], by original monotypy.

Parahydraspis Wieland 1923:2

Type species: *Parahydraspis paranaensis* † Wieland 1923, by original monotypy.

Phrynops geoffroanus (Schweigger 1812) [10:44, 14:40] **(90)**
Geoffroy's Side-necked Turtle


Vinícius T. de Carvalho / Piracicaba, São Paulo, Brazil


(orange dot = probable trade)

Argentina (Corrientes, Misiones), Bolivia (Beni), Brazil (Acre, Alagoas, Amazonas, Bahia, Ceará, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Piauí, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Rondônia, Santa Catarina, São Paulo, Sergipe, Tocantins), Colombia (Amazonas, Caquetá, Casanare, Guainía, Meta, Putumayo, Vaupés, Vichada), Ecuador, Paraguay, Peru (Cusco, Huanuco, Junin, Loreto, Madre de Dios, Pasco), Venezuela (Amazonas)

IUCN Red List: Least Concern [Not Listed] (1996)

TFTSG Draft Red List: Least Concern (2011)

Emys geoffroana Schweigger 1812:302, *Chelodina geoffroana, Phrynops geoffroanus, Platemys geoffroana, Hydraspis (Phrynops) geoffroana, Hydraspis geoffroana, Phrynops geoffroana, Rhinemys geoffroana, Phrynops geoffroana geoffroana, Phrynops geoffroanus geoffroanus*
Type locality: "Brasilia" [Brazil].

Emys depressa Merrem 1820:22 (senior homonym, not = *Emys depressa* Spix 1824 = *Acanthochelys spixii*), *Chelys (Hydraspis) depressa, Chelys depressa, Hydraspis depressa, Platemys depressa*
Type locality: "Brasilia" [Brazil].

Emys viridis Spix 1824:3, *Chelys (Hydraspis) viridis, Chelys viridis, Hydraspis viridis*
Type locality: "fluminis Carinhanhae, confluentis Sti Francisci" [Rio Carinhanha, tributary of Rio São Francisco, Brazil].

Emys tritentaculata Saint-Hilaire *in* Cuvier 1829:11 [14:40] (*nomen nudum et dubium*)

Emys geoffroyana Gray 1830e:16 (*nomen novum*), *Phrynops geoffroyana, Hydraspis geoffroyana, Platemys geoffroyana*

Platemys geoffreana Duméril and Bibron 1835:418 (*nomen novum*)

Platemys waglerii Duméril and Bibron 1835:422, *Hydraspis waglerii, Phrynops waglerii*
Type locality: "Brésil" [Brazil].

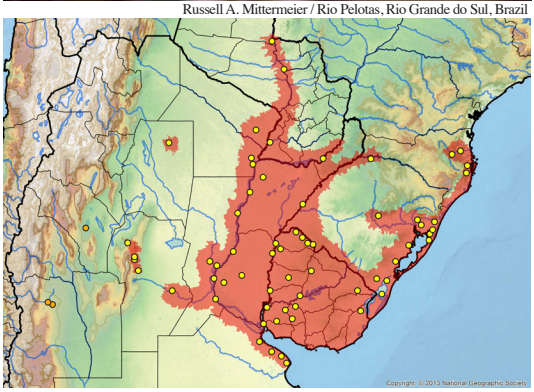
Platemys neuwiedii Duméril and Bibron 1835:425 (*nomen novum*)

Hydraspis boulengeri Bohls 1895:53
Type locality: "nördlichen Theile Paraguays...im Aquidaban, Tagatiya und anderen linken Nebenflüssen des Paraguaystromes" [Paraguay]. Restricted to "Departmento Concepción: Río Saladillo, 23ºS" [Paraguay] by Cacciali et al. (2016:45).

Hydraspis lutzi Ihering *in* Luederwaldt 1926:441, *Phrynops lutzi*
Type locality: "Mogy-guassù (Est. de S. Paulo)" [Brazil].

Phrynops hilarii (Duméril and Bibron 1835)
Saint-Hilaire's Side-necked Turtle


Russell A. Mittermeier / Rio Pelotas, Rio Grande do Sul, Brazil


(orange dots = probably introduced)

Argentina (Buenos Aires, Chaco, Córdoba, Corrientes, Entre Rios, Formosa, La Rioja (?), Mendoza (?), Misiones, Santa Fe, Santiago del Estero), Brazil (Rio Grande do Sul, Santa Catarina), Paraguay, Uruguay

IUCN Red List: Least Concern [Not Listed] (1996)

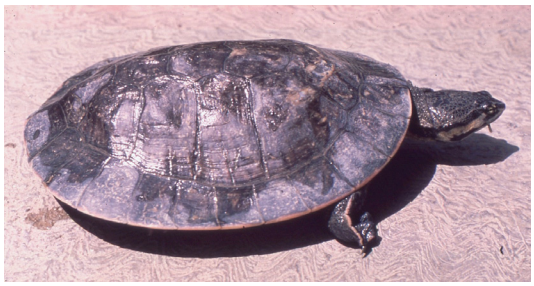
TFTSG Draft Red List: Least Concern (2011)

Platemys hilarii Duméril and Bibron 1835:428, *Hydraspis hilarii, Hydraspis geoffroyana hilarii, Phrynops hilarii, Phrynops geoffroana hilarii, Phrynops geoffroanus hilarii*
Type locality: "Brésil" [Brazil].

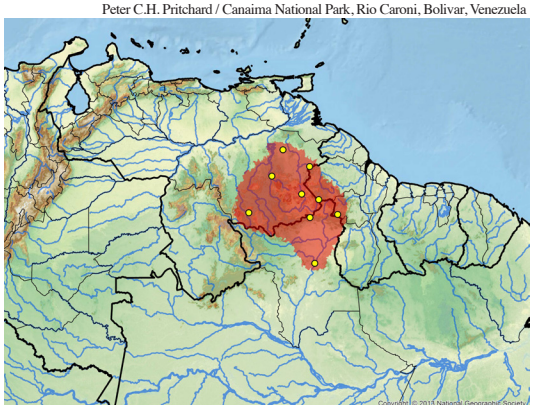
Hydraspis hilairii Gray 1844:40 (*nomen novum*), *Platemys hilairii, Phrynops (Phrynops) geoffroanus hilairii, Phrynops geoffroanus hilairii*

Spatulemys lasalae Gray 1872b:463
Type locality: "Rio Parana, Corrientes" [Argentina].

Phrynops tuberosus (Peters 1870) (10:44) **(90)**
Guianan Shield Side-necked Turtle



Peter C.H. Pritchard / Canaima National Park, Rio Caroni, Bolivar, Venezuela

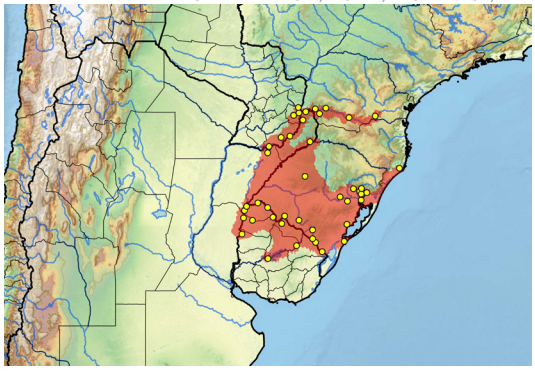


Brazil (Roraima), Guyana, Venezuela (Bolívar)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Least Concern (2011)
Platemys tuberosa Peters 1870:311, *Hydraspis tuberosa, Phrynops tuberosa, Phrynops geoffroana tuberosa, Phrynops geoffroanus tuberosus, Phrynops (Phrynops) tuberosus, Phrynops tuberosus*
Type locality: "Cotingaflusse am Roraimagebirge in British-Guyana" [Guyana]. Emended to "Amazon drainage, the Río Cotingo... Brazil...state of Roraima" by Bour (2008:38).

Phrynops williamsi Rhodin and Mittermeier 1983
Williams' Side-necked Turtle



Vinícius T. de Carvalho / Picada Café, rio Cadeia, Rio Grande do Sul, Brazil

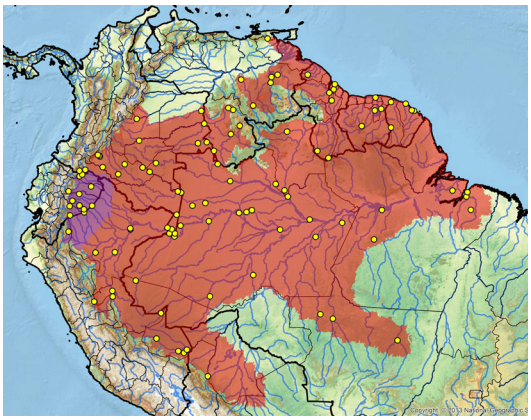


Argentina (Corrientes, Entre Rios, Misiones), Brazil (Paraná, Rio Grande do Sul, Santa Catarina), Paraguay, Uruguay
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Vulnerable (2011)
Phrynops williamsi Rhodin and Mittermeier 1983:58
Type locality: "Rio Cadea, Rio Grande do Sul, Brazil."

Platemys Wagler 1830b (14:39)

Platemys Wagler 1830b:135
Type species: *Platemys planiceps* [= *Testudo planiceps* Schneider 1792] [= objective synonym of *Testudo platycephala* Schneider 1792], by original monotypy.

Platemys platycephala (Schneider 1792) (14:41) **(91)**
Twist-necked Turtle



(subspecies: *platycephala* = red, *melanonota* = purple)
Bolivia (Beni, Cochabamba), Brazil (Acre, Amapá [?], Amazonas, Mato Grosso, Pará, Roraima), Colombia (Amazonas, Caquetá, Guainía, Guaviare, Meta, Putumayo, Vaupés, Vichada), Ecuador, French Guiana, Guyana, Peru (Amazonas, Huánuco, Loreto, Madre de Dios, Puno, Ucayali), Suriname, Venezuela (Amazonas, Bolívar, Delta Amacuro, Monagas)
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2011)

Platemys platycephala platycephala (Schneider 1792)
Eastern Twist-necked Turtle, Common Twist-necked Turtle



Russell A. Mittermeier / nr. Leticia, Colombia

Bolivia (Beni, Cochabamba), Brazil (Acre, Amapá?, Amazonas, Mato Grosso, Pará, Roraima), Colombia (Amazonas, Caquetá, Putumayo, Vaupés), French Guiana, Guyana, Peru (Huánuco, Loreto, Madre de Dios, Puno, Ucayali), Suriname, Venezuela (Amazonas, Bolívar, Delta Amacuro, Monagas)
Testudo platycephala Schneider 1792:261, *Platemys platycephala, Platemys platycephala platycephala*

Type locality: "Ost-indien." Restricted to "Cayenne, French Guiana" by Ernst (1984:350).

Testudo planiceps Schneider 1792:pl.7 (*nomen novum* and senior homonym, not = *Testudo planiceps* Gray 1854b = *Chelonoidis* sp. indet.), *Emys planiceps, Hydraspis planiceps, Clemmys planiceps, Platemys planiceps, Chelys (Hydraspis) planiceps, Chelys planiceps*

Testudo martinella Daudin 1802:377, *Platemys martinella*
Type locality: "Cayenne et dans l'intérieur de la Guiane" [French Guiana].

Emys discolor Thunberg *in* Schweigger 1812:302, *Hydraspis (Phrynops) discolor, Hydraspis discolor*
Type locality: Not known. Restricted to "Cayenne, French Guiana" by Ernst (1984:350).

Emys canaliculata Spix 1824:10, *Hydraspis canaliculata, Platemys canaliculata*
Type locality: "fluminis Solimoens" [Rio Solimões, Amazonas, Brazil].

Emys carunculata Saint-Hilaire *in* Cuvier 1829:11 (14:41) (*nomen nudum et dubium*)

Emys constricta Cuvier *in* Gray 1830e:17 (*nomen nudum*)

Hydraspis pachyura Boie *in* Gray 1830e:17 (*nomen nudum*), *Emys pachyura*

Hydraspis constricta Gray 1831d:43
Type locality: Not known. Restricted to "Belem, Brazil" by Ernst (1984:350).

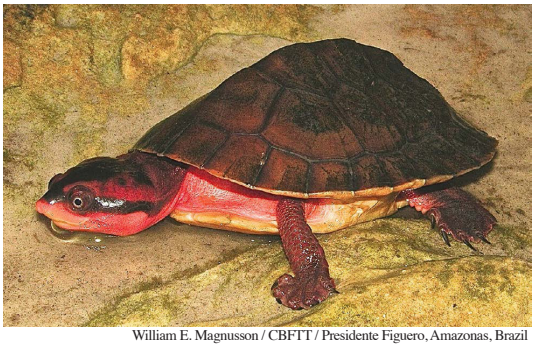
Platemys platycephala melanonota Ernst 1984 (91)
Black-backed Twist-necked Turtle
Ecuador, Peru (Amazonas, Loreto)

Platemys platycephala melanonota Ernst 1984:352
Type locality: "vicinity of Galilea, on the Río Santiago, Amazonas, Perú (4°1' S, 77°47' W)."

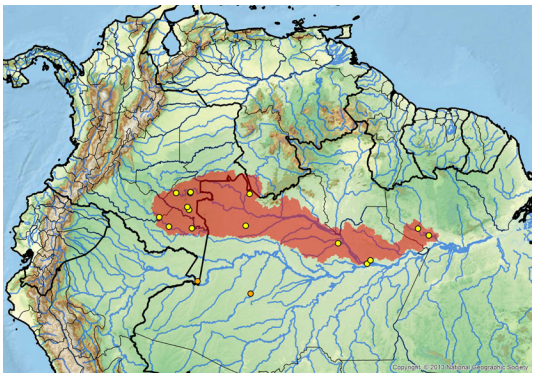
Rhinemys Wagler 1830b (07:100)

Rhinemys Wagler 1830b:134
Type species: *Rhinemys rufipes* [= *Emys rufipes* Spix 1824], by subsequent designation by Fitzinger (1843:29).

Rhinemys rufipes (Spix 1824)
Red Side-necked Turtle, Red-footed Sideneck Turtle



William E. Magnusson / CBFTT / Presidente Figuero, Amazonas, Brazil



(orange dots = trade and uncertain)

Brazil (Amazonas, Pará), Colombia (Amazonas, Guainía, Vaupés), Venezuela (?) (Amazonas)

CBFTT Account: Magnusson and Vgt (2014)

IUCN Red List: Near Threatened (1996)

TFTSG Draft Red List: Least Concern (2011)

Emys rufipes Spix 1824:7, *Hydraspis rufipes, Rhinemys rufipes, Chelys (Hydraspis) rufipes, Chelys rufipes, Platemys rufipes, Phrynops rufipes*
Type locality: "fluminis Solimoëns" [Rio Solimões, Amazonas, Brazil].

HYDROMEDUSINAE Baur 1893a (12:39)

Hydromedusidae Baur 1893a:211

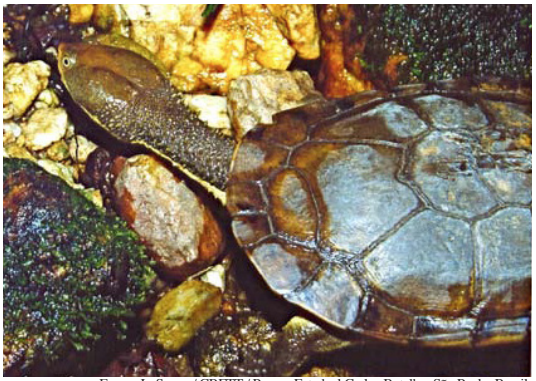
Hydromedusinae Georges, Birrell, Saint, McCord, and Donnellan 1998:235

Hydromedusa Wagler 1830b

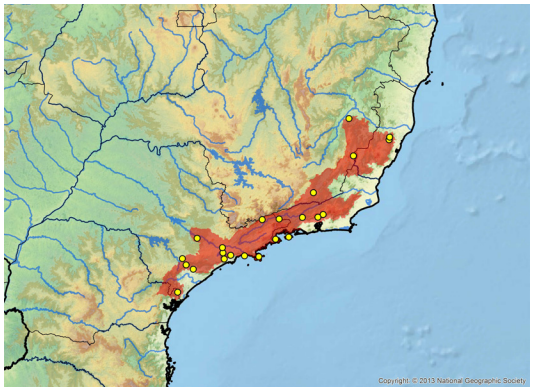
Hydromedusa Wagler 1830b:135
Type species: *Hydromedusa maximiliani* [= *Emys maximiliani* Mikan 1825], by original monotypy.

Hydromedusa (Chelomedusa) Gray 1873c:303
Type species: *Hydromedusa (Chelomedusa) depressa* [= *Hydromedusa depressa* Gray 1856b] [= subjective synonym of *Emys maximiliani* Mikan 1825], by subsequent designation by Lindholm (1929:289).

Hydromedusa maximiliani (Mikan 1825)
Brazilian Snake-necked Turtle, Maximilian's Snake-necked Turtle



Franco L. Souza / CBFTT / Parque Estadual Carlos Botelho, São Paulo, Brazil



Brazil (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)
CBFTT Account: Souza and Martins (2009)
IUCN Red List: Vulnerable B1+2cd (1996)
TFTSG Draft Red List: Near Threatened (2011)

Emys maximiliani Mikan 1825:[unpaginated], *Chelodina maximiliani, Hydromedusa maximiliani, Hydraspis maximiliani*
Type locality: "Brasiliam...Capitania St. Paulo" [São Paulo, Brazil].

Emys maximiliana Gray 1830e:17 (*nomen novum*), *Hydromedusa maximiliana*

Chelodina flavilabris Duméril and Bibron 1835:446, *Hydromedusa flavilabris, Chelomedusa flavilabris*
Type locality: "Brésil" [Brazil].

Hydromedusa subdepressa Gray 1854a:134
Type locality: "Brazils" [Brazil].

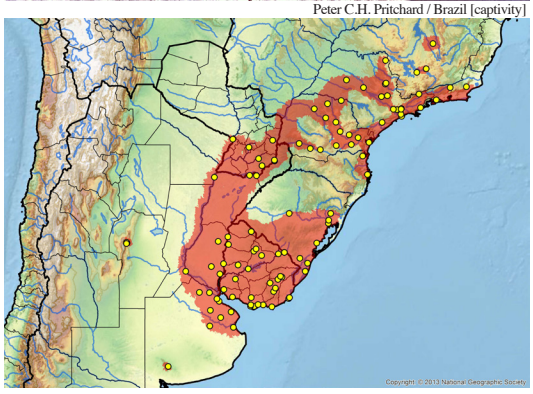
Hydromedusa depressa Gray 1856b:60 (*nomen novum*), *Chelomedusa depressa*

Hydromedusa bankae Giebel 1866b:19
Type locality: "Insel Banka" [Bangka Island, Sumatra, Indonesia] [in error].

Hydromedusa tectifera Cope 1870a
South American Snake-necked Turtle



Peter C.H. Pritchard / Brazil [captivity]



Argentina (Buenos Aires, Chaco, Córdoba, Corrientes, Entre Rios, Formosa, Misiones, Santa Fe, Santiago del Estero), Brazil (Minas Gerais, Paraná, Rio de Janeiro, Rio Grande do Sul, Santa Catarina, São Paulo), Paraguay, Uruguay
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2011)

Hydromedusa tectifera Cope 1870a:147
Type locality: "tributaries of the Parana or Uraguay rivers, either in the Argentine Confederation or the Banda Oriental" [Argentina or Uruguay].

Hydromedusa platanensis Gray 1873c:302, *Hydromedusa platensis*
Type locality: "Rio de la Plata" [Argentina or Uruguay].

Platemys antiqua † Ameghino 1882:41 (*nomen nudum*) [Pleistocene or Holocene, Argentina (Buenos Aires)]

Platemys fossilis † Ameghino 1882:41 (*nomen nudum*) [Pleistocene or Holocene, Argentina (Buenos Aires)]

Platemys laevis † Ameghino 1882:41 (*nomen nudum*) [Pleistocene or Holocene, Argentina (Buenos Aires)]

Platemys robusta † Ameghino 1882:41 (*nomen nudum*) [Pleistocene or Holocene, Argentina (Buenos Aires)]

Hydromedusa wagleri Günther 1884:423
Type locality: "Buenos Ayres" [Argentina].

CHELODININAE Baur 1893a (12:39)

Chelodinidae Baur 1893a:211
Chelodininae Georges, Birrell, Saint, McCord, and Donnellan 1998:235

Chelodina Fitzinger 1826 (07:85, 08:2, 10:34)

Chelodina Fitzinger 1826:6
Type species: *Chelodina longicollis* [= *Testudo longicollis* Shaw 1794], by original designation.

Hydraspis Bell 1828b:512
Type species: *Hydraspis longicollis* [= *Testudo longicollis* Shaw 1794], by original designation.

Chelyodina Agassiz 1846:79 (*nomen novum*)

Hesperochelodina Wells and Wellington 1985:9 (*nomen nudum*)

Macrochelodina Wells and Wellington 1985:9
Type species: *Macrochelodina oblonga* [= *Chelodina oblonga* Gray 1841], by original designation.

Macrodiremys McCord and Joseph-Ouni 2007b:57
Type species: *Macrodiremys oblonga* [= *Chelodina oblonga* Gray 1841], by original designation.

Chelodina (Supremechelys) Hoser 2014b:8 (unavailable name pending ICZN decision; Rhodin et al. 2015) (4, 92)

Chelodina (Chelodina) Fitzinger 1826 (10:34)

Chelodina Fitzinger 1826:6
Type species: *Chelodina longicollis* [= *Testudo longicollis* Shaw 1794], by original designation.

Hydraspis Bell 1828b:512
Type species: *Hydraspis longicollis* [= *Testudo longicollis* Shaw 1794], by original designation.

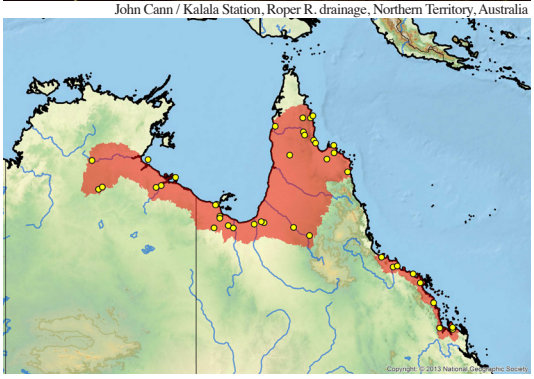
Chelyodina Agassiz 1846:79 (*nomen novum*)

Hesperochelodina Wells and Wellington 1985:9 (*nomen nudum*)

Chelodina (Chelodina) canni McCord and Thomson 2002 [07:86]
Cann's Snake-necked Turtle



John Cann / Kalala Station, Roper R. drainage, Northern Territory, Australia



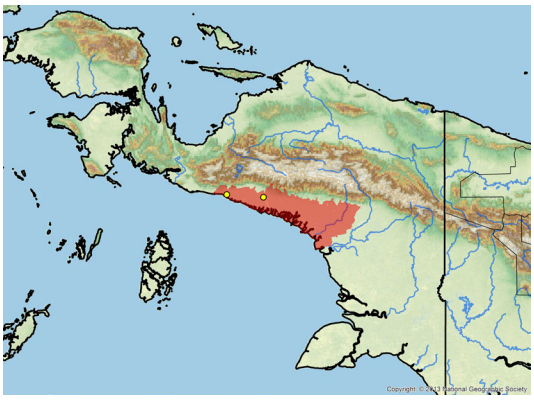
Australia (Northern Territory, Queensland)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Near Threatened (2011)

Chelodina rankini Wells and Wellington 1985:8 (*nomen nudum*)

Chelodina canni McCord and Thomson 2002:256, *Chelodina (Chelodina) canni*, *Chelodina novaeguineae canni*
Type locality: "Malogie Waterhole, near Scarlet Hill on Kalala Station (16°08' S, 133°36' E), Northern Territory, Australia."

Chelodina rankini Wells 2007a:2 [07:86, 10:43] (unavailable name)
Type locality: "north-eastern Australia...Burdekin River, Queensland."

Chelodina (Chelodina) gunaleni McCord and Joseph-Ouni 2007a [10:35]
Gunalen's Snake-necked Turtle



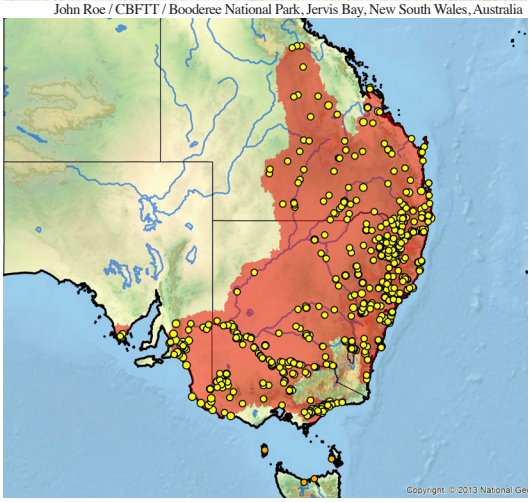
Indonesia (Papua)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Data Deficient (2011)

Chelodina gunaleni McCord and Joseph-Ouni 2007a:48, *Chelodina (Chelodina) gunaleni*
Type locality: "Uta River basin, Mimika District, Central Papua Province (Irian Jaya), Indonesia."

Chelodina (Chelodina) longicollis (Shaw 1794) [92]
Eastern Snake-necked Turtle, Common Snake-necked Turtle



John Roe / CBFTT / Booderee National Park, Jervis Bay, New South Wales, Australia



(orange dots = introduced)

Australia (New South Wales, Queensland, South Australia, Victoria)
Introduced: Australia (Tasmania)
CBFTT Account: Kennett, Roe, Hodges, and Georges (2009)
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2011)

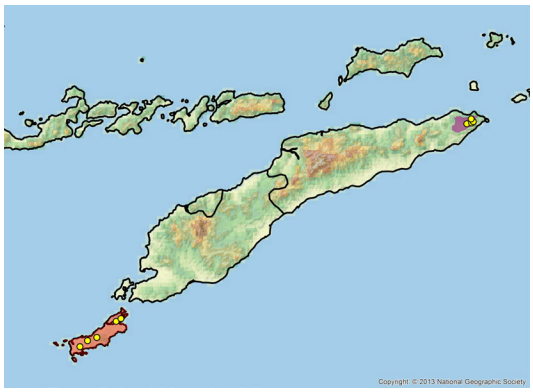
Testudo longicollis Shaw 1794:19, *Emys longicollis, Chelodina longicollis, Hydraspis longicollis, Chelys (Chelodina) longicollis, Chelys longicollis, Chelodina longicollis longicollis, Chelodina (Chelodina) longicollis*
Type locality: "The vast island or rather continent of Australia, Australasia, or New Holland."

Chelodina novaehollandiae Duméril and Bibron 1835:443 (*nomen novum*)

Chelodina sulcata Gray 1856a:201, *Chelodina longicollis sulcata*
Type locality: "Australia."

Chelodina sulcifera Gray 1856b:59 (*nomen novum*), *Chelodina longicollis sulcifera*

Chelodina (Chelodina) mccordi Rhodin 1994b (10:36)
Roti Snake-necked Turtle



(subspecies: *mccordi* [western Roti] and *roteensis* [eastern Roti] = red, *timorensis* = purple)
Indonesia (Lesser Sundas [Roti]), Timor-Leste
CBFTT Account: Rhodin, Ibarrondo, and Kuchling (2008)
IUCN Red List: Critically Endangered A1d, B1+2e (2000); Previously: Vulnerable (1996)
TFTSG Draft Red List: Critically Endangered (2011)
CITES: Appendix II

Chelodina (Chelodina) mccordi mccordi Rhodin 1994b (10:36)
Western Roti Snake-necked Turtle


Anders G.J. Rhodin / TCF / CBFTT / nr. Busalangga, Roti, Indonesia

Indonesia (Lesser Sundas [Roti])
Chelodina rottiensis Brongersma *in* Rhodin 1994b:3 (*nomen nudum*)
Chelodina mccordi Rhodin 1994b:4, *Chelodina mccordi mccordi, Chelodina (Chelodina) mccordi, Chelodina (Chelodina) mccordi mccordi*
Type locality: "Danau Naloek, near Busalangga, ca. 11 km northeast of Tudameda and ca. 8 km southwest of Ba'a, elevation ca. 115 m, southwestern Roti Island (10°48' S, 123°00' E), East Nusa Tenggara Province, Indonesia."

Chelodina (Chelodina) mccordi roteensis McCord, Joseph-Ouni, and Hagen 2007b (07:87, 10:36)
Eastern Roti Snake-necked Turtle
Indonesia (Lesser Sundas [Roti])
Chelodina mccordi roteensis McCord, Joseph-Ouni, and Hagen 2007b:59, *Chelodina (Chelodina) mccordi roteensis*
Type locality: "Lake Enduy, eastern Rote Island, East Nusa Tenggara Province, Indonesia."

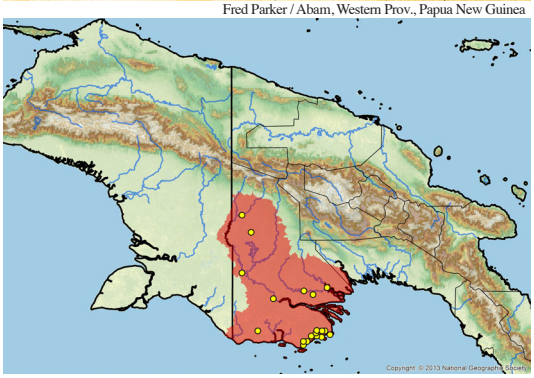
Chelodina (Chelodina) mccordi timorensis McCord, Joseph-Ouni, and Hagen 2007a (07:89, 10:36)
Timor Snake-necked Turtle


Bonggi R. Ibarrondo / CCB / Lospalos, Lautém Dist., Timor-Leste

Timor-Leste
Chelodina timorensis McCord, Joseph-Ouni, and Hagen 2007a:54, *Chelodina mccordi timorensis, Chelodina (Chelodina) mccordi timorensis*
Type locality: "Lake Ira Lalaro, Lautem District (regency), Tutuala Subdistrict, eastern East Timor (= Timor-Leste; = Timor Lorosa'E)."
Chelodina mccordi timorlestensis Kuchling, Rhodin, Ibarrondo, and Trainor 2007:213
Type locality: "plain of Lake Iralalaro (= Lagoa Ira Lalaro) (ca. 08°28' S; 127°07' E, elev. ca. 334 m), east of Lospalos, Lautém District, Timor-Leste."

Chelodina (Chelodina) novaeguineae Boulenger 1888b
New Guinea Snake-necked Turtle

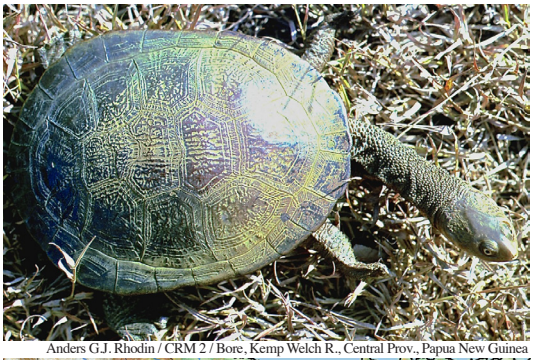

Fred Parker / Abam, Western Prov., Papua New Guinea

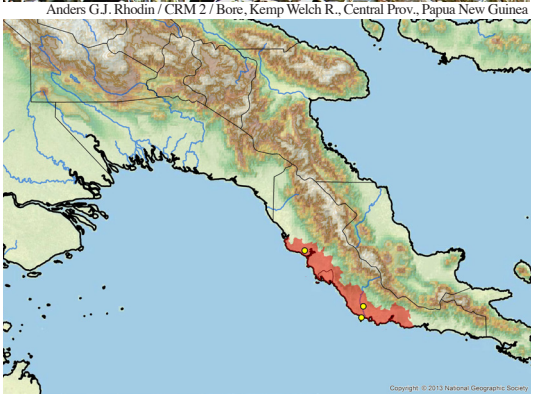


Indonesia (Papua), Papua New Guinea (Southern)
IUCN Red List: Least Concern (2000); Previously: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2011)
Chelodina novaeguineae Boulenger 1888b:450, *Chelodina novaeguineae novaeguineae, Chelodina (Chelodina)*

novaeguineae
Type locality: "Katow, S. E. New Guinea" [Papua New Guinea]. Emended to "Mawatta, Binaturi River, Western Province, Papua New Guinea" by Rhodin (1994a:9).

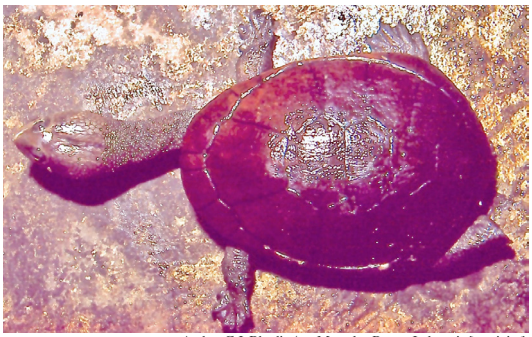
Chelodina (Chelodina) pritchardi Rhodin 1994a
Pritchard's Snake-necked Turtle

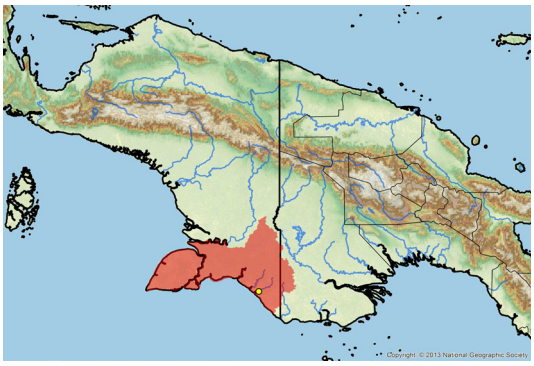

Anders G.J. Rhodin / CRM 2 / Bore, Kemp Welch R., Central Prov., Papua New Guinea



Papua New Guinea (Southern)
IUCN Red List: Endangered B1+2e (2000); Previously: Vulnerable (1996)
TFTSG Draft Red List: Endangered (2011)
Chelodina pritchardi Rhodin 1994a:4, *Chelodina (Chelodina) pritchardi*
Type locality: "Bore, Kemp Welch River, 13 km southeast of Kwikila, Central Province, Papua New Guinea (9°53' S, 147°46' E)."

Chelodina (Chelodina) reimanni Philippen and Grossmann 1990
Reimann's Snake-necked Turtle

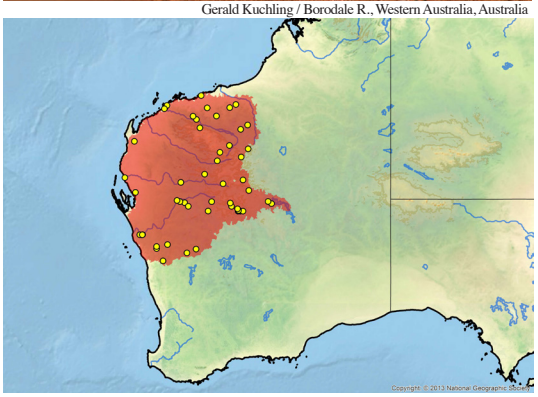

Anders G.J. Rhodin / nr. Merauke, Papua, Indonesia [captivity]



Indonesia (Papua), Papua New Guinea (Southern)
IUCN Red List: Near Threatened (2000); Previously: Vulnerable (1996)
TFTSG Draft Red List: Data Deficient (2011)
Chelodina reimanni Philippen and Grossman 1990:95, *Chelodina novaeguineae reimanni*, *Chelodina (Chelodina) reimanni*
Type locality: "Merauke-River, West-Irian, Neuguinea" [Papua, Indonesia].

Chelodina (Chelodina) steindachneri Siebenrock 1914 (07:85)
Steindachner's Snake-necked Turtle


Gerald Kuchling / Borodale R., Western Australia, Australia



Australia (Western Australia)
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Data Deficient (2011)
Chelodina steindachneri Siebenrock 1914:386, *Hesperochelodina steindachneri*, *Chelodina (Chelodina) steindachneri*
Type locality: "Marloo Station am Grey River in Westaustralien" [Australia].
Chelodina millymillyensis Glauert 1923:54
Type locality: "Milly Milly, Murchison River, W.A." [Australia]. Emended to "Milly Milly Creek, Milly Milly Station, Murchison River, W.A." [Australia] by lectotype designation by Cogger et al. (1983:62).

Chelodina (Macrochelodina) Wells and Wellington 1985

(07:85, 08:2, 10:34)

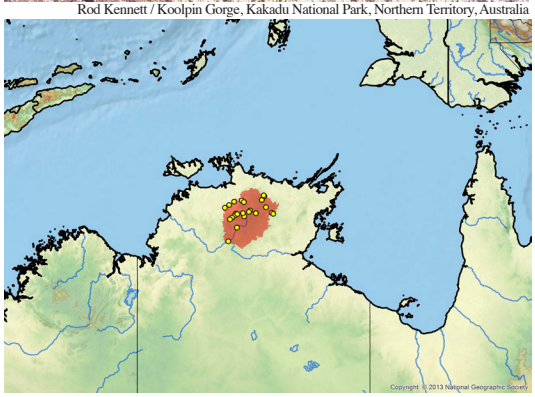
Macrochelodina Wells and Wellington 1985:9
Type species: *Macrochelodina oblonga* [= *Chelodina oblonga* Gray 1841], by original designation.
Chelodina (Supremechelys) Hoser 2014b:8 (unavailable name pending ICZN decision; Rhodin et al. 2015) [4, 92]

Chelodina (Macrochelodina) burrungandjii Thomson, Kennett, and Georges 2000

Arnhem Snake-necked Turtle, Sandstone Snake-necked Turtle



Rod Kennett / Koolpin Gorge, Kakadu National Park, Northern Territory, Australia



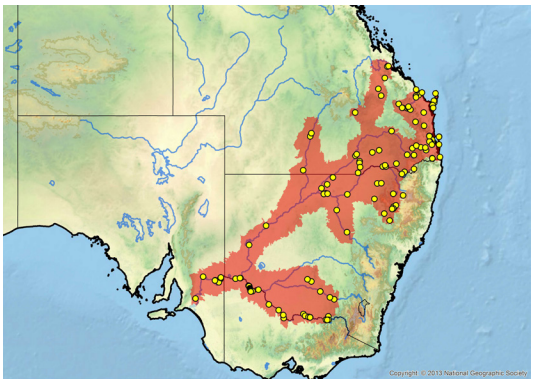
Australia (Northern Territory)
CBFTT Account: Thomson, Kennett, Tucker, FitzSimmons, Featherston, Alacs, and Georges (2011)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Least Concern (2011)
Chelodina burrungandjii Thomson, Kennett, and Georges 2000:676, *Macrochelodina burrungandjii, Chelodina (Macrochelodina) burrungandjii*
Type locality: "Koolpin Gorge, South Alligator River (13°28' S, 132°38' E)... Arnhem Land Plateau, Northern Territory, Australia."

Chelodina (Macrochelodina) expansa Gray 1857 [93]

Broad-shelled Snake-necked Turtle



Claire Treilibs / CBFTT / Paringa, South Australia, Australia



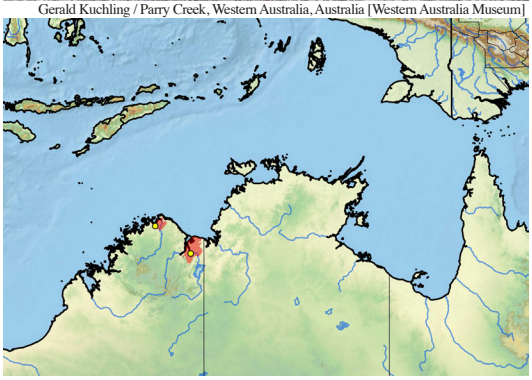
Australia (New South Wales, Queensland, South Australia, Victoria)
CBFTT Account: Bower and Hodges (2014)
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Near Threatened (2011)
Chelodina expansa Gray 1857:370, *Chelodina oblonga expansa, Macrochelodina expansa, Chelodina (Macrochelodina) expansa, Chelodina (Supremechelys) expansa*
Type locality: "Australia." Restricted to "nördliches Australien" [Australia] by Wermuth and Mertens (1977:122).
Chelodina (Supremechelys) expansa brisbaneensis Hoser 2014b:9 (unavailable name pending ICZN decision; Rhodin et al. 2015) [4, 93]
Chelodina (Supremechelys) duboisi Hoser 2014b:9 (unavailable name pending ICZN decision; Rhodin et al. 2015) [4, 93]

Chelodina (Macrochelodina) kuchlingi Cann 1997d (07:90, 10:37, 14:42) [94]

Kuchling's Snake-necked Turtle



Gerald Kuchling / Parry Creek, Western Australia, Australia [Western Australia Museum]

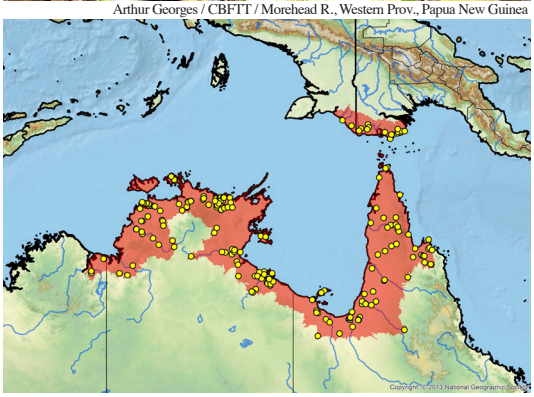


Australia (Western Australia)
IUCN Red List: Not Evaluated
Chelodina kuchlingi Cann 1997d:41 (07:90, 10:37, 14:42), *Macrochelodina kuchlingi, Chelodina (Macrochelodina) kuchlingi*
Type locality: "Kalumburu, N. W. Australia, (14°18' S x 126°28' E)."

Chelodina (Macrochelodina) oblonga Gray 1841 (14:43) (**94**)
[formerly *C. (M.) rugosa* Ogilby 1890] (07:91, 10:37)
Northern Snake-necked Turtle



Arthur Georges / CBFTT / Morehead R., Western Prov., Papua New Guinea



Australia (Northern Territory, Queensland, Western Australia), Indonesia (Papua), Papua New Guinea (Southern)
CBFTT Account: Kennett, Fordham, Alacs, Corey, and Georges (2014)
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Near Threatened (2011)

Chelodina oblonga Gray 1841:446 (14:43) (*nomen conservandum*, ICZN 2013a), *Chelodina (Macrochelodina) oblonga*
Type locality: "Western Australia." Emended to "Northern Territory...possibly...Port Essington" [Australia] by Thomson (2000:747).

Chelodina rugosa Ogilby 1890:56 (14:43), *Chelodina oblonga rugosa, Macrochelodina rugosa, Macrochelodina rugosa rugosa, Chelodina (Macrochelodina) rugosa*
Type locality: "Cape York, Q." [Queensland, Australia].

Chelodina siebenrocki Werner 1901a:602 (07:91), *Chelodina oblonga siebenrocki, Macrochelodina siebenrocki, Macrochelodina rugosa siebenrocki*
Type locality: "Deutsch Neu-Guinea" [northern Papua New Guinea] [in error]. Emended to "New Guinea's south coast" [southern Papua New Guinea] by Rhodin and Mittermeier (1976:474).

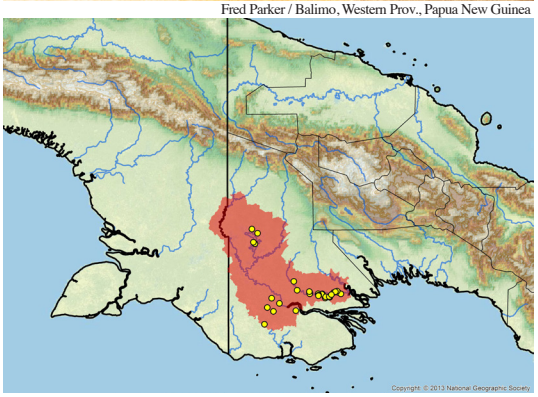
Chelodina intergularis Fry 1915:88
Type locality: "Australia."

Macrochelodina billabong Wells and Wellington 1985:9 (*nomen nudum*), *Chelodina billabong*

Chelodina (Macrochelodina) parkeri Rhodin and Mittermeier 1976
Parker's Snake-necked Turtle



Fred Parker / Balimo, Western Prov., Papua New Guinea



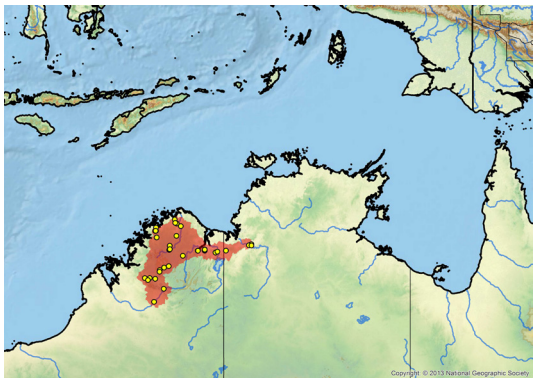
Indonesia (Papua), Papua New Guinea (Southern)
IUCN Red List: Vulnerable D2 (2000); Previously: Vulnerable (1996)
TFTSG Draft Red List: Near Threatened (2011)

Chelodina parkeri Rhodin and Mittermeier 1976:465, *Macrochelodina parkeri, Chelodina (Macrochelodina) parkeri*
Type locality: "Mawa, Lake Murray, Western District, Papua New Guinea."

Chelodina (Macrochelodina) walloyarrina McCord and Joseph-Ouni 2007b (08:4, 10:38) (**94**)
Kimberley Snake-necked Turtle



John Cann / TCF / Kimberleys, Western Australia, Australia



Australia (Northern Territory, Western Australia)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Data Deficient (2011)

Macrochelodina walloyarrina McCord and Joseph-Ouni 2007b:59, *Chelodina (Macrochelodina) walloyarrina*
Type locality: "The Fitzroy River at Fitzroy River Crossing, Western Australia, Australia, 18°10.834' S and 125°35.849' E."

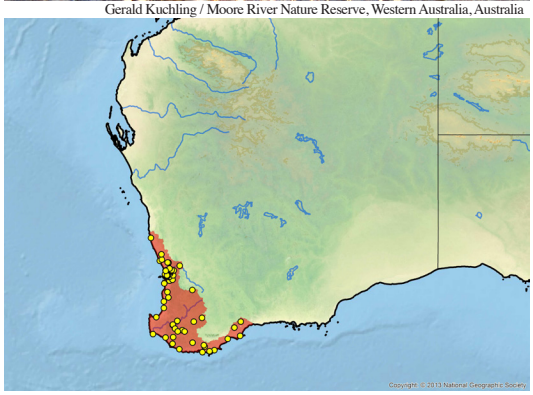
Chelodina (Macrodiremys) McCord and Joseph-Ouni 2007b
(10:34, 10:39, 14:44)

Macrodiremys McCord and Joseph-Ouni 2007b:57 (08:3, 10:39)
Type species: *Macrodiremys oblonga* sensu Burbidge et al. 1974 [= *Chelodina oblonga* Gray 1841 sensu Burbidge et al. 1974 = subjective synonym of *Chelodina colliei* Gray 1856a], by original designation.

Chelodina (Macrodiremys) colliei Gray 1856a (07:88, 08:3, 10:39, 14:44
[formerly *C.* (*M.*) *oblonga* Gray 1841] (14:43)
Southwestern Snake-necked Turtle



Gerald Kuchling / Moore River Nature Reserve, Western Australia, Australia



Australia (Western Australia)
IUCN Red List: Near Threatened (1996)
TFTSG Draft Red List: Near Threatened (2011)

Chelodina oblonga Gray 1841:446 (14:43) (in error, misidentified type, ICZN 2013a), *Macrodiremys oblonga*, *Chelodina (Macrodiremys) oblonga*
Type locality: "Western Australia." Emended to "Northern Territory...possibly...Port Essington" [Australia] by Thomson (2000:747).

Chelodina colliei Gray 1856a:200, *Macrodiremys colliei*, *Chelodina (Macrodiremys) colliei*
Type locality: "Swan River" [Western Australia, Australia].

Elseya Gray 1867 (07:92, 14:45) (**95**)

Elseya Gray 1867:44
Type species: *Elseya dentata* [= *Chelymys dentata* Gray 1863a], by subsequent designation by Lindholm (1929:291).

Pelocomastes De Vis 1897:6
Type species: *Pelocomastes ampla* † De Vis 1897 [= subjective synonym of *Chelymys uberrima* † De Vis 1897], by original monotypy.

Elseya (Hanwarachelys) Thomson, Amepou, Anamiato, and Georges 2015:65
Type species: *Elseya (Hanwarachelys) novaeguineae* [= *Platemys novaeguineae* Meyer 1874], by original designation.

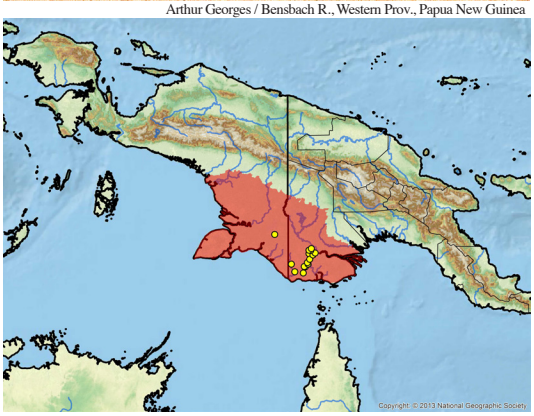
Elseya (Elseya) Gray 1867 (**95**)

Elseya Gray 1867:44
Type species: *Elseya dentata* [= *Chelymys dentata* Gray 1863a], by subsequent designation by Lindholm (1929:291).

Elseya (Elseya) branderhorsti (Ouwens 1914) (07:93)
White-bellied Snapping Turtle, Branderhorst's Snapping Turtle



Arthur Georges / Bensbach R., Western Prov., Papua New Guinea



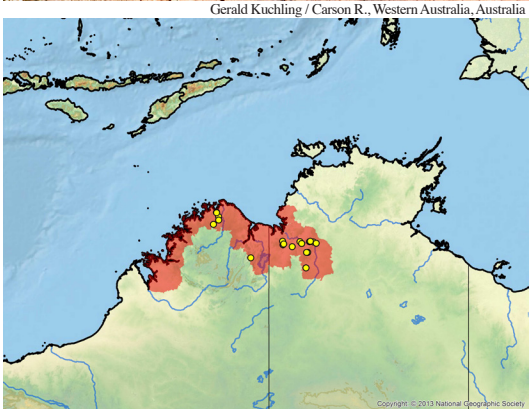
Indonesia (Papua), Papua New Guinea (Southern)
IUCN Red List: Vulnerable B1+2e (2000)
TFTSG Draft Red List: Vulnerable (2011)

Emydura branderhorsti Ouwens 1914:31, *Elseya branderhorsti*, *Elseya (Elseya) branderhorsti*
Type locality: "Sth. Nw. Guinea" [Southern New Guinea = Papua, Indonesia]. Restricted to "southeastern Papua, Indonesia, between the Lorentz River and Merauke" by Thomson et al. (2015:65); and to "Bensbach River of the Trans-Fly region of Papua New Guinea (8°50'58.6896" S., 141°14'52.944" E.) by neotype designation by Thomson et al. (2015:63).

Elseya (Elseya) dentata (Gray 1863a)
Northern Snapping Turtle



Gerald Kuchling / Carson R., Western Australia, Australia



Australia (Northern Territory, Western Australia)
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2011)

Chelymys dentata Gray 1863a:98, *Podocnemis dentata, Elseya dentata, Emydura dentata, Elseya dentata dentata, Elseya (Elseya) dentata*
Type locality: "N. Australia; Upper Victoria, in Beagle's Valley." [Northern Territory, Australia]. Emended to "Beagles Valley, Victoria River, Northern Territory...(15°34' S, 130°54' E)" by lectotype designation by Thomson et al. (2015:62).

Chelymys elseyi Gray 1864d:132 (*nomen nudum*)

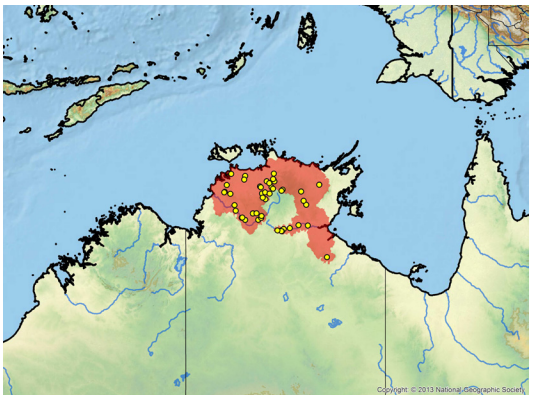
Chelymys elseya Gray 1870c:76 (*nomen nudum*)

Elseya intermedia Gray 1872c:23
Type locality: "North Australia, upper part of Victoria" [Northern Territory, Australia].

Elseya (Elseya) flaviventralis Thomson and Georges 2016 [96]
Yellow-bellied Snapping Turtle



Arthur Georges / South Alligator R., Northern Territory, Australia



Australia (Northern Territory)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Not Evaluated

Elseya flaviventralis Georges, Doody, Young, and Cann 2000:7 (*nomen nudum*)

Elseya jukesi Wells 2002b:7 (*nomen nudum*)

Elseya jukesi Wells 2007b:5 [07:94, 10:43] (unavailable name)

Elseya (Elseya) flaviventralis Thomson and Georges 2016:20
Type locality: "Pine Creek Crossing, South Alligator River Drainage, Kakadu National Park, Northern Territory, Australia, 13°30' S 132°28' E".

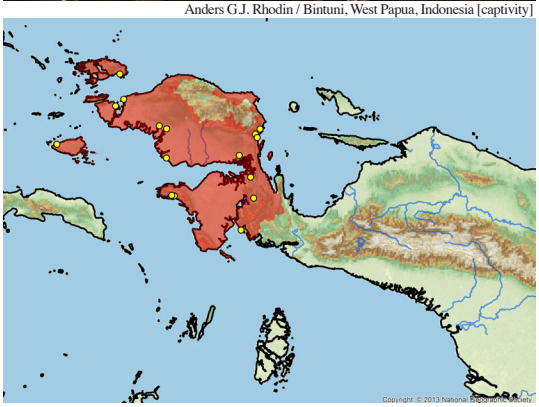
Elseya (Hanwarachelys) Thomson, Amepou, Anamiato, and Georges 2015 [95]

Elseya (Hanwarachelys) Thomson, Amepou, Anamiato, and Georges 2015:65
Type species: *Elseya (Hanwarachelys) novaeguineae* [= *Platemys novaeguineae* Meyer 1874], by original designation.

Elseya (Hanwarachelys) novaeguineae (Meyer 1874) [10:40, 14:45] [97]
Western New Guinea Stream Turtle, New Guinea Snapping Turtle



Anders G.J. Rhodin / Bintuni, West Papua, Indonesia [captivity]

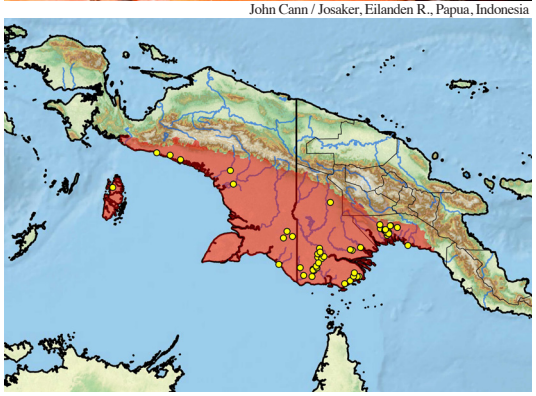


Indonesia (Misool, Papua, Waigeo)
Introduced: Palau (Babeldaob)
IUCN Red List: Least Concern (2000); Previously: Least

Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2015)
Platemys novaeguineae Meyer 1874:128, *Emydura novaeguineae, Elseya novaeguineae, Elseya latisternum novaeguineae, Elseya dentata novaeguineae, Elseya novaeguineae novaeguineae, Myuchelys novaeguineae, Elseya (Hanwarachelys) novaeguineae*
Type locality: "Neu-Guinea" [Papua, Indonesia]. Restricted to "Passim (Nordwest Neu Guinea)" [Papua, Indonesia] by Meyer (1887:4); to "southwestern shore of Cenderawasih Bay on the southeastern Vogelkop" [Papua, Indonesia] by Rhodin and Genorupa (2000:132); and to "Passim, Barbussi River, ca. 3 km N. Sieb, 1 km S. Tandjung Sjeri (= Syeri), west shore Geelvink Bay (= Cenderawasih Bay), Papua, Indonesia (1°41' S, 134°05' E)" by Thomson et al. (2015:67).

Elseya (Hanwarachelys) rhodini Thomson, Amepou, Anamiato, and Georges 2015 [(97)]
Southern New Guinea Stream Turtle; Rhodin's Stream Turtle

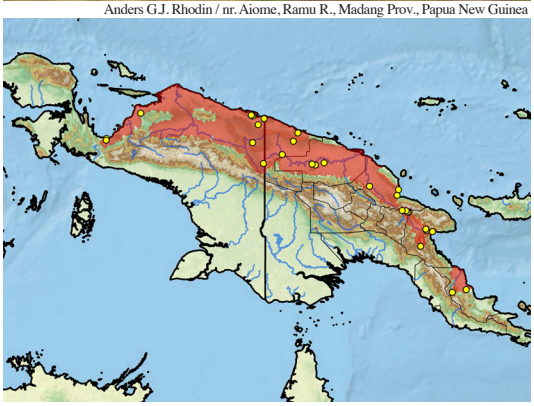

John Cann / Josaker, Eilanden R., Papua, Indonesia



Indonesia (Aru Islands, Papua); Papua New Guinea (Southern)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Least Concern (2015)
Elseya (Hanwarachelys) rhodini Thomson, Amepou, Anamiato, and Georges 2015:69, *Elseya rhodini*
Type locality: "Rue Creek (tributary of Wau Creek), Gulf Province, Papua New Guinea (07°11'67.3" S, 144°37'13.8" E)"; GPS coordinates emended here to 07°11.673' S, 144°37.138' E.

Elseya (Hanwarachelys) schultzei (Vogt 1911) [(07:95, 10:40, 14:45)]
Northern New Guinea Stream Turtle, Schultze's Snapping Turtle


Anders G.J. Rhodin / nr. Aiome, Ramu R., Madang Prov., Papua New Guinea

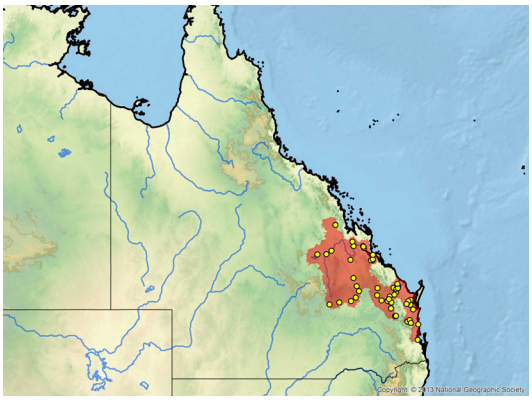


Indonesia (Papua); Papua New Guinea (Northern)
Introduced: Solomon Islands (?) (Malaita)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Least Concern (2015)
Emydura schultzei Vogt 1911:410, *Elseya schultzei, Elseya novaeguineae schultzei, Elseya (Hanwarachelys) schultzei*
Type locality: "Fluss westlich der Tamimündung...Holländisch-Neu-Guinea" [Papua, Indonesia]. Restricted to "near Sae village, Seko coast, near Skosai, ca 5 km W. mouth of Tami River, Papua, Indonesia (2°37' S, 140°54' E)" by Thomson et al. (2015:68).

Elseya (Pelocomastes) De Vis 1897 [(95)]
Pelocomastes De Vis 1897:6
Type species: *Pelocomastes ampla* † De Vis 1897 [= subjective synonym of *Chelymys uberrima* † De Vis 1897], by original monotypy.

Elseya (Pelocomastes) albagula Thomson, Georges, and Limpus 2006
White-throated Snapping Turtle, Southern Snapping Turtle


John Cann / CCB / Burnett R., Queensland, Australia

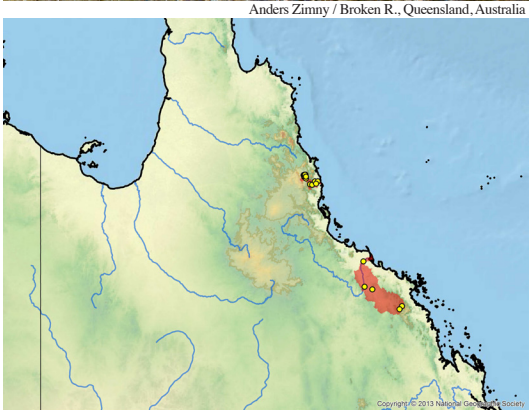


Australia (Queensland)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Vulnerable (2011); Australia: Critically Endangered (2014)
Elseya albagula Thomson, Georges, and Limpus 2006:75, *Elseya dentata albagula, Elseya (Pelocomastes) albagula*
Type locality: "Ned Churchwood Weir, Burnett River, Queensland, Australia (25º03' S, 152º05' E)."

Elseya (Pelocomastes) irwini Cann 1997c
Irwin's Snapping Turtle



Anders Zimny / Broken R., Queensland, Australia

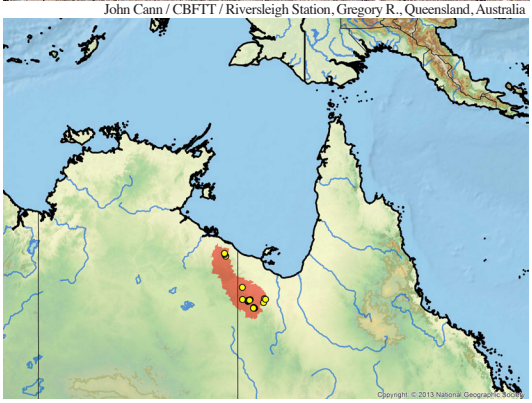


Australia (Queensland)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Data Deficient (2011)
Elseya stirlingi Wells and Wellington 1985:9 (*nomen nudum*), *Elseya sterlingi*
Elseya irwini Cann 1997c:36, *Elseya dentata irwini, Elseya (Pelocomastes) irwini*
Type locality: "Burdekin River, Queensland, 19°42' S, 147°18' E, approximately 18 km upstream from Ayr" [Australia].
Elseya stirlingi Wells 2007b:4 (07:96, 10:43) (unavailable name)

Elseya (Pelocomastes) lavarackorum (White and Archer 1994)
Riversleigh Snapping Turtle, Gulf Snapping Turtle



John Cann / CBFTT / Riversleigh Station, Gregory R., Queensland, Australia



Australia (Northern Territory, Queensland)
CBFTT Account: Freeman, Thomson, and Cann (2014)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Data Deficient (2011)
Emydura lavarackorum † White and Archer 1994:159 [Pleistocene, Australia (Queensland)], *Elseya lavarackorum, Elseya dentata lavarackorum, Elseya (Pelocomastes) lavarackorum*
Type locality: "Gregory River, Riversleigh Station, northwestern Queensland, approximately 200 km northwest of Mount Isa" [Australia].

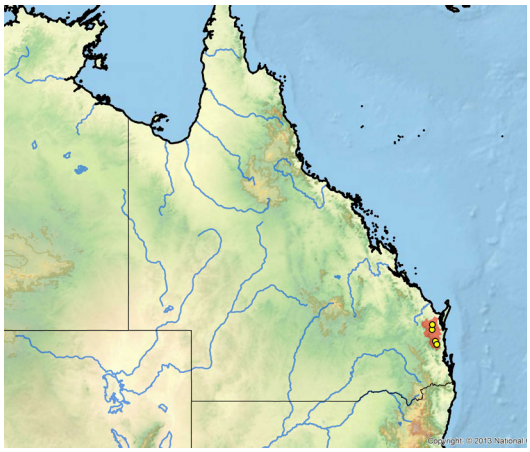
Elusor Cann and Legler 1994

Elusor Cann and Legler 1994:83
Type species: *Elusor macrurus* Cann and Legler 1994, by original monotypy.

Elusor macrurus Cann and Legler 1994
Mary River Turtle



Marilyn Connell / Mary R., Queensland, Australia / male



Australia (Queensland)
IUCN Red List: Endangered B1+2c (1996)
TFTSG Draft Red List: Endangered (2011)

Elusor macrurus Cann and Legler 1994:83
Type locality: "Mary River. 45.5 km S and 21.0 km W Maryborough, Queensland, Australia, elevation approximately 30 m (25°58' S, 152°30' E)."

Emydura Bonaparte 1836

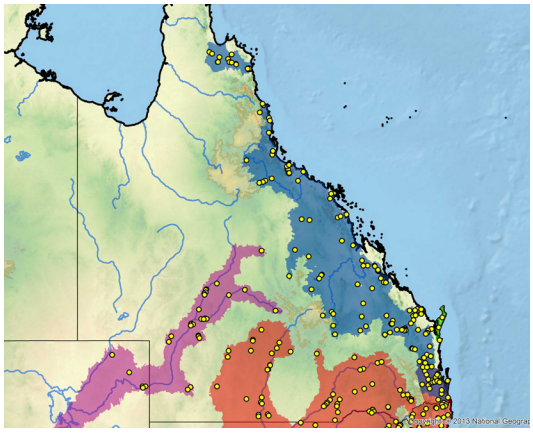
Emydura Bonaparte 1836:7
Type species: *Emydura macquaria* [= *Emys macquaria* Cuvier 1829] [= *Chelys (Hydraspis) macquarii* Gray 1830e], by original monotypy.

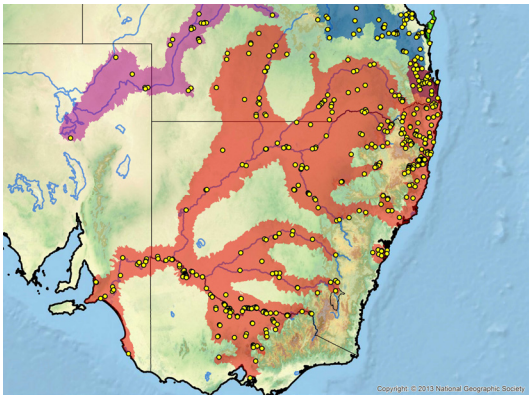
Chelymys Gray 1844:42
Type species: *Chelymys macquaria* [= *Emys macquaria* Cuvier 1829] [= *Chelys (Hydraspis) macquarii* Gray 1830e], by original monotypy.

Euchelymys Gray 1871a:118
Type species: *Euchelymys sulcifera* [= subjective synonym of *Chelys (Hydraspis) macquarii* Gray 1830e], by subsequent designation by Lindholm (1929:290).

Tropicochelymys Wells and Wellington 1985:9
Type species: *Tropicochelymys victoriae* [= *Hydraspis victoriae* Gray 1842], by original designation.

Emydura macquarii (Gray 1830e) (10:7) **(98)**
Eastern Short-necked Turtle, Southern River Turtle





(subspecies: *macquarii* = red, *emmotti* = purple, *krefftii* = blue, *nigra* = green; overlap = intergrades)
Australia (New South Wales, Queensland, South Australia, Victoria)
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2011)

Emydura macquarii macquarii (Gray 1830e) (07:98, 10:7, 10:41, 10:42)
Macquarie River Turtle



Arthur Georges / Brisbane R., Queensland, Australia
Australia (New South Wales, Queensland, South Australia, Victoria)

Emys macquaria Cuvier 1829:11 (*nomen nudum*)
Chelys (Hydraspis) macquarii Gray 1830e:15 (10:7), *Chelys macquarii, Emys macquarii, Emydura macquarii, Chelymys macquarii, Emydura macquarii macquarii*
Type locality: "New Holland" [Australia]. Restricted to "Novâ Hollandiâ, Macquarrie River" [New South Wales, Australia] by Gray (1831d:40), and to "Upper Macquarie River, in the vicinity of Bathurst [NSW]" [Australia] by Cann (1998:101).
Hydraspis macquarrii Gray 1831d:40 (*nomen novum*), *Emydura macquarrii, Emydura macquarrii macquarrii*
Platemys macquaria Duméril and Bibron 1835:438 (*nomen novum*), *Hydraspis macquaria, Chelymys macquaria*
Hydraspis australis Gray 1841:445 (10:41) (*nomen dubium*), *Chelymys australis, Emydura australis, Emydura australis australis*
Type locality: "Western Australia?" Restricted to "Australia, Macquarie River" by Gray (1872d:506).
Euchelymys sulcifera Gray 1871a:118
Type locality: "North Australia."
Emydura macquariae Boulenger 1889:ix (*nomen novum*)
Emydura signata Ahl 1932:127 (10:42), *Emydura macquarrii signata, Chelymys signata, Emydura macquarii signata*
Type locality: "Umgebung von Brisbane, Australien" [Queensland, Australia].
Emydura canni Worrell 1970:pl.6 (*nomen nudum*)
Chelymys cooki Wells and Wellington 1985:8 (*nomen*

nudum), *Emydura cooki*
Chelymys johncanni Wells and Wellington 1985:8 (*nomen nudum*)
Emydura macquarii binjing Cann 1998:116 (10:42)
Type locality: "Clarence River and its tributaries in eastern New South Wales...29°45'S, 152°15'E" [Australia].
Emydura macquarii dharra Cann 1998:120 (10:42)
Type locality: "Macleay River and its tributaries in eastern New South Wales...30°54'S, 152°10'E" [Australia].
Emydura macquarii gunabarra Cann 1998:123 (10:42)
Type locality: "Hunter River and its tributaries in eastern New South Wales...32°09'S, 150°58'E" [Australia].
Emydura macquarii dharuk Cann 1998:126 (10:42)
Type locality: "Norton's Basin, Nepean River, 0.5 km upstream from the junction of the Warragamba and Nepean Rivers at 33°52'S, 150°37'E...Sydney Basin in eastern New South Wales" [Australia].

Emydura macquarii emmotti Cann, McCord, and Joseph-Ouni *in* McCord, Cann, and Joseph-Ouni 2003 (98)
Cooper Creek Turtle


Kate Hodges / Stonehenge, Thomson R., Queensland, Australia / megacephalic female

Australia (Queensland, South Australia)
Chelymys windorah Wells and Wellington 1985:8 (*nomen nudum*), *Emydura windorah*
Emydura macquarii emmotti Cann, McCord, and Joseph-Ouni *in* McCord, Cann, and Joseph-Ouni 2003:60, *Emydura emmotti*
Type locality: "Waterloo Station, shearing-shed waterhole, south-western Queensland, Australia (24°13' S, 143°17' E)."

Emydura macquarii krefftii (Gray 1871b) (98)
Krefft's River Turtle


Arthur Georges / Grays Waterhole, Burnett R., Queensland, Australia

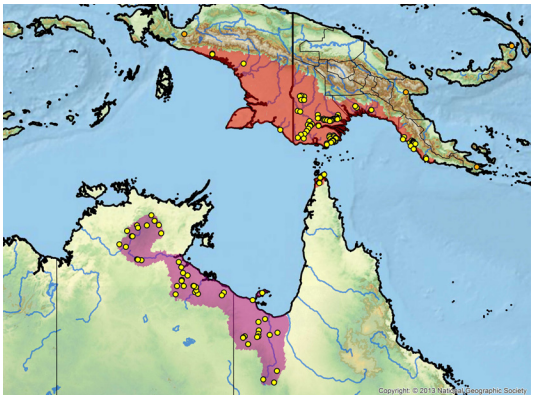
Australia (Queensland)
Chelymys krefftii Gray 1871b:366, *Emydura krefftii, Emydura australis krefftii, Emydura macquarrii krefftii, Tropicochelymys krefftii, Emydura macquarii krefftii*
Type locality: "Burnett's River" [Queensland, Australia].
Chelymys victoriae marmorata Gray 1872d:506
Type locality: "east coast of Queensland, Burnett River" [Australia].
Chelymys victoriae sulcata Gray 1872d:506
Type locality: "east coast of Queensland, Burnett River" [Australia].

Emydura macquarii nigra McCord, Cann, and Joseph-Ouni 2003 (98)
Fraser Island Short-necked Turtle


Arthur Georges / Fraser Island, Queensland, Australia

Australia (Queensland)
Tropicochelymys insularis Wells and Wellington 1985:9 (*nomen nudum*), *Emydura insularis*
Emydura macquarii nigra McCord, Cann, and Joseph-Ouni 2003:59, *Emydura nigra*
Type locality: "Lake McKenzie, Fraser Island, Queensland, Australia (25°27' S, 153°04' E)."

Emydura subglobosa (Krefft 1876)
Red-bellied Short-necked Turtle


(subspecies: *subglobosa* = red, *worrelli* = purple; orange dots = trade)

Australia (Northern Territory, Queensland), Indonesia (Papua), Papua New Guinea (Southern)
Introduced: Papua New Guinea (New Britain, Northern)
IUCN Red List: Least Concern (2000); Previously: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2011)

Emydura subglobosa subglobosa (Krefft 1876)
New Guinea Red-bellied Short-necked Turtle



Arthur Georges / Suki-Aramba Swamps, Fly R., Western Prov., Papua New Guinea

Australia (Queensland), Indonesia (Papua), Papua New Guinea (Southern)
Introduced: Papua New Guinea (New Britain, Northern)

Euchelymys subglobosa Krefft 1876:390, *Emydura subglobosa, Emydura australis subglobosa, Emydura macquarrii subglobosa, Chelymys subglobosa, Tropicochelymys subglobosa, Emydura subglobosa subglobosa*
Type locality: "Amama River S. E. New Guinea" [Papua New Guinea]. Restricted to "Naiabui S. E. New Guinea" [Papua New Guinea] by Boulenger (1888b:450).

Emydura albertisii Boulenger 1888b:449, *Emydura australis albertisii*
Type locality: "Katow, S. E. New Guinea" [= Mawatta, Binaturi River (9°08' S, 142°55' E), Papua New Guinea].

Tropicochelymys goodei Wells and Wellington 1985:9 (*nomen nudum*), *Emydura goodei*

Emydura subglobosa worrelli (Wells and Wellington 1985) (07:99)
Worrell's Short-necked Turtle, Diamond-head Turtle



Jason Schaffer / Dugald R., Flinders basin, Queensland, Australia

Australia (Northern Territory, Queensland)

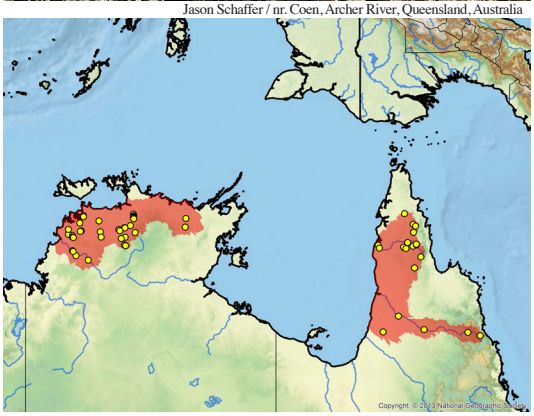
Tropicochelymys leichhardti Wells and Wellington 1985:9 (*nomen nudum*)

Tropicochelymys worrelli Wells and Wellington 1985:9, *Emydura worrelli, Emydura subglobosa worrelli*
Type locality: "Caranbirini Waterhole, ca. 21 km north of MacArthur River, Northern Territory (16°16' S x 136°05' E)" [Australia].

Emydura tanybaraga Cann 1997b
Northern Yellow-faced Turtle



Jason Schaffer / nr. Coen, Archer River, Queensland, Australia



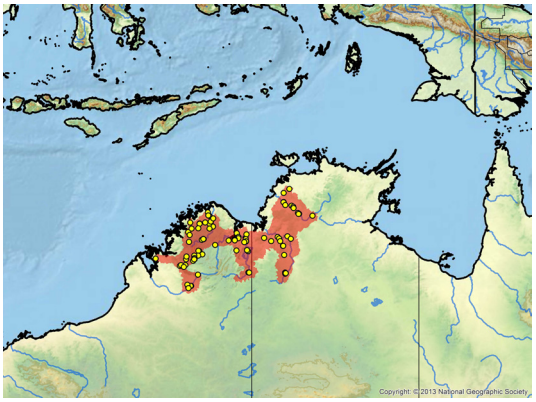
Australia (Northern Territory, Queensland)
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Data Deficient (2011)

Emydura tanybaraga Cann 1997b:24, *Emydura subglobosa tanybaraga*
Type locality: "near Policeman Crossing, Daly River, Northern Territory (13°46' S x 130°43' E)" [Australia].

Emydura victoriae (Gray 1842)
Northern Red-faced Turtle



Gerald Kuchling / Barnett R., Western Australia, Australia



Australia (Northern Territory, Western Australia)
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2011)

Hydraspis victoriae Gray 1842:55, *Chelymys victoriae, Emydura victoriae, Tropicochelymys victoriae*
Type locality: "Victoria River, North-west coast of New Holland" [Northern Territory, Australia].

Myuchelys Thomson and Georges 2009 (09:45, 10:43) (**99**)

Wollumbinia Wells 2007c:1 (07:97, 10:43) (unavailable name)

Myuchelys Thomson and Georges 2009:33 (09:45)
Type species: *Myuchelys latisternum* [= *Elseya latisternum* Gray 1867], by original designation.

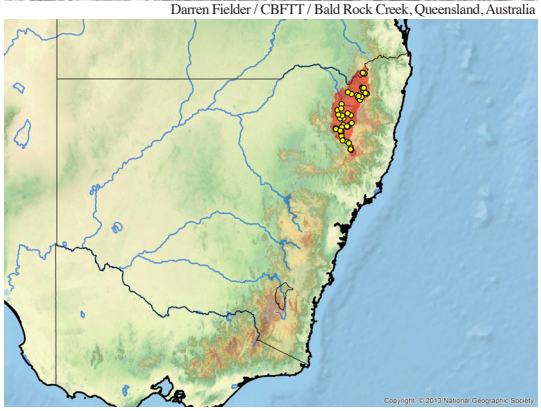
Flaviemys Le, Reid, McCord, Naro-Maciel, Raxworthy, Amato, and Georges 2013:257 (**99**)
Type species: *Flaviemys purvisi* [= *Elseya purvisi* Wells and Wellington 1985], by original designation.

Myuchelys bellii (Gray 1844) (07:97)

Bell's Sawshelled Turtle, Western Sawshelled Turtle



Darren Fielder / CBFTT / Bald Rock Creek, Queensland, Australia



Australia (New South Wales, Queensland)
CBFTT Account: Fielder, Chessman, and Georges (2015)
IUCN Red List: Endangered B1+2c (1996)
TFTSG Draft Red List: Endangered (2011)

Phrynops bellii Gray 1844:41, *Hydraspis bellii, Elseya bellii, Wollumbinia bellii, Wollumbinia bellii bellii, Elseya latisternum bellii, Myuchelys bellii*
Type locality: Not known. Restricted to "the upper reaches of both the Namoi-MacDonald and Gwydir Rivers, above the New England escarpment, in New South Wales" [Australia] by Cann (1998:211).

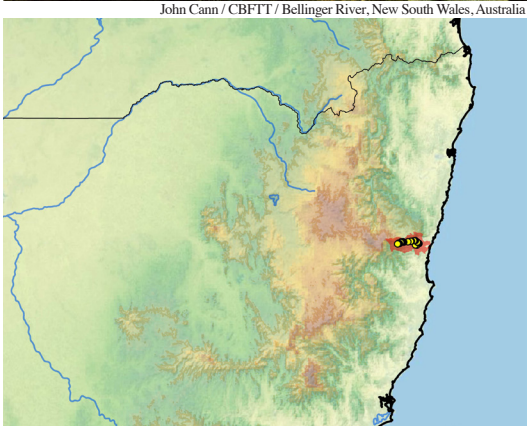
Elseya dorriani Wells 2002b:16 (07:97) (*nomen nudum*), *Wollumbinia bellii dorriani*

Myuchelys georgesi (Cann 1997a)

Bellinger River Sawshelled Turtle



John Cann / CBFTT / Bellinger River, New South Wales, Australia



Australia (New South Wales)
CBFTT Account: Cann, Spencer, Welsh, and Georges (2015)
IUCN Red List: Data Deficient (1996)
TFTSG Draft Red List: Critically Endangered (2015)

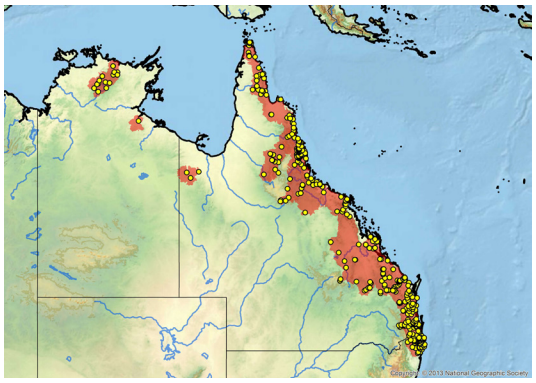
Elseya georgesi Cann 1997a:18, *Wollumbinia georgesi, Elseya latisternum georgesi, Myuchelys georgesi*
Type locality: "Bellinger River 30°25' S, 152°46' E" [New South Wales, Australia].

Myuchelys latisternum (Gray 1867) (09:47)

Sawshelled Turtle, Common Sawshelled Turtle



Alastair Freeman / CBFTT / Chillagoe Creek, Queensland, Australia



Australia (New South Wales, Northern Territory, Queensland)
CBFTT Account: Freeman and Cann (2014)
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2011)

Elseya latisternum Gray 1867:44, *Emydura latisternum, Elseya latisternum latisternum, Wollumbinia latisternum, Myuchelys latisternum*
Type locality: "North Australia."

Euchelymys spinosa Gray 1871a:118 (09:47)
Type locality: "North Australia."

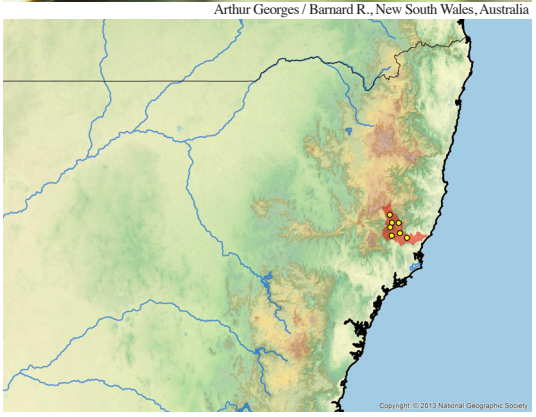
Elseya latisternon Gray 1871b:292 (*nomen novum*)

Wollumbinia dorsii Wells 2009:2 (09:46, 10:43) (unavailable name)

Myuchelys purvisi (Wells and Wellington 1985) (14:46) (**99**)
Manning River Sawshelled Turtle



Arthur Georges / Barnard R., New South Wales, Australia



Australia (New South Wales)
IUCN Red List: Data Deficient (1996)
TFTSG Draft Red List: Near Threatened (2011)

Elseya purvisi Wells and Wellington 1985:8, *Wollumbinia purvisi, Elseya latisternum purvisi, Myuchelys purvisi, Flaviemys purvisi*
Type locality: "a river 15 km S., 32.3 km E. of Nowendoc, New South Wales (31°39' S x 152°04' E. elevation 183 m)" [Australia].

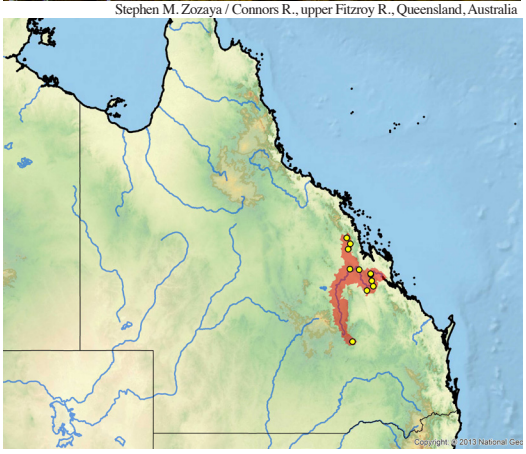
Rheodytes Legler and Cann 1980

Rheodytes Legler and Cann 1980:2
Type species: *Rheodytes leukops* Legler and Cann 1980, by original designation.

Rheodytes leukops Legler and Cann 1980
Fitzroy River Turtle



Stephen M. Zozaya / Connors R., upper Fitzroy R., Queensland, Australia



Australia (Queensland)
IUCN Red List: Vulnerable A1c+2c, D2 (1996)
TFTSG Draft Red List: Vulnerable (2011)

Rheodytes leukops Legler and Cann 1980:2, *Elseya leukops*
Type locality: "Fitzroy River, 63 km N and 25 km E of Duaringa, Queensland, Australia, elevation 40 m (23°09' S 149°55' E)."

Pseudemydurinae Gaffney 1977 (100)

Pseudemydurinae Gaffney 1977:24

Pseudemydura Siebenrock 1901 (100)

Pseudemydura Siebenrock 1901:248

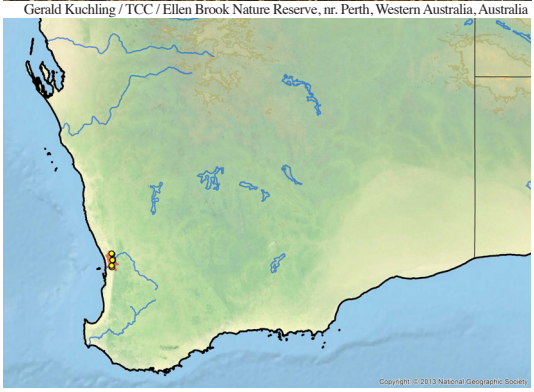
Type species: *Pseudemydura umbrina* Siebenrock 1901, by original monotypy.

Pseudemydura umbrina Siebenrock 1901 (100)

Western Swamp Turtle



Gerald Kuchling / TCC / Ellen Brook Nature Reserve, nr. Perth, Western Australia, Australia



Australia (Western Australia)

IUCN Red List: Critically Endangered A1c, B1+2c, C1+2b, D (1996)

TFTSG Draft Red List: Critically Endangered (2011)

CITES: Appendix I

Pseudemydura umbrina Siebenrock 1901:249

Type locality: "Australien" [Australia].

Emydura inspectata Glauert 1954:125

Type locality: "Warbrook, about 24 miles north of Perth...Swan River District" [Western Australia, Australia].

Pelomedusidae Cope 1868a (11:19)

Hydraspidina Bonaparte 1836:3 (*partim*)

Pelomedusidae Cope 1868a:119

Pelomedusa Wagler 1830b (11:19) (101)

Pelomedusa Wagler 1830b:136 (*nomen conservandum*, ICZN 1989)

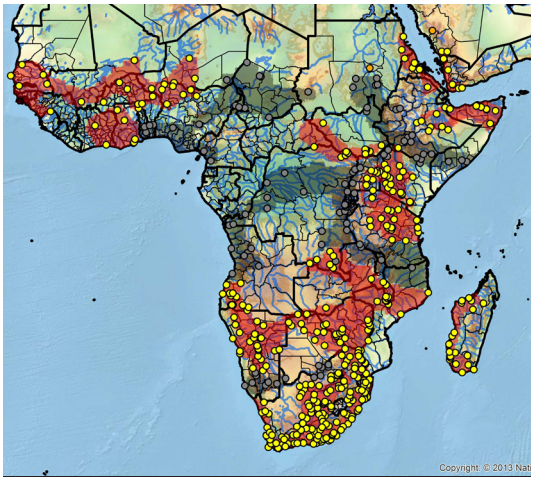
Type species: *Pelomedusa galeata* [= *Testudo galeata* Schoepff 1792], by original monotypy.

Pentonyx Duméril and Bibron 1835:389

Type species: *Pentonyx galeata* [= *Testudo galeata* Schoepff 1792], by original designation.

Pelomedusa subrufa (sensu lato) species complex (101)

African Helmeted Turtles, African Helmeted Terrapins



(yellow dots and red distributions = assigned *Pelomedusa* spp. – see below; gray dots and gray distributions = unassigned *Pelomedusa subrufa* sensu lato; orange dots = introduced or trade or questionable)

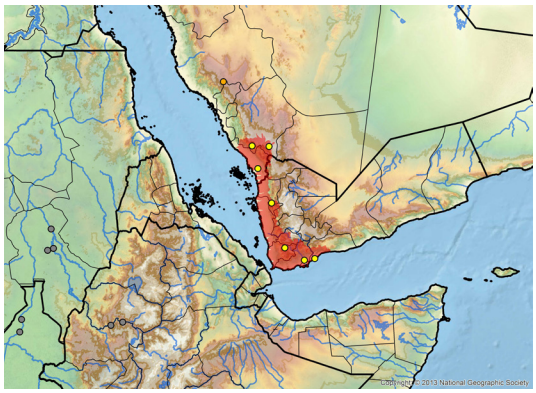
Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo (DRC), Congo (ROC), Eritrea, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Ivory Coast, Kenya, Lesotho, Liberia, Madagascar (prehistoric introduction?), Malawi, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rwanda, Saudi Arabia, Senegal, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Swaziland, Tanzania, Togo, Uganda, Yemen, Zambia, Zimbabwe

Pelomedusa barbata Petzold, Vargas-Ramírez, Kehlmaier, Vamberger, Branch, Du Preez, Hofmeyr, Meyer, Schleicher, Široký, and Fritz 2014 (101)

Arabian Helmeted Turtle



Johannes Els / Taif, Saudi Arabia



(gray dots = unassigned *Pelomedusa* spp. = *P. subrufa* sensu lato; orange dot = introduced or trade)

Saudi Arabia (Asir, Jizan), Yemen

CBFTT Account: Boycott and Bourquin (2008) [as part of *Pelomedusa subrufa* sensu lato]

IUCN Red List: Not Evaluated

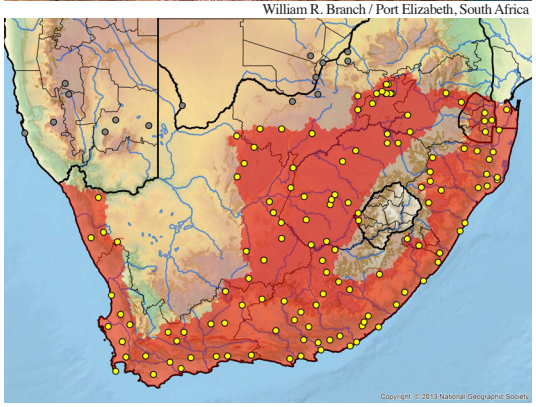
TFTSG Draft Red List: Endangered (2016)

Pelomedusa barbata Petzold, Vargas-Ramírez, Kehlmaier, Vamberger, Branch, Du Preez, Hofmeyr, Meyer, Schleicher, Široký, and Fritz 2014:530
Type locality: "Zinjibar, Abyan, Yemen, N13°7.75 E45°22.81."

Pelomedusa galeata (Schoepff 1792) [(101)]
South African Helmeted Turtle



William R. Branch / Port Elizabeth, South Africa



(gray dots = unassigned *Pelomedusa* spp. = *P. subrufa* sensu lato)

Botswana (?), Lesotho, Mozambique, Namibia (?), South Africa, Swaziland

CBFTT Account: Boycott and Bourquin (2008) [as part of *Pelomedusa subrufa* sensu lato]

IUCN Red List: Not Evaluated

Testudo scabra Retzius *in* Schoepff 1792:12 (*nomen nudum* and junior homonym, not = *Testudo scabra* Linnaeus 1758 = *Rhinoclemmys punctularia punctularia*)

Testudo galeata Schoepff 1792:12 (*nomen conservandum*, ICZN 1989), *Emys galeata, Pelomedusa galeata, Pentonyx galeata, Hydraspis (Pelomedusa) galeata, Hydraspis galeata, Pelomedusa galeata galeata*
Type locality: "India orientali." Restricted to "near Cape Town" [South Africa] by Hewitt (1935:326).

Pentonyx capensis Duméril and Bibron 1835:390
Type locality: "au cap de Bonne-Espérance, dans l'Ile de Madagascar." Restricted to "Kap der Guten Hoffnung" [Cape of Good Hope, South Africa] by Mertens (1937:139) [invalid designation]; and to "Cape of Good Hope" [South Africa] by lectotype designation by Fritz et al. (2014b:510).

Pelomedusa nigra Gray 1863b:99, *Pelomedusa galeata nigra, Pelomedusa subrufa nigra*
Type locality: "Natal" [South Africa]; with lectotype designation by Fritz et al. (2014b:514).

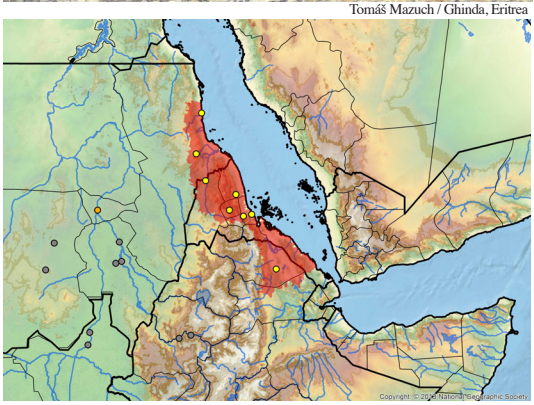
Pelomedusa galeata orangensis Hewitt 1935:332, *Pelomedusa subrufa orangensis*
Type locality: "presumably from the Kimberley neighbourhood" [South Africa].

Pelomedusa galeata devilliersi Hewitt 1935:337
Type locality: "Besondermeid, Steinkopf, Namaqualand, C.P." [South Africa].

Pelomedusa gehafie (Rüppell 1835) [(101)]
Eritrean Helmeted Turtle



Tomáš Mazuch / Ghinda, Eritrea



(gray dots = unassigned *Pelomedusa* spp. = *P. subrufa* sensu lato; orange dot = questionable record)

Eritrea, Sudan

CBFTT Account: Boycott and Bourquin (2008) [as part of *Pelomedusa subrufa* sensu lato]

IUCN Red List: Not Evaluated

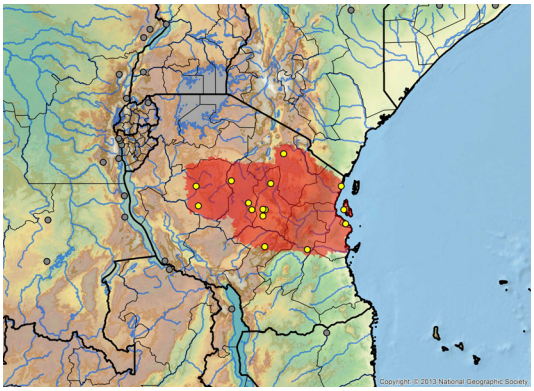
Pentonyx gehafie Rüppell 1835:2, *Pelomedusa galeata gehafie, Pelomedusa subrufa gehafie, Pelomedusa gehafie*
Type locality: "östlichen Abhange der abyssinischen Küstengebirge" [eastern slope of Abyssinian coastal mountains] [Eritrea]. Restricted to "Massaua" [Masawa, Eritrea] by lectotype designation by Mertens (1937:140) [invalid designation] see Fritz et al. 2014b:511).

Pelomedusa gehafiae Gray 1844:38 (*nomen novum*)

Pelomedusa galeata disjuncta Vaillant and Grandidier

1910:56
Type locality: Not designated. Restricted to "shore of Lake Abaya, Sidamo, Ethiopia" by Loveridge (1941:480) [invalid designation]; and to "Abyssinia...the eastern slope of the coastal mountains in present-day Eritrea," by lectotype designation by Fritz et al. (2014b:515).

Pelomedusa kobe Petzold, Vargas-Ramírez, Kehlmaier, Vamberger, Branch, Du Preez, Hofmeyr, Meyer, Schleicher, Široký, and Fritz 2014 [(101)]
Tanzanian Helmeted Turtle

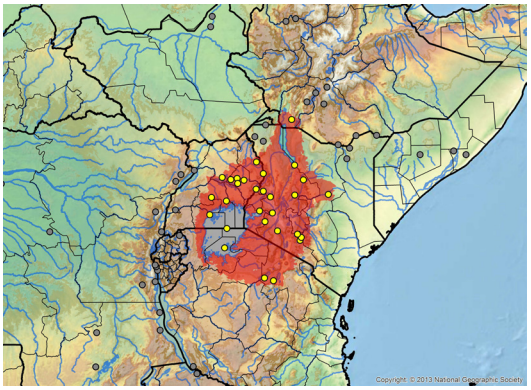


(gray dots = unassigned *Pelomedusa* spp. = *P. subrufa* sensu lato)
Tanzania
CBFTT Account: Boycott and Bourquin (2008) [as part of *Pelomedusa subrufa* sensu lato]
IUCN Red List: Not Evaluated
Pelomedusa kobe Petzold, Vargas-Ramírez, Kehlmaier, Vamberger, Branch, Du Preez, Hofmeyr, Meyer, Schleicher, Široký, and Fritz 2014:535
Type locality: "Naberera, Manyara, Tanzania, S4°11.66 E36°55.74."

Pelomedusa neumanni Petzold, Vargas-Ramírez, Kehlmaier, Vamberger, Branch, Du Preez, Hofmeyr, Meyer, Schleicher, Široký, and Fritz 2014 [(101)]
Neumann's Helmeted Turtle



Tomáš Mazuch / nr. Turmi, Omo Region, Ethiopia

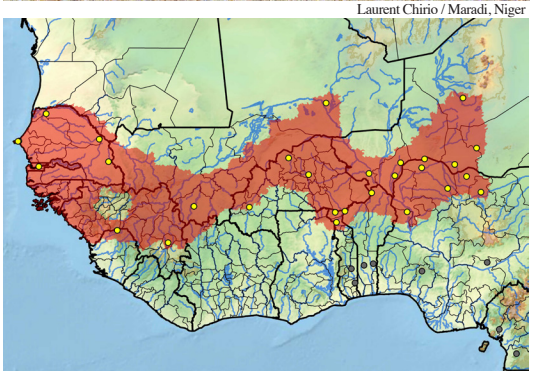


(gray dots = unassigned *Pelomedusa* spp. = *P. subrufa* sensu lato)
Ethiopia, Kenya, Tanzania
CBFTT Account: Boycott and Bourquin (2008) [as part of *Pelomedusa subrufa* sensu lato]
IUCN Red List: Not Evaluated
Pelomedusa neumanni Petzold, Vargas-Ramírez, Kehlmaier, Vamberger, Branch, Du Preez, Hofmeyr, Meyer, Schleicher, Široký, and Fritz 2014:537
Type locality: "Kakamega, Kenya, N0°17.04 E34°44.52."

Pelomedusa olivacea (Schweigger 1812) [(101)]
Sahelian Helmeted Turtle



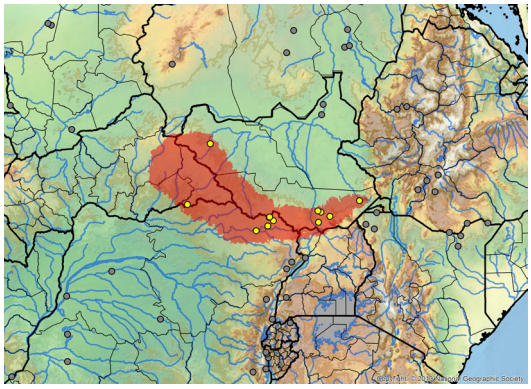
Laurent Chirio / Maradi, Niger



(gray dots = unassigned *Pelomedusa* spp. = *P. subrufa* sensu lato)
Benin, Burkina Faso, Gambia, Ghana, Guinea, Guinea-Bissau, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo
CBFTT Account: Boycott and Bourquin (2008) [as part of *Pelomedusa subrufa* sensu lato]
IUCN Red List: Not Evaluated
Emys olivacea Schweigger 1812:307 (senior homonym, not = *Emys olivacea* Gray 1856b = *Trachemys stejnegeri stejnegeri*), *Hydraspis (Pelomedusa) olivacea, Hydraspis olivacea, Pelomedusa subrufa olivacea, Pelomedusa olivacea*
Type locality: "sabulosis Nigritiae" [Senegal].
Pelomedusa gasconi Rochebrune 1884:25
Type locality: "Dagana, Saidé, lac de N'Guer, marigot des

Maringouins" [Senegal]. Restricted to "Dagana, Senegal" by Loveridge (1941:480) [invalid designation]; and to "Dakar" [Senegal] by neotype designation by Fritz et al. (2014b:514).

Pelomedusa schweinfurthi Petzold, Vargas-Ramírez, Kehlmaier, Vamberger, Branch, Du Preez, Hofmeyr, Meyer, Schleicher, Široký, and Fritz 2014 (101)
Schweinfurth's Helmeted Turtle

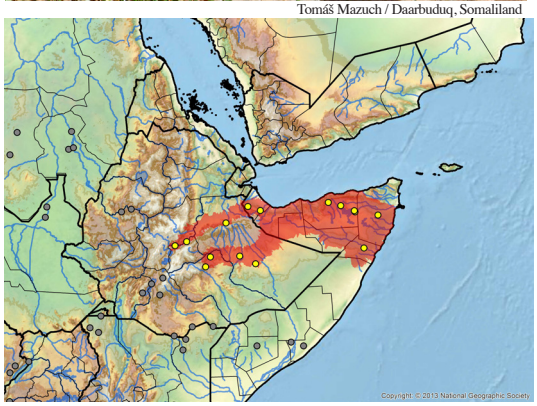


(gray dots = unassigned *Pelomedusa* spp. = *P. subrufa* sensu lato)
Central African Republic, Congo (DRC), South Sudan
CBFTT Account: Boycott and Bourquin (2008) [as part of *Pelomedusa subrufa* sensu lato]
IUCN Red List: Not Evaluated
Pelomedusa schweinfurthi Petzold, Vargas-Ramírez, Kehlmaier, Vamberger, Branch, Du Preez, Hofmeyr, Meyer, Schleicher, Široký, and Fritz 2014:539
Type locality: "Liria, Central Equatoria, South Sudan, N4°38.66 E32°4.83."

Pelomedusa somalica Petzold, Vargas-Ramírez, Kehlmaier, Vamberger, Branch, Du Preez, Hofmeyr, Meyer, Schleicher, Široký, and Fritz 2014 (101)
Somalian Helmeted Turtle



Tomáš Mazuch / Daarbuduq, Somaliland

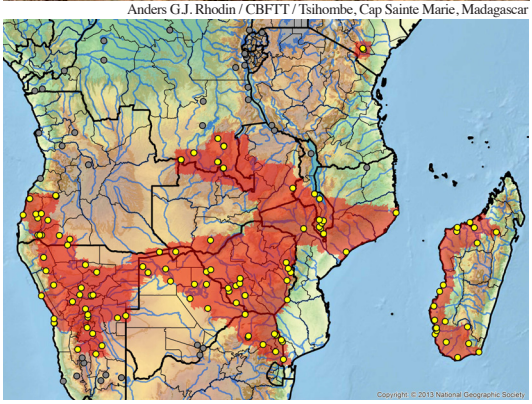


(gray dots = unassigned *Pelomedusa* spp. = *P. subrufa* sensu lato)
Ethiopia, Somalia
CBFTT Account: Boycott and Bourquin (2008) [as part of *Pelomedusa subrufa* sensu lato]
IUCN Red List: Not Evaluated
Pelomedusa somalica Petzold, Vargas-Ramírez, Kehlmaier, Vamberger, Branch, Du Preez, Hofmeyr, Meyer, Schleicher, Široký, and Fritz 2014:540
Type locality: "Borama district, Awdal, Somaliland/Somalia, N9°55 E43°10, 4500 ft."

Pelomedusa subrufa (sensu stricto) (Bonnaterre 1789) (10:45, 11:19) (101)
Helmeted Turtle, African Helmeted Terrapin



Anders G.J. Rhodin / CBFTT / Tsihombe, Cap Sainte Marie, Madagascar

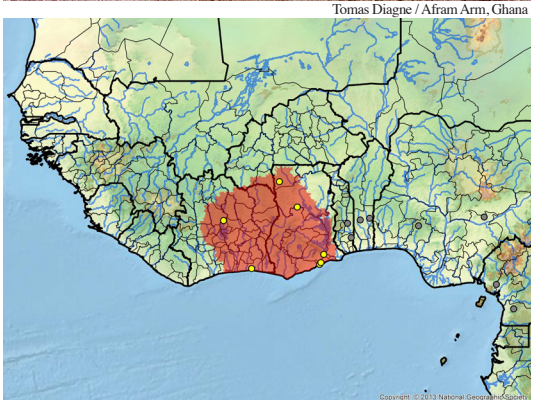


(gray dots = unassigned *Pelomedusa* spp. = *P. subrufa* sensu lato)
Angola, Botswana, Congo (DRC), Kenya, Madagascar (prehistoric introduction?), Malawi, Mozambique, Namibia, South Africa, Tanzania (?), Zambia, Zimbabwe
CBFTT Account: Boycott and Bourquin (2008) [*Pelomedusa subrufa* sensu lato]
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2013)
Testudo planitia Meuschen 1778:11 (*nomen dubium* and senior homonym, not = *Testudo planitia* Gmelin 1789 = *Macrochelys temminckii*), *Hydraspis (Pelomedusa) planitia, Hydraspis planitia*
Type locality: Not designated.
Testudo subrufa Lacepède 1788:173, synopsis[table] (07:102, 09:6) (*nomen suppressum,* ICZN 2005a)
Type locality: "l'Inde" [India] [in error]. Restricted to "Kap der Guten Hoffnung" [Cape of Good Hope, South Africa] by Mertens (1937:139); and to "Taolañaro (Fort-Dauphin), République Malagasy (Madagascar)" by Bour (1982c:535).
Testudo subrufa Bonnaterre 1789:28, *Emys subrufa, Pelomedusa subrufa, Chelys (Hydraspis) subrufa, Chelys subrufa, Hydraspis subrufa, Pelomedusa galeata subrufa, Pelomedusa subrufa subrufa*
Type locality: "l'Inde" [India] [in error]. Restricted to "Taolañaro, Madagascar" by Fritz et al. (2014b:507), following Bour (1982c:535).
Testudo rubra Meyer 1790:83 (09:8) (*nomen novum, dubium et*

oblitum)
Testudo badia Donndorff 1798:34 (*nomen novum*)
Testudo rubicunda Suckow 1798:49 (*nomen novum*)
Pentonix americana Cornalia 1849:13 [105] (*nomen dubium*), *Pentonyx americana*
Type locality: "Flum. prope Novaeboracum" [= Novum Eboracum = New York, USA] [in error].
Pelomedusa mossambicensis Peters *in* Lichtenstein 1856:2 (*nomen nudum*)
Pelomedusa mozambica Peters *in* Gray 1856b:53 (*nomen nudum*)
Pelomedusa galeata damarensis Hewitt 1935:338, *Pelomedusa subrufa damarensis*
Type locality: "Quickborn, near Okahandja, South West Africa" [Namibia]; with lectotype designation by Fritz et al. (2014b:515).
Pelomedusa subrufa wettsteini Mertens 1937:141
Type locality: "Majunga, West-Madagaskar" [Mahajanga, Madagascar].

Pelomedusa variabilis Petzold, Vargas-Ramírez, Kehlmaier, Vamberger, Branch, Du Preez, Hofmeyr, Meyer, Schleicher, Široký, and Fritz 2014 [101]
West African Helmeted Turtle

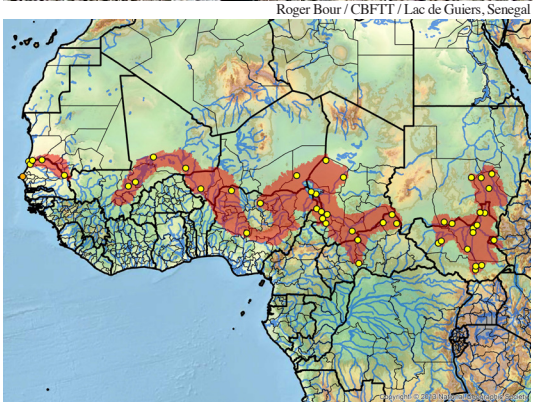

Tomas Diagne / Afram Arm, Ghana


(gray dots = unassigned *Pelomedusa* spp. = *P. subrufa* sensu lato)
Burkina Faso (?), Ghana, Ivory Coast
CBFTT Account: Boycott and Bourquin (2008) [as part of *Pelomedusa subrufa* sensu lato]
IUCN Red List: Not Evaluated
Pelomedusa variabilis Petzold, Vargas-Ramírez, Kehlmaier, Vamberger, Branch, Du Preez, Hofmeyr, Meyer, Schleicher, Široký, and Fritz 2014:543
Type locality: "Gold Coast, Ghana."

Pelusios Wagler 1830b [11:19] [102]
Sternothaerus Bell 1825a:305 (*partim, nomen suppressum*, ICZN 1989)
Type species: *Sternothaerus leachianus* Bell 1825a [= subjective synonym of *Emys castanea* Schweigger 1812 = *Pelusios castaneus*], by subsequent designation by Bell (1828c:515); not *Sternothaerus odoratus* Bell [= *Testudo odorata* Latreille *in* Sonnini and Latreille 1801], by incorrect designation by Fitzinger (1843:290).
Pelusios Wagler 1830b:137 (*nomen conservandum*, ICZN 1989)
Type species: *Pelusios subniger* Wagler [= *Testudo subnigra* Lacepède 1788 (*nomen suppressum*) = *Testudo subnigra* Bonnaterre 1789], by subsequent designation by Fitzinger (1843:29).
Sternothaerus (*Tanoa*) Gray 1863f:193
Type species: *Sternothaerus (Tanoa) sinuatus* (Smith 1838), by subsequent designation by Lindholm (1929:288).
Sternothaerus (*Notoa*) Gray 1863f:195
Type species: Type species (by monotypy): *Sternothaerus (Notoa) subniger* (Lacepède 1788) [= *Sternothaerus (Notoa) subniger* (Bonnaterre 1789)], by original monotypy.
Sternothaerus (*Anota*) Gray 1863f:196 (junior homonym, not = *Anota* Hallowell 1852 [= Sauria])
Type species: *Sternothaerus (Anota) niger* (Duméril and Bibron 1835), by original monotypy.

Pelusios adansonii (Schweigger 1812)
Adanson's Mud Turtle

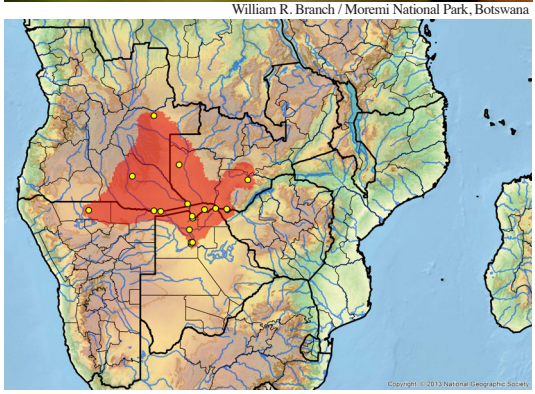

Roger Bour / CBFTT / Lac de Guiers, Senegal


(orange dot = probable trade)
Benin (?), Cameroon, Central African Republic, Chad, Ethiopia, Mali, Mauritania, Niger, Nigeria, Senegal, South Sudan, Sudan
CBFTT Account: Bour (2008)
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2013)
Emys adansonii Schweigger 1812:308, *Hydraspis adansonii, Pelomedusa adansonii, Sternotherus adansonii, Sternothaerus adansonii, Pentonyx andansonii, Pentonyx*

adansonii, Pelusios adansonii, Pelusios adansonii adansonii
Type locality: "Nigritia" [Senegal]. Restricted to "cap Vert" [Senegal] by Duméril and Bibron (1835:395).
Chelys (Hydraspis) adamsonii Gray 1830e:15 (*nomen novum*)

Pelusios bechuanicus FitzSimons 1932
Okavango Mud Turtle

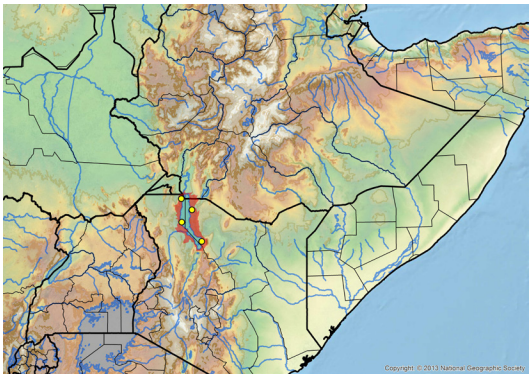

William R. Branch / Moremi National Park, Botswana



Angola, Botswana, Namibia, Zambia, Zimbabwe
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2013)
Pelusios bechuanicus FitzSimons 1932:37, *Pelusios castaneus bechuanicus, Pelusios bechuanicus bechuanicus*
Type locality: "Thamalakane River at Maun, Ngamiland" [Botswana].

Pelusios broadleyi Bour 1986
Turkana Mud Turtle

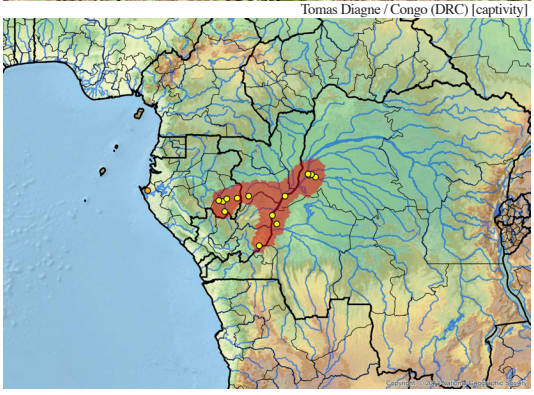

Tomas Diagne / Lake Turkana, Kenya



Ethiopia (?), Kenya
IUCN Red List: Vulnerable D2 (1996)
TFTSG Draft Red List: Endangered (2013)
Pelusios broadleyi Bour 1986:31
Type locality: "Loiengalani [= Loyengalanij] (2°43' N, 36°43' E), Marsabit district, Kenya."

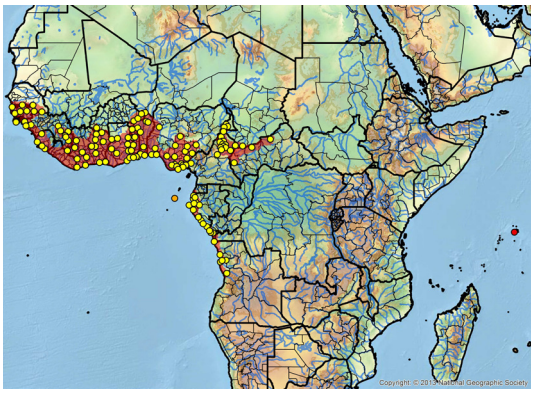
Pelusios carinatus Laurent 1956 [(102)]
African Keeled Mud Turtle


Tomas Diagne / Congo (DRC) [captivity]



(orange dot = uncertain identification)
Congo (DRC), Congo (ROC), Gabon
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2013)
Pelusios carinatus Laurent 1956:39
Type locality: "Eala, Equateur" [Democratic Republic of Congo (DRC)].

Pelusios castaneus (Schweigger 1812) (14:47) **(102)**
African Mud Turtle



(orange dot = introduced or trade, red dot = extirpated)

Angola, Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Congo (DRC), Congo (ROC), Equatorial Guinea (?), Gabon, Ghana, Guinea, Guinea-Bissau, Ivory Coast, Liberia, Mali (?), Niger, Nigeria, São Tomé and Príncipe (probable historic introduction), Senegal, Seychelles (extirpated; possible historic introduction), Sierra Leone, Togo

Introduced: Guadeloupe

CBFTT Account: Bour, Luiselli, Petrozzi, Segniagbeto, and Chirio (2016)

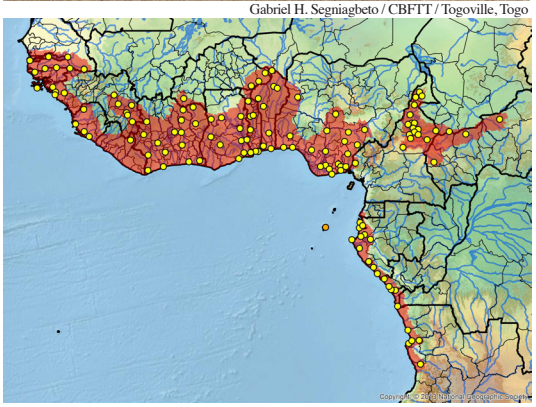
IUCN Red List: Least Concern [Not Listed] (1996)

TFTSG Draft Red List: Least Concern (2013)

Pelusios castaneus castaneus (Schweigger 1812) (14:47)
West African Mud Turtle, Swamp Terrapin



Gabriel H. Segniagbeto / CBFTT / Togoville, Togo



(orange dot = introduced or trade)

Angola, Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Congo (DRC), Congo (ROC), Equatorial Guinea (?), Gabon, Ghana, Guinea, Guinea-Bissau, Ivory Coast, Liberia, Mali (?), Niger, Nigeria, São Tomé and Príncipe (probable historic introduction), Senegal, Sierra Leone, Togo

Emys castanea Schweigger 1812:314, *Pelusios castaneus, Chelys (Sternotherus) castaneus, Chelys castaneus, Sternotherus castaneus, Clemmys (Pelusios) castanea, Clemmys castanea, Sternothaerus castaneus, Sternothaerus nigricans castaneus, Sternothaerus nigricans castanea, Pelusios nigricans castaneus, Pelusios subniger castaneus, Pelusios castaneus, Pelusios castaneus castaneus*
Type locality: Not known. Restricted to "vicinity of Koutchatcha (7°20' N, 1°18' E)...close to the Amou River (ca. 30 km East of Gléï), Ogou Prefecture, Plateaux Region, Togo" by neotype designation by Bour (2008:37).

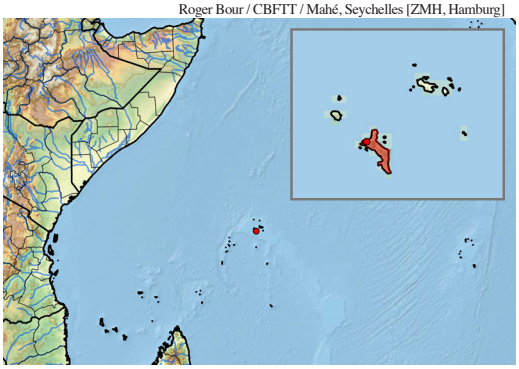
Sternothaerus leachianus Bell 1825a:306, *Sternotherus leachianus*
Type locality: Not known.

Sternotherus derbianus Gray 1844:37, *Sternothaerus derbianus, Sternothaerus (Tanoa) derbianus, Pelusios derbianus, Pelusios castaneus derbianus*
Type locality: "W. Africa, Sierra Leone ? Gambia." Restricted to "Gambia" by Loveridge (1941:491).

Pelusios castaneus seychellensis (Siebenrock 1906c) (07:103, 14:47) **(103)**
(Extinct, ca. 1950)
Seychelles Mud Turtle



Roger Bour / CBFTT / Mahé, Seychelles [ZMH, Hamburg]



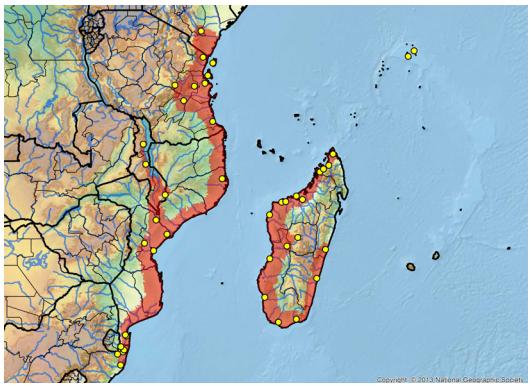
Seychelles (Mahé [extinct]; possible historic introduction)

CBFTT Accounts: Bour and Gerlach 2008; Bour, Luiselli, Petrozzi, Segniagbeto, and Chirio 2016

IUCN Red List: Extinct (2003)

Sternothaerus nigricans seychellensis Siebenrock 1906c:38, *Pelusios subniger seychellensis, Sternothaerus castaneus seychellensis, Pelusios castaneus seychellensis, Pelusios seychellensis*
Type locality: "Seychellen" [Seychelles]. Restricted to "Seychellen, Insel Gloriosa?" [Seychelles] by Siebenrock (1909a:559), and to "Insel Mahé" [Seychelles] by Siebenrock (1909b:362).

Pelusios castanoides Hewitt 1931 (11:19, 12:42)
Yellow-bellied Mud Turtle



Kenya, Madagascar (prehistoric introduction?), Malawi, Mozambique, Seychelles (prehistoric introduction?), South Africa, Tanzania
IUCN Red List: Least Concern (1996)
SARCA Draft: Least Concern (regional) (2010)
TFTSG Draft Red List: Least Concern (2013)

Pelusios castanoides castanoides Hewitt 1931 (11:19, 12:42)
East African Yellow-bellied Mud Turtle



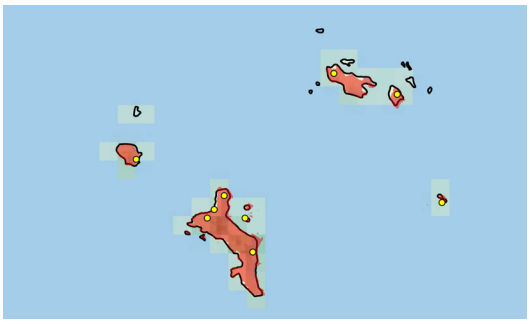
Gerald Kuchling / Madagascar

Kenya, Madagascar (prehistoric introduction?), Malawi, Mozambique, South Africa, Tanzania
Pelusios nigricans castanoides Hewitt 1931:463, *Pelusios subniger castanoides*, *Pelusios castaneus castanoides*, *Pelusios castanoides*, *Pelusios castanoides castanoides*
Type locality: "Richards Bay, Zululand" [South Africa]. Restricted to "Lake St. Lucia estuary, KwaZulu" [South Africa] by Broadley (1981:673).
Pelusios castaneus kapika Bour 1979:149, *Pelusios castanoides kapika*
Type locality: "Delta du Sambirano (Province de Diégo-Suarez), nord de Madagascar."

Pelusios castanoides intergularis Bour 1983 (11:19, 12:42)
Seychelles Yellow-bellied Mud Turtle



Justin Gerlach / CBFTT / Seychelles

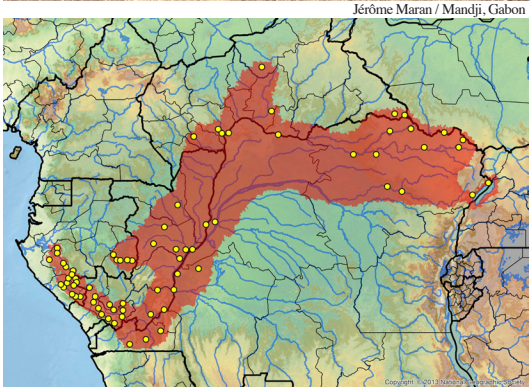


Seychelles (Cerf, Fregate, La Digue, Mahé, Praslin, Silhouette) (prehistoric introduction?)
CBFTT Account: Gerlach (2008a)
IUCN Red List: Critically Endangered A2c, B2ab (2003)
Pelusios castanoides intergularis Bour 1983:355
Type locality: "La Digue Island, Seychelles."

Pelusios chapini Laurent 1965 (11:19) **(102)**
Central African Mud Turtle



Jérôme Maran / Mandji, Gabon

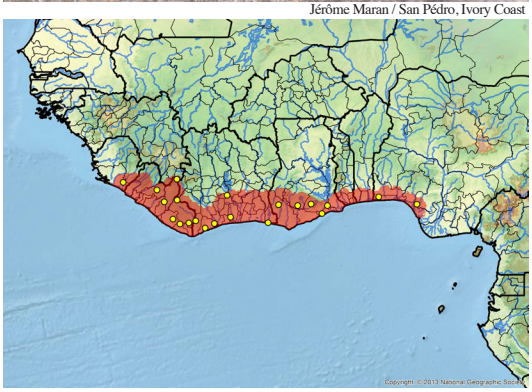


Central African Republic, Congo (DRC), Congo (ROC), Gabon, South Sudan, Uganda
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2013)
Pelusios castaneus chapini Laurent 1965:21, *Pelusios chapini*
Type locality: "Kasenyi, Lake Albert, Bunia Terr., Ituri, Congo" [Democratic Republic of Congo (DRC)]

Pelusios cupulatta Bour and Maran 2003
Ivory Coast Mud Turtle



Jérôme Maran / San Pédro, Ivory Coast

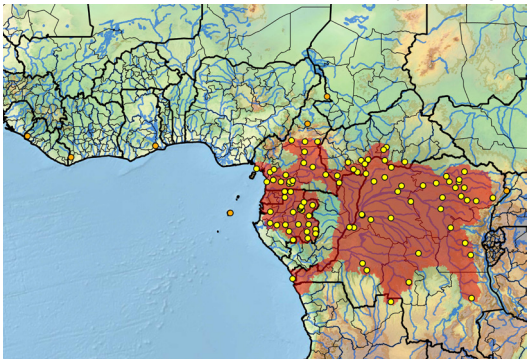


Benin, Ghana, Guinea, Ivory Coast, Liberia, Nigeria, Sierra Leone, Togo
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Least Concern (2013)
Pelusios cupulatta Bour and Maran 2003:28
Type locality: "environs de San Pédro, Côte d'Ivoire, précisément entre San Pédro (10 km W) et Grand-Bérébi (20 km E) (4°50' N, 6°47' W)." [Ivory Coast].

Pelusios gabonensis (Duméril 1856) [102]
African Forest Turtle



Jérôme Maran / Gabon

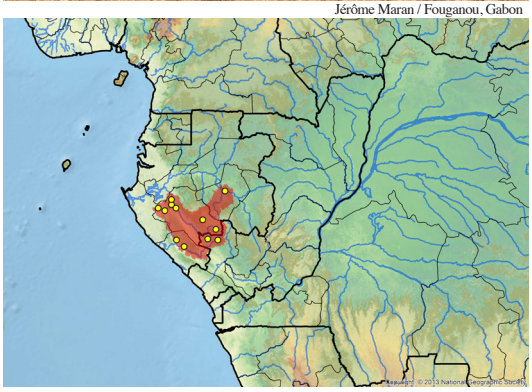


(orange dots = uncertain, trade, or possibly misidentified)
Angola, Cameroon, Central African Republic, Congo (DRC), Congo (ROC), Equatorial Guinea, Gabon
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Least Concern (2013)
Pentonyx gabonensis Duméril 1856:373, *Pelomedusa gabonensis, Sternothaerus gabonensis, Pelusios gabonensis*
Type locality: "Gabon."
Pentonyx gaboonensis Gray 1863f:194 (*nomen novum*)
Pelomedusa gabonica Peters 1864:644 (*nomen novum*)
Sternothaerus steindachneri Siebenrock 1902a:6
Type locality: "Madagascar" [in error].

Pelusios marani Bour 2000
Gabon Mud Turtle



Jérôme Maran / Fouganou, Gabon

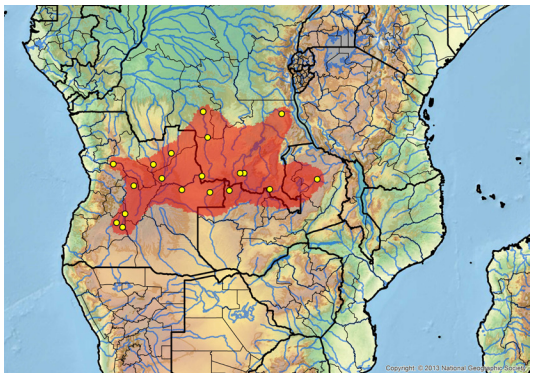


Congo (ROC), Gabon
IUCN Red List: Not Evaluated
TFTSG Draft Red List: Data Deficient (2013)
Pelusios marani Bour 2000:3
Type locality: "Yombi (01°26' S, 10°37' E), province de N'Gounié, Gabon; environ 30 km SSE de Fougamou, entre Lambaréné et Mouïla."

Pelusios nanus Laurent 1956 [102]
African Dwarf Mud Turtle



William R. Branch / northwest Zambia



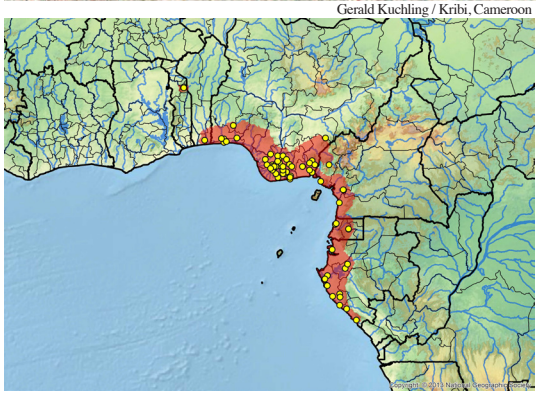
Angola, Congo (DRC), Zambia
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Data Deficient (2013)

Pelusios nanus Laurent 1956:31, *Pelusios adansonii nanus*
Type locality: "Dilolo, Haut Lualaba" [Democratic Republic of Congo (DRC)].

Pelusios niger (Duméril and Bibron 1835)
West African Black Mud Turtle



Gerald Kuchling / Kribi, Cameroon



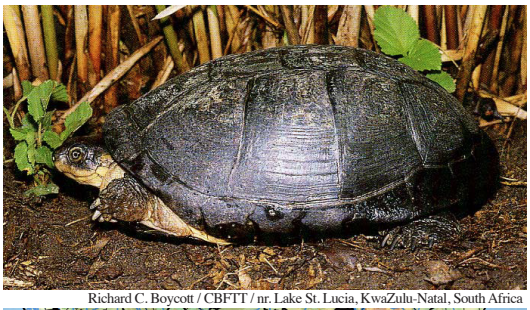
Benin, Cameroon, Equatorial Guinea, Gabon, Nigeria, Togo
IUCN Red List: Least Concern [Not Listed] (1996)
TFTSG Draft Red List: Near Threatened (2013)

Sternotherus niger Duméril and Bibron 1835:397, *Sternothaerus niger, Sternothaerus (Anota) niger, Pelusios niger*
Type locality: "probablement...originaire de l'île de Madagascar" [in error].

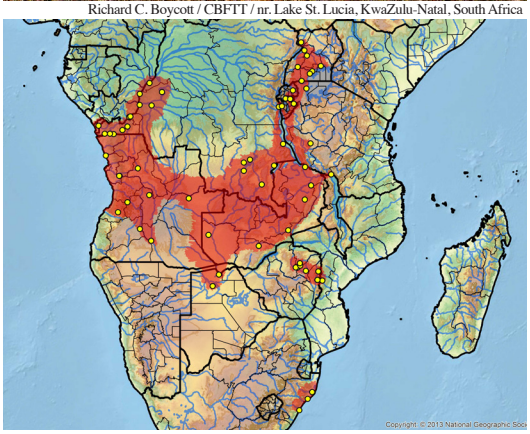
Sternothaerus oxyrhinus Boulenger 1897b:919
Type locality: "unknown...but probably...from some part of Tropical Africa."

Sternothaerus heinrothi Kanberg 1924:195
Type locality: "Kamerun" [Cameroon].

Pelusios rhodesianus Hewitt 1927 (11:19) **(102)**
Variable Mud Turtle, Mashona Hinged Terrapin



Richard C. Boycott / CBFTT / nr. Lake St. Lucia, KwaZulu-Natal, South Africa



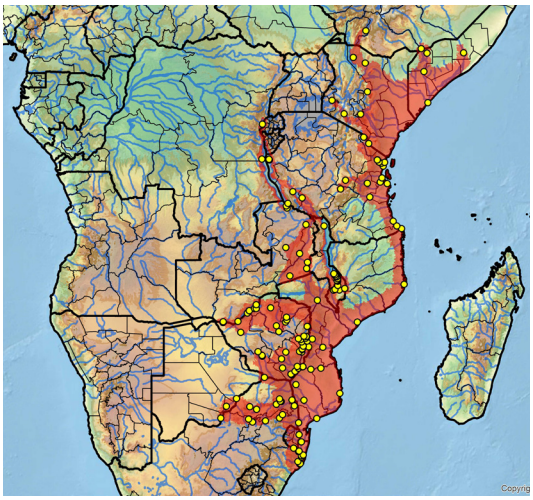
Angola, Botswana, Burundi, Congo (DRC), Congo (ROC), Malawi, Mozambique, Namibia, Rwanda, South Africa, Tanzania, Uganda, Zambia, Zimbabwe
CBFTT Account: Broadley and Boycott (2008)
IUCN Red List: Least Concern (1996)
SARCA Draft: Vulnerable (regional) (2010)

Pelusios nigricans rhodesianus Hewitt 1927:375, *Pelusios subniger rhodesianus, Pelusios rhodesianus, Pelusios castaneus rhodesianus, Pelusios rhodesianus rhodesianus*
Type locality: "Mpika district, N.E. Rhodesia" [Zambia].

Pelusios sinuatus (Smith 1838) (11:19)
Serrated Hinged Terrapin



Richard C. Boycott / CBFTT / Ndumu Game Reserve, KwaZulu-Natal, South Africa



Botswana, Burundi, Congo (DRC), Ethiopia, Kenya, Malawi, Mozambique, Rwanda, Somalia, South Africa, Swaziland, Tanzania, Zambia, Zimbabwe

CBFTT Account: Broadley and Boycott (2009)

IUCN Red List: Least Concern [Not Listed] (1996)

SARCA Draft: Least Concern (regional) (2010)

TFTSG Draft Red List: Least Concern (2013)

Sternotherus sinuatus Smith 1838:Reptilia,pl.1, *Sternothaerus (Tanoa) sinuatus, Sternothaerus sinuatus, Pelusios sinuatus, Pelusios sinuatus sinuatus*
Type locality: "rivers to the north of 25° south latitude" [South Africa]. Restricted to "the Crocodile/Marico Confluence, N. Transvaal" [South Africa] by Broadley (1981:675).

Sternotherus dentatus Peters 1848:494 (*nomen nudum*), *Sternothaerus dentatus*

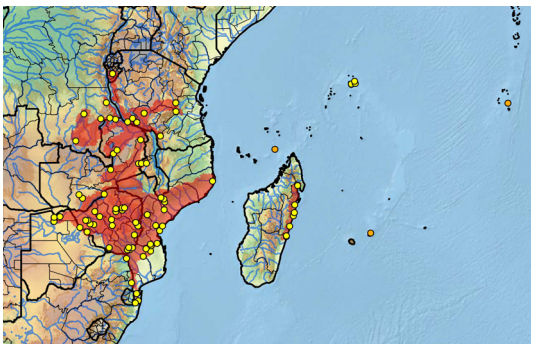
Sternothaerus bottegi Boulenger 1895a:9
Type locality: "Bardera...Giuba e dei suoi affluenti" [Italian Somaliland] [Somalia].

Pelusios sinuatus zuluensis Hewitt 1927:371
Type locality: "near the Umsinene River, Zululand" [South Africa].

Pelusios sinuatus leptus Hewitt 1933a:45
Type locality: "Isoka, North-East Rhodesia" [Zambia].

Sternothaerus rudolphi † Arambourg 1947:461 [Pleistocene, Ethiopia (Lake Turkana)], *Pelusios rudolphi*
Type locality: "basin du Lac Rodolphe et de la basse vallée de l'Omo" [Ethiopia]. Emended to "Shungura Formation...Omo River Basin...Ethiopia" by Lapparent de Broin (2000b:59).

Pelusios subniger (Bonnaterre 1789) (12:43)
East African Black Mud Turtle



(orange dots = introduced)

Botswana, Burundi, Congo (DRC), Madagascar (prehistoric introduction?), Malawi, Mozambique, Seychelles (prehistoric introduction?), South Africa, Tanzania, Zambia, Zimbabwe

Introduced: British Indian Ocean Territory (Chagos Archipelago), Glorioso Islands, Mauritius

IUCN Red List: Least Concern (1996)

SARCA Draft: Least Concern (regional) (2010)

TFTSG Draft Red List: Least Concern (2013)

Pelusios subniger subniger (Bonnaterre 1789) (12:43)
East African Black Mud Turtle



Jérôme Maran / Tamatave (Toamasina), Madagascar

Botswana, Burundi, Congo (DRC), Madagascar (prehistoric introduction?), Malawi, Mozambique, South Africa, Tanzania, Zambia, Zimbabwe

Testudo subnigra Lacepède 1788:175, synopsis[table] (09:6) (*nomen conservandum*, ICZN 1989; *nomen suppressum*, ICZN 2005a)
Type locality: Not known. Restricted to "Tamatave, est de Madagascar" by Bour (1979:152).

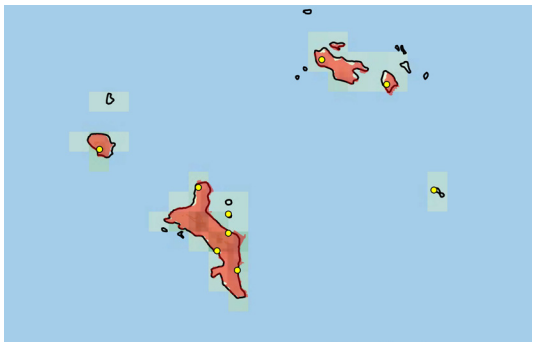
Testudo subnigra Bonnaterre 1789:30, *Emys subnigra, Pelusios subniger, Sternotherus subniger, Clemmys (Pelusios) subnigra, Clemmys subnigra, Sternothaerus subniger, Sternothaerus (Notoa) subniger, Pelusios subniger, Pelusios subniger subniger*
Type locality: Not known.

Testudo nigricans Donndorff 1798:34, *Terrapene nigricans, Kinosternon nigricans, Sternotherus nigricans, Sternothaerus nigricans, Sternothaerus nigricans nigricans, Pelusios nigricans, Pelusios nigricans nigricans*
Type locality: Not known.

Pelusios subniger parietalis Bour 1983 (12:43)
Seychelles Black Mud Turtle



Justin Gerlach / CBFTT / Seychelles



Seychelles (Cerf, Cousin [extirpated], Fregate, La Digue, Mahé, Praslin, Silhouette, St. Anne [extirpated]) (prehistoric introduction?)

CBFTT Account: Gerlach (2008b)

IUCN Red List: Critically Endangered A2c, B2ab(ii,iii) (2003)

Pelusios subniger parietalis Bour 1983:359

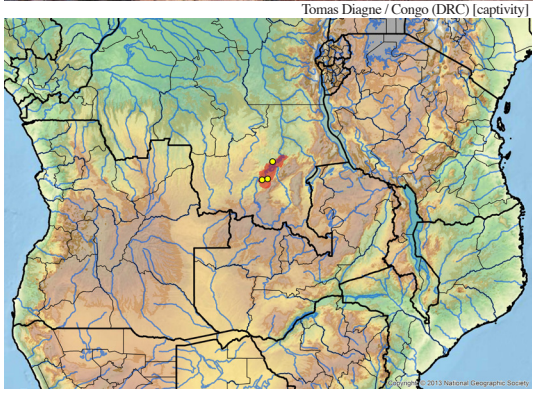
Type locality: "La Digue Island, Seychelles."

Pelusios upembae Broadley 1981

Upemba Mud Turtle



Tomas Diagne / Congo (DRC) [captivity]



Congo (DRC)

IUCN Red List: Data Deficient (1996)

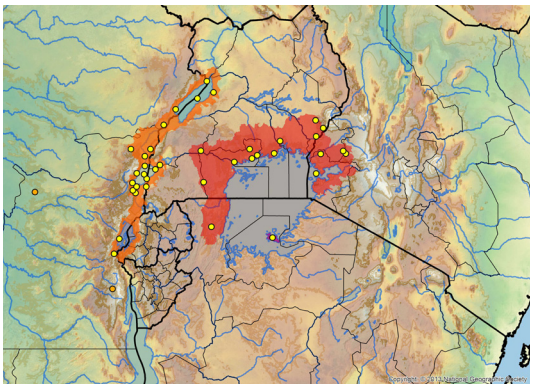
TFTSG Draft Red List: Data Deficient (2013)

Pelusios bechuanicus upembae Broadley 1981:667, *Pelusios upembae*

Type locality: "Kanonga River, tributary of the right bank of the Fungwe River (695 m), Upemba National Park, Shaba Province, Zaire" [Democratic Republic of Congo (DRC)].

Pelusios williamsi Laurent 1965

Williams' Mud Turtle



(subspecies: *williamsi* = red, *laurenti* = purple, *lutescens* = orange; orange dots = possible trade)

Congo (DRC), Kenya, Tanzania, Uganda

IUCN Red List: Least Concern [Not Listed] (1996)

TFTSG Draft Red List: Least Concern (2013)

Pelusios williamsi williamsi Laurent 1965

Lake Victoria Mud Turtle



Jérôme Maran / Lake Victoria, Uganda [captivity]

Kenya, Tanzania, Uganda

Pelusios williamsi Laurent 1965:12, *Pelusios williamsi williamsi, Pelusios castaneus williamsi*

Type locality: "Kakamega, Kaimosi, Kenya."

Pelusios williamsi laurenti Bour 1984a

Ukerewe Island Mud Turtle

Tanzania

Pelusios williamsi laurenti Bour 1984a:29

Type locality: "Ukerewe Island (Lake Victoria), Tanzania, altitude 1150 m."

Pelusios williamsi lutescens Laurent 1965

Albert Nile Mud Turtle

Congo (DRC), Uganda

Pelusios williamsi lutescens Laurent 1965:16, *Pelusios castaneus lutescens*

Type locality: "Semliki River, 1 km below the Lake Edward" [Democratic Republic of Congo (DRC)].

Podocnemididae Cope 1868b (07:104, 09:48, 11:20)

Hydraspidina Bonaparte 1836:3 (*partim*)
Podocnemididae Cope 1868b:282
Peltocephalidae Gray 1870f:718

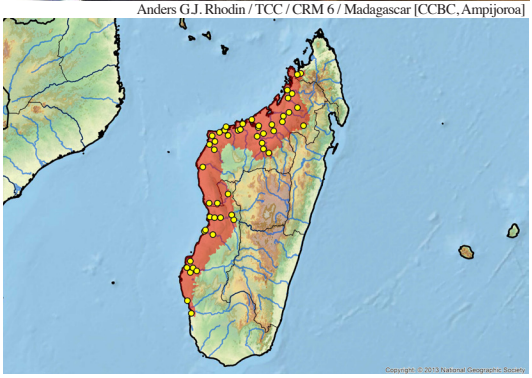
Erymnochelys Baur 1888a

Dumerilia Grandidier 1867:232 (junior homonym, not = *Dumerilia* Leach 1824 [= Coleoptera] or *Dumerilia* Robineau-Desvoidy 1835 [= Diptera] or *Dumerilia* Bocage 1866 [= Sauria])
Type species: *Dumerilia madagascariensis* Grandidier 1867, by original monotypy.
Erymnochelys Baur 1888a:421 (*nomen novum*)
Type species: *Erymnochelys madagascariensis* [= *Dumerilia madagascariensis* Grandidier 1867], by application of ICZN Article 67.8.

Erymnochelys madagascariensis (Grandidier 1867)

Madagascan Big-headed Turtle, Rere


Anders G.J. Rhodin / TCC / CRM 6 / Madagascar [CCBC, Ampijoroa]



Madagascar
IUCN Red List: Critically Endangered A4d (2008); Previously: Endangered (1996)
CITES: Appendix II

Dumerilia madagascariensis Grandidier 1867:232, *Podocnemis madagascariensis, Erymnochelys madagascariensis, Dumerilia madagascarensis, Erymnochelys madagascarensis, Podocnemis madagascarensis*
Type locality: "Mouroundava Tsidsibonque flumina in occidentali insulae Madagascar littore" [Morondava and Tsiribihina rivers on the western coast of Madagascar Island]. Restricted to "Morondava River...Madagascar" by Bour (2006a:37).
Podocnemis madagascariensis bifilaris Boettger 1893:14
Type locality: "Mojanga, West-Madagaskar" [Madagascar].

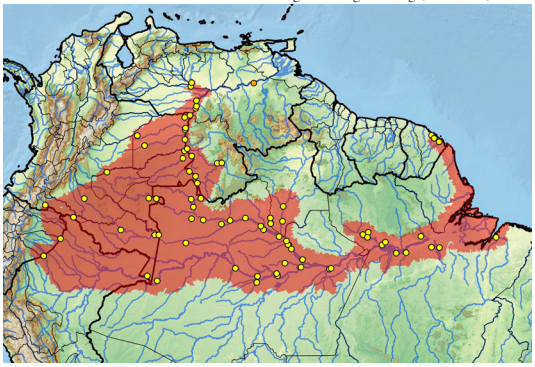
Peltocephalus Duméril and Bibron 1835

Peltocephalus Duméril and Bibron 1835:377
Type species: *Peltocephalus tracaxa* [= *Emys tracaxa* Spix 1824] [= subjective synonym of *Emys dumeriliana* Schweigger 1812], by original monotypy.

Peltocephalus dumerilianus (Schweigger 1812)

Big-headed Sideneck Turtle


Richard C. Vogt / Rio Negro drainage, Amazonas, Brazil


(orange dot = probable trade)

Brazil (Amapá, Amazonas, Pará, Roraima), Colombia (Amazonas, Caquetá, Guainía, Guaviare, Meta, Putumayo, Vaupés, Vichada), Ecuador, French Guiana, Peru (Loreto), Venezuela (Amazonas, Apure)
IUCN Red List: Vulnerable A1acd (1996)
TFTSG Draft Red List: Vulnerable (2011)
CITES: Appendix II

Emys dumeriliana Schweigger 1812:300, *Podocnemis dumeriliana, Hydraspis dumeriliana, Peltocephalus dumerilianus, Chelonemys dumeriliana, Peltocephalus dumeriliana*
Type locality: "America meridionali." Restricted to "French Guiana" by neotype designation by Bour (2006a:29).
Emys macrocephala Spix 1824:5 (senior homonym, not = *Emys macrocephalus* Gray 1844 = *Malaclemys terrapin terrapin*), *Peltocephalus macrocephala*
Type locality: "Airon ad ripam fluminis Yau, confluentis Rio Negro" [Airão, Rio Jáu, Amazonas, Brazil].
Emys tracaxa Spix 1824:6, *Hydraspis tracaxa, Podocnemis tracaxa, Peltocephalus tracaxa, Peltocephalus tracaxus*
Type locality: "fluminis Solimoëns" [Rio Solimões, Amazonas, Brazil].
Chelys (Hydraspis) dumerilliana Gray 1830e:17 (*nomen novum*)
Emys icterocephala Spix *in* Gray 1830e:17 (*nomen nudum*)
Peltocephalus tracaya Troschel 1848:646 (*nomen novum*)

Podocnemis Wagler 1830b

Podocnemis Wagler 1830b:135
Type species: *Podocnemis expansa* [= *Emys expansa* Schweigger 1812], by subsequent designation by Fitzinger (1843:29).

Chelonemys Gray 1864d:134 (junior homonyn)
Type species: *Chelonemys dumeriliana* sensu Gray 1864 (non *Emys dumeriliana* Schweigger 1812) [= subjective synonym of *Podocnemis unifilis* Troschel 1848], by original monotypy.

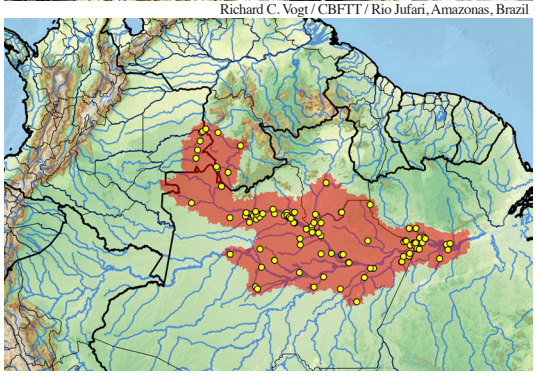
Bartlettia Gray 1870f:720 (junior homonym, not = *Bartlettia* Adams 1867 [= Mollusca])
Type species: *Bartlettia pitipii* Gray 1870 [= subjective synonym of *Podocnemis sextuberculata* Cornalia 1849], by original monotypy.

Podocnemis erythrocephala (Spix 1824) (10:46) (**104**)

Red-headed Amazon River Turtle



Richard C. Vogt / CBFTT / Rio Jufari, Amazonas, Brazil



Brazil (Amazonas, Pará, Roraima), Colombia (Guainía, Guaviare [?], Vaupés, Vichada), Venezuela (Amazonas)

CBFTT Account: Mittermeier, Vogt, Bernhard, and Ferrara (2015)

IUCN Red List: Vulnerable A1bd (1996)

TFTSG Draft Red List: Vulnerable (2011)

CITES: Appendix II, as *Podocnemis* spp.

Emys cayennensis Schweigger 1812:298 (10:48, 14:50) (*partim*, misidentified type, provisional *nomen suppressum*), *Chelys (Hydraspis) cayennensis, Chelys cayennensis, Hydraspis cayennensis, Podocnemis cayennensis*
Type locality: "Cayenna" [Cayenne, French Guiana].

Emys erythrocephala Spix 1824:9, *Podocnemis erythrocephala, Hydraspis expansa erythrocephala, Chelys (Hydraspis) erythrocephala, Chelys erythrocephala*
Type locality: "aquis ripariis fluminis Solimoens" [Rio Solimões, Amazonas, Brazil].

Emys bitentaculata Cuvier *in* Gray 1830e:17 (14:48) (*nomen nudum et dubium*)

Hydraspis bitentaculata Gray 1831d:42 (14:48) (*nomen oblitum et dubium*)
Type locality: "Brasilia" [Brazil].

Podocnemis agassizii Coutinho *in* Göldi 1886:277 (10:46)
Type locality: "Rio Negro" [Amazonas, Brazil].

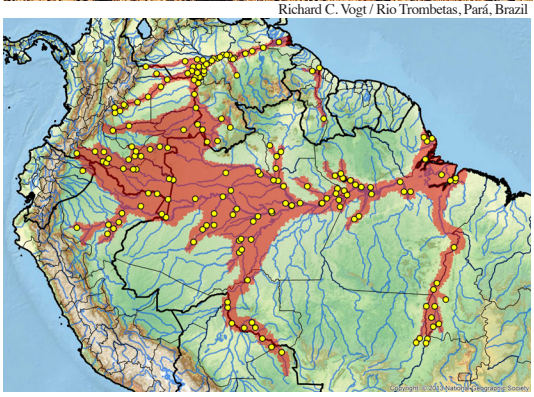
Podocnemis coutinhii Göldi 1886:279 (*nomen novum*)

Podocnemis expansa (Schweigger 1812)

Giant South American River Turtle, Giant Amazon River Turtle, Arrau



Richard C. Vogt / Rio Trombetas, Pará, Brazil



Bolivia (Beni, Cochabamba, La Paz, Pando, Santa Cruz), Brazil (Amapá, Amazonas, Goiás, Mato Grosso, Pará, Rondônia, Roraima, Tocantins), Colombia (Amazonas, Arauca, Caquetá, Casanare, Guainía, Meta, Putumayo, Vaupés, Vichada), Ecuador, Guyana, Peru (Loreto, Ucayali), Venezuela (Amazonas, Anzoátegui, Apure, Bolívar, Delta Amacuro, Guárico, Monagas)

IUCN Red List: Lower Risk/conservation dependent (1996)

TFTSG Draft Red List: Critically Endangered (2011)

CITES: Appendix II, as *Podocnemis* spp.

Emys expansa Schweigger 1812:299, *Podocnemis expansa, Chelys (Hydraspis) expansa, Chelys expansa, Hydraspis expansa*
Type locality: "America meridionali." Restricted to "French Guiana" by lectotype designation by Bour (2006a:35).

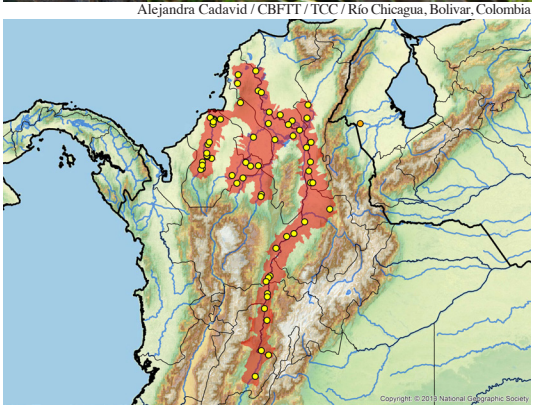
Testudo arrau Humboldt 1819a:243 (14:49), *Emys arrau*
Type locality: "entre le confluent de l'Orénoque avec l'Apure et les grandes cataractes ou *Raudales*...entre Cabruta et la mission d'Aturès...les trois pêches de l'Encaramada ou Boca del Cabullare, de Cucuruparu ou Boca de la Tortuga, et de Pararuma, un peu au-dessous de Carichana" [Venezuela]. Restricted to "zwischen dem Zusammenfluss des Apure mit dem Orinoko und den grossen Wasserfällen" [Venezuela] by Wermuth and Mertens (1961:296).

Emys amazonica Spix 1824:1
Type locality: "fluvio Solimoens et confluentibus Javary, Rio Branco" [Rio Solimões, Amazonas, Brazil].

Podocnemis lewyana Duméril 1852 (12:44)
Magdalena River Turtle



Alejandra Cadavid / CBFTT / TCC / Río Chicagua, Bolivar, Colombia



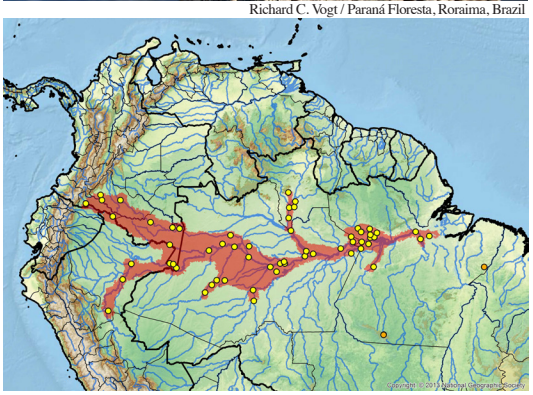
(orange dot = introduced or trade)

Colombia (Antioquia, Atlántico, Bolívar, Boyacá, Caldas, Cesar, Córdoba, Cundinamarca, La Guajira, Magdalena, Santander, Sucre, Tolima)
Introduced: Venezuela (Zulia)
CBFTT Account: Páez, Restrepo, Vargas-Ramirez, and Bock (2009)
IUCN Red List: Critically Endangered A2acd+4acd (2016); Previously: Endangered (1996)
CITES: Appendix II, as *Podocnemis* spp.
Podocnemis lewyana Duméril 1852:242
Type locality: "Santa Fé de Bogota...et...la République de Venezuella" [Colombia and Venezuela]. Restricted to "Bogotá, Colombia" by holotype [= lectotype] designation by Williams (1954:281).

Podocnemis sextuberculata Cornalia 1849 (10:47) (**105**)
Six-tubercled Amazon River Turtle, Pitiu



Richard C. Vogt / Paraná Floresta, Roraima, Brazil



(orange dots = probable trade)

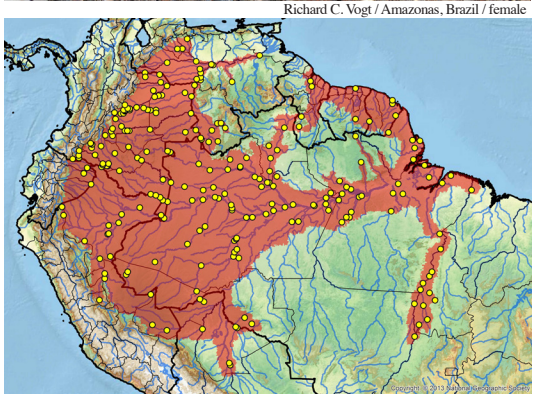
Brazil (Amazonas, Pará, Roraima), Colombia (Amazonas, Caquetá, Putomayo, Vaupés), Ecuador (?), Peru (Loreto)
IUCN Red List: Vulnerable A1acd (1996)
TFTSG Draft Red List: Vulnerable (2011)
CITES: Appendix II, as *Podocnemis* spp.
Podocnemis sextuberculata Cornalia 1849:13 (**105**)
Type locality: "Fl. Amazonum" [Rio Amazonas, Brazil].
Podocnemis pitiu Coutinho 1868:150 (10:47)
Type locality: "l'Amazone" [Amazonas, Brazil].
Bartlettia pitipii Gray 1870f:720, *Bartlettia pitipiti*
Type locality: "Lakes of the Upper Amazons" [Brazil].

Podocnemis unifilis Troschel 1848 (07:105, 08:16, 09:49, 10:48, 10:49, 14:50)

Yellow-spotted River Turtle, Yellow-spotted Sideneck Turtle, Tracaja



Richard C. Vogt / Amazonas, Brazil / female



Bolivia (Beni, Cochabamba, La Paz, Pando, Santa Cruz), Brazil (Acre, Amapá, Amazonas, Goiás, Mato Grosso, Maranhão, Pará, Rondônia, Roraima, Tocantins), Colombia (Amazonas, Arauca, Caquetá, Casanare, Guainía, Meta, Putumayo, Vaupés, Vichada), Ecuador, French Guiana, Guyana, Peru (Huanuco, Loreto, Madre de Dios, Pasco, Ucayali), Suriname, Venezuela (Amazonas, Anzoátegui, Apure, Barinas, Bolívar, Cojedes, Delta Amacuro, Guárico, Monagas)

IUCN Red List: Vulnerable A1acd (1996)

TFTSG Draft Red List: Endangered (2011)

CITES: Appendix II, as *Podocnemis* spp.

Emys cayennensis Schweigger 1812:298 (10:48, 14:50)(*partim*, misidentified type, provisional *nomen suppressum*), *Chelys (Hydraspis) cayennensis, Chelys cayennensis, Hydraspis cayennensis, Podocnemis cayennensis*

Type locality: "Cayenna" [Cayenne, French Guiana].

Testudo terekay Humboldt 1819a:243 (14:49) (*nomen oblitum*), *Emys terekay*

Type locality: "Haut-Orénoque...l'Apure, l'Uritucu, la Guarico et...les Llanos de Caracas" [= Upper Orinoco, Apure, Uritucu, Guarico, and the Llanos of Caracas, Venezuela].

Chelys (Hydraspis) lata Bell *in* Gray 1830e:17 (08:16, 10:7) (*nomen oblitum*), *Chelys lata, Hydraspis lata*

Type locality: "Demerara" [Guyana].

Podocnemis unifilis Troschel 1848:647

Type locality: "Britisch-Guiana...Rupununi und Takutu" [Guyana].

Podocnemis tracaya Coutinho 1868:149 (10:49)

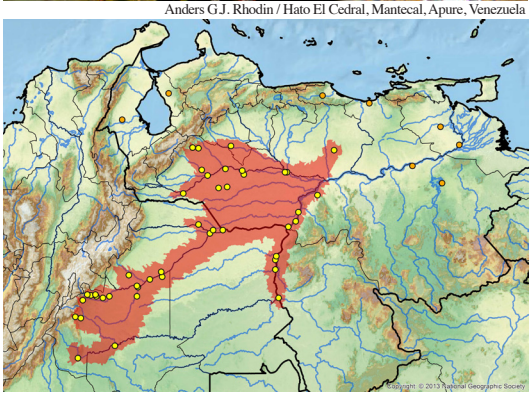
Type locality: "l'Amazone" [Amazonas, Brazil].

Podocnemis vogli Müller 1935

Savanna Sideneck Turtle, Llanos Sideneck Turtle



Anders G.J. Rhodin / Hato El Cedral, Mantecal, Apure, Venezuela



(orange dots = probable introduced or trade)

Colombia (Arauca, Casanare, Guaviare, Meta, Vichada), Venezuela (Anzoátegui, Apure, Barinas, Bolívar, Cojedes, Delta Amacuro, Guárico, Monagas, Portuguesa)

Introduced: Venezuela (Zulia)

IUCN Red List: Least Concern [Not Listed] (1996)

TFTSG Draft Red List: Vulnerable (2011)

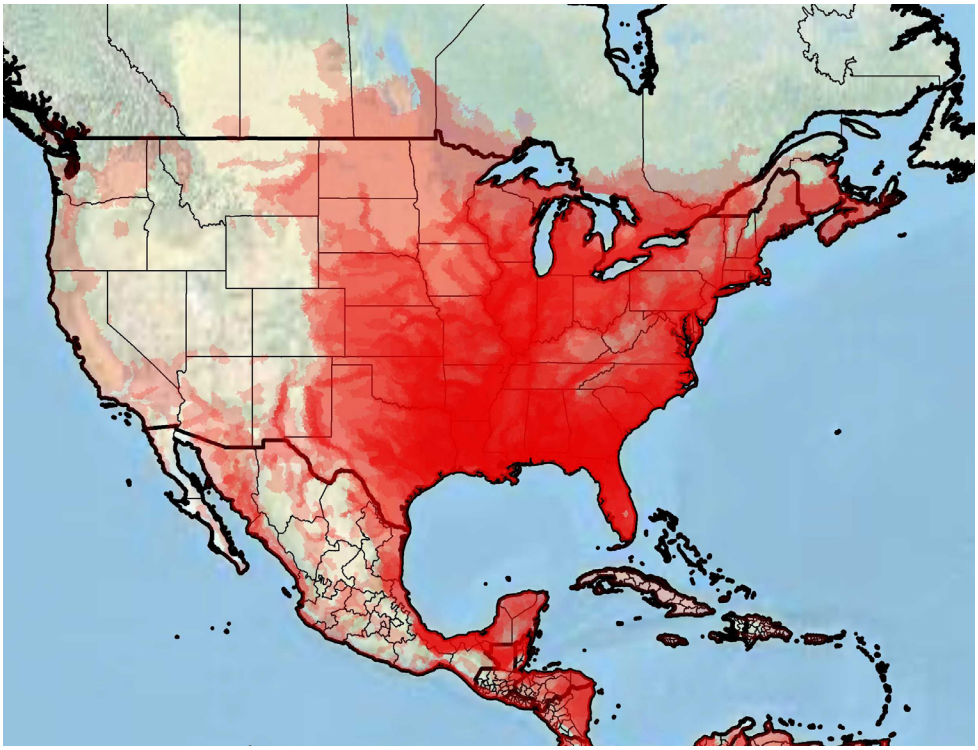
CITES: Appendix II, as *Podocnemis* spp.

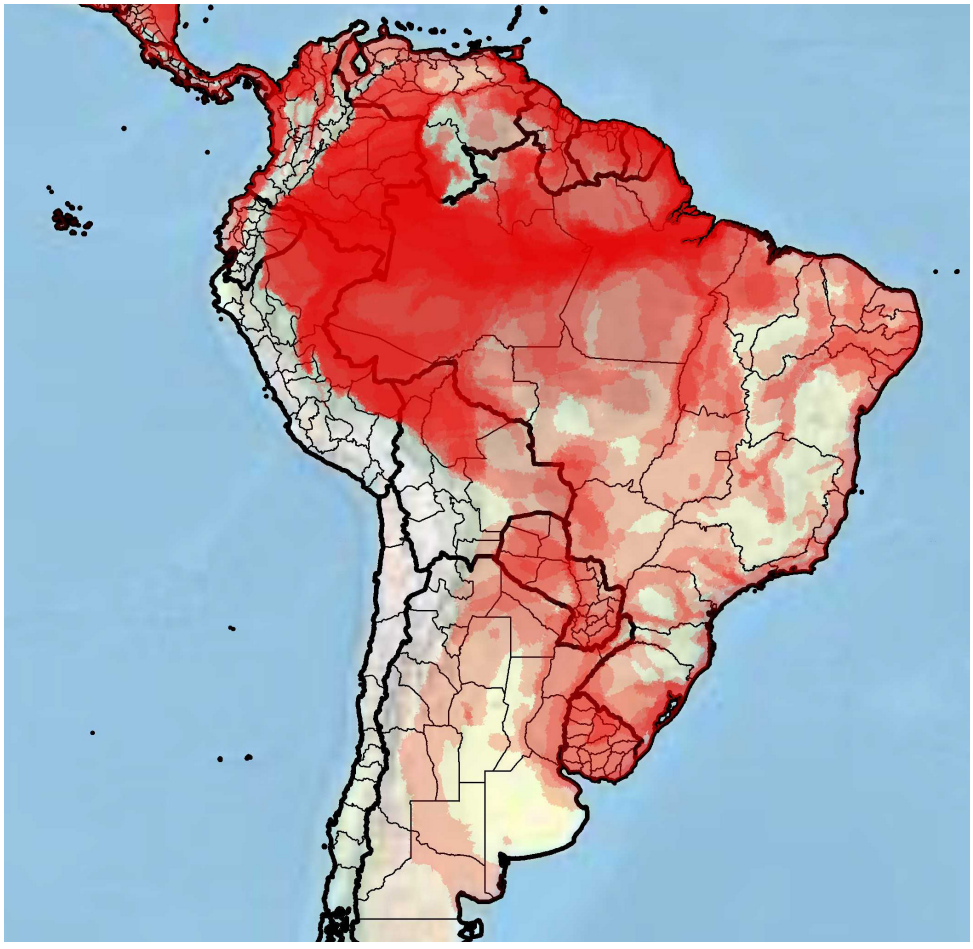
Podocnemis vogli Müller 1935:104

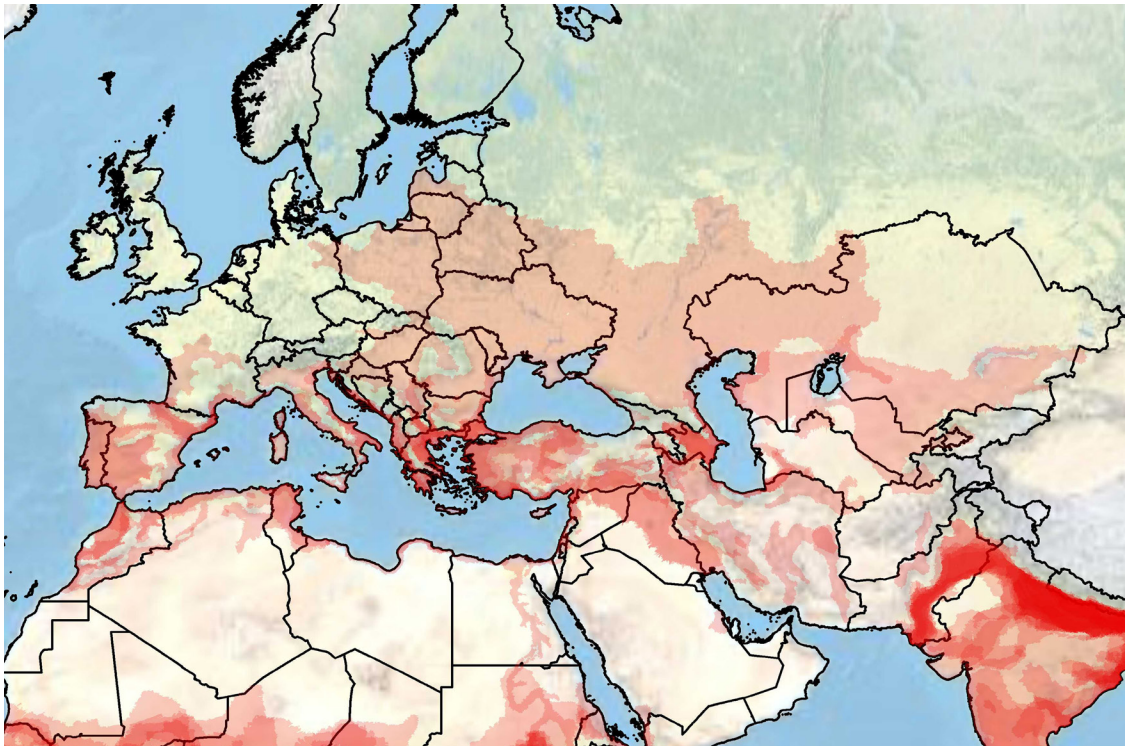
Type locality: "Barinas (Staat Zamora), Venezuela." [= Barinas Prov.].

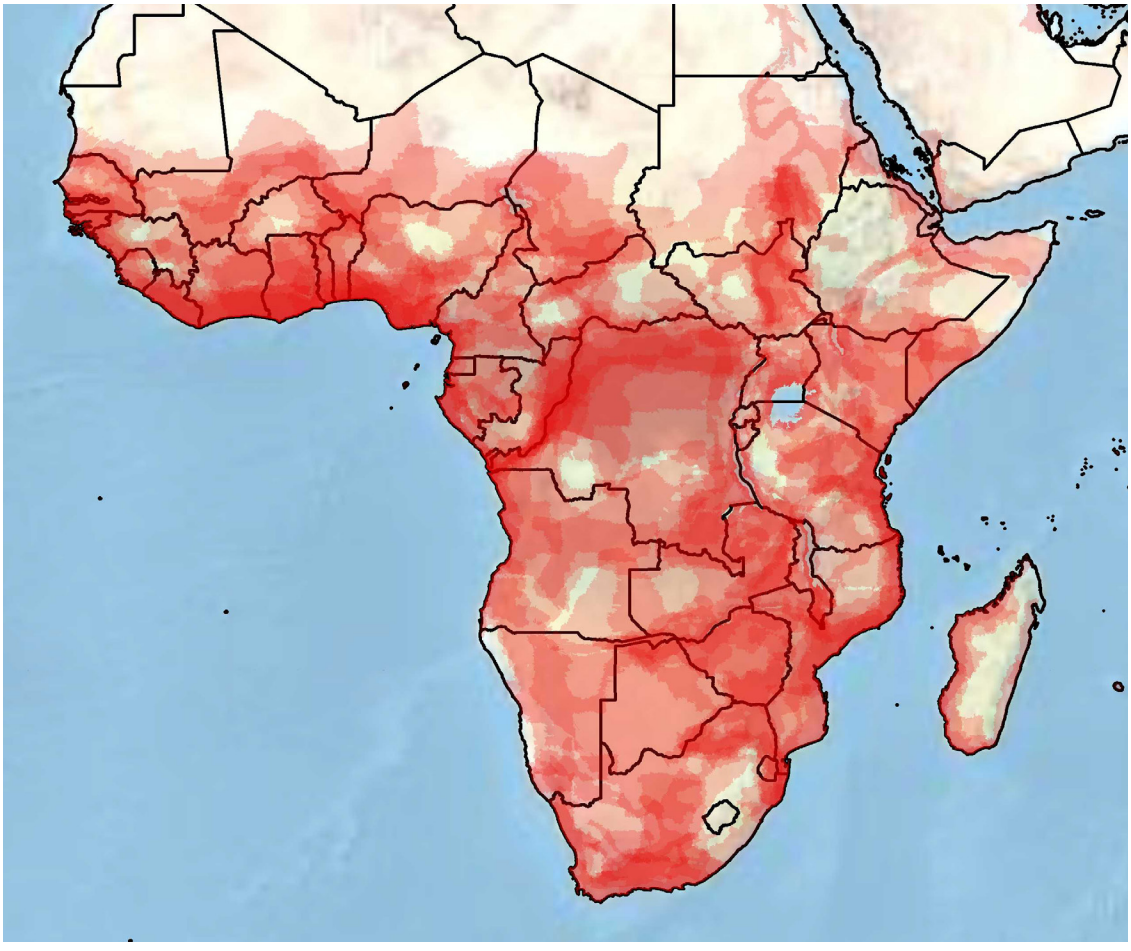
Regional Species Richness Maps

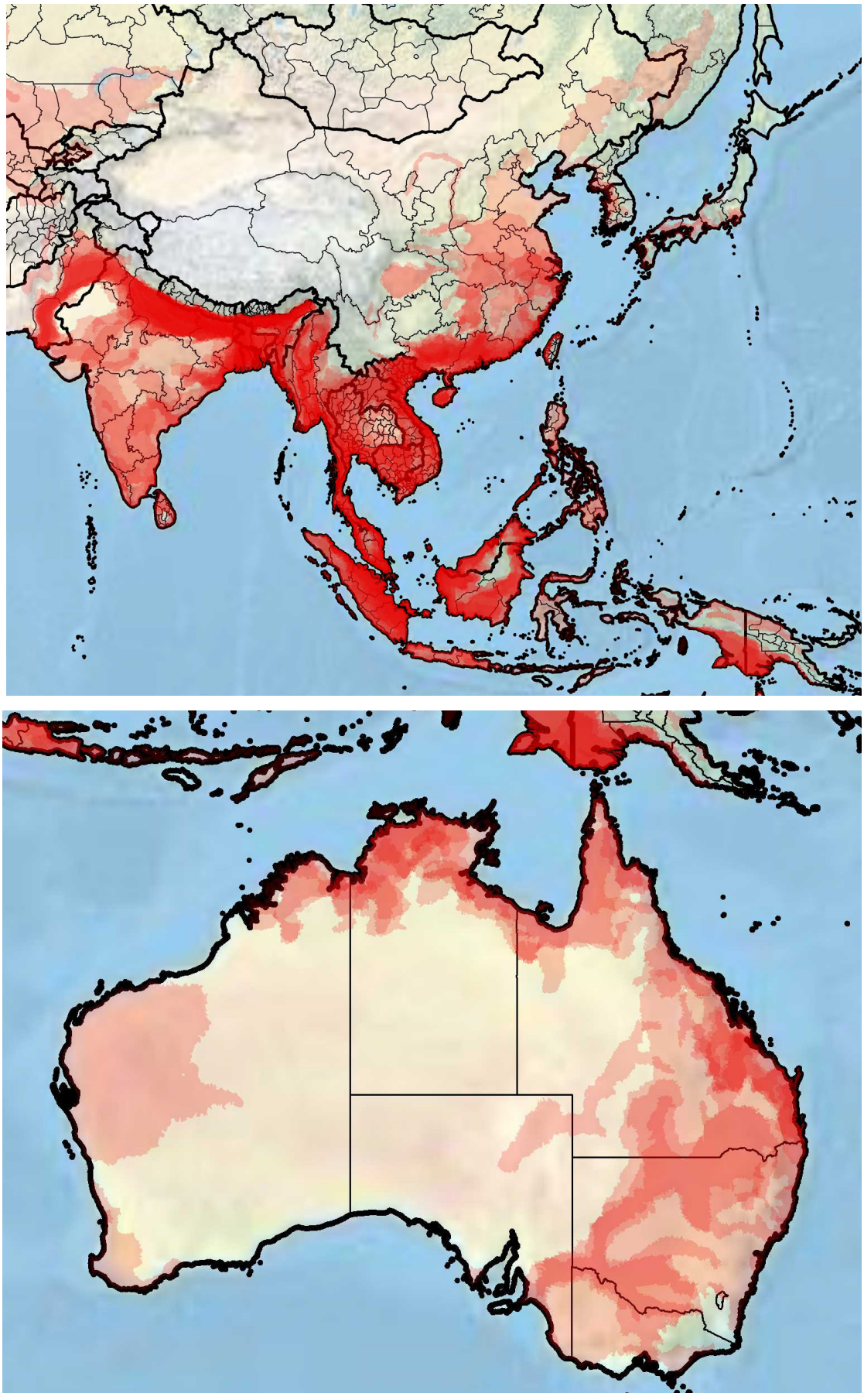
Distribution shapefiles for all taxa in these maps are each shown in red at 80% transparency and stacked; lighest red color = one taxon, darkest red color = > 15 taxa. For composite global species richness map, see p. 17.











ANNOTATIONS

Comments on taxonomic change or other annotations in this checklist and previous checklists are indicated by superscripts. New annotations in each new checklist are simple bold numbers in separate parentheses, e.g.,[(35)]. Earlier annotations from any of the previous checklists are indicated in subsequent checklists by two-part non-bold superscripts in separate parentheses that indicate the year of publication and the annotation number from that year, e.g.,[(07:105, 08:25, 14:50)]. All annotations from previous checklists are now listed at the end of this section in order to facilitate access to these commentaries, and all checklists are available as open-access publications online at **www.iucn-tftsg.org/checklist/**.

CURRENT CHECKLIST

1. **Phylocode Classification**: Crawford et al. (2015) performed a genome-scale analysis of turtle phylogeny, sequencing 2381 ultraconserved element loci representing a total of 1,718,154 bp of aligned DNA sequences in 32 turtle taxa representing 14 turtle families. Their recovered phylogeny corresponded to well-supported clades that they concluded were consistent with the temporal appearance of clades and paleobiogeography. They recommended the alternative hierarchical Phylocode classification of turtles presented at the beginning of our Checklist. We continue to use our ICZN-compliant Linnaean classification as outlined on the same page.

In addition, Pereira et al. (2017) recently used publicly available databases for nucleotide sequences and composed a dataset comprising 13 loci for 294 living species of Testudines, accounting for all living genera and 83% of extant species diversity (as recognized in our checklist); they constructed a Phylocode-based classification scheme somewhat at variance with both Crawford et al. (2015) and our checklist.

2. ***Macrochelys***: Previous molecular studies have demonstrated significant diversity within the long-recognized widespread species *Macrochelys temminckii*: mtDNA data supported the distinction of three geographic clades, and microsatellite data suggested that six genetic clusters were recognizable (Roman et al. 1999; Echelle et al. 2010). Based on additional mtDNA data, a morphometric (osteological) analysis, and an examination of all available fossil material for the genus, Thomas et al. (2014) demonstrated the existence of three distinct, Recent, geographically separated populations: *M. suwanniensis* (Suwannee River drainage), *M. apalachicolae* (Apalachicola River and nearby lesser drainages), and a restricted *M. temminckii* (Yellow-Conecuh to Mobile Bay to Mississippi to Neches River basins). Independently, Murray et al. (2014) examined morphometric variation in the skull of *Macrochelys* across most of its range. Their results demonstrated distinct drainage-specific differences in skull morphology, supported the distinction of the Suwannee River turtles, and suggested that "further splitting may eventually be warranted" among the basins west of the Suwannee. Subsequently, Folt and Guyer (2015) reconsidered the published data, critiqued the methods of Thomas et al. (2014), and concluded that the evidence to date supported the distinction of *M. suwanniensis*, but that *M. apalachicolae* was not adequately distinguished from *M. temminckii* (sensu stricto), and thus recommended their synonymization, with which we concur.

3. ***Macrochelys***: Two names for Alligator Snapping Turtles used by Hoser (2013) (*Macrochelys temminckii muscati* and *Macrochelys maxhoseri*) in his attempt to name some of these lineages, have been noted by Thomas et al. (2014) to be unavailable for nomenclatural purposes due to technical errors in the descriptions.

4. **Names coined by Hoser**: Raymond Hoser (2013, 2014a,b, and several other papers) has circumvented conventional standards of scientific analysis and peer-review in his broadly sweeping and extensive new taxonomies and nomenclatures. We regard his actions as confusing and unwarranted acts of nomenclatural disruption under the International Code of Zoological Nomenclature (ICZN 1999), and we do not regard the documents circulated under the name *Australasian Journal of Herpetology* as scientific publications nor as available publications for the purposes of nomenclature (Kaiser et al. 2013; Kaiser 2014; Rhodin et al. 2015). In collaboration with a wide leadership group representing the global herpetological and zoological communities, we have petitioned the International Commission on Zoological Nomenclature to declare and treat Hoser's works in his self-produced *Australasian Journal of Herpetology* as nomenclaturally unavailable (Rhodin et al. 2015), and have noted that all new names created therein are nomenclaturally unavailable pending a ruling by the Commission. Hoser's production has heretofore focused primarily on snakes, but recently he has proposed names for purportedly distinct new taxa of turtles, including American *Macrochelys*, Australasian *Pelochelys*, and Australian *Chelodina*. We consider all these names to be unavailable unless the ICZN rules them to be available.

5. ***Caretta caretta***: Continued examination of intraspecific genetic structure within this species by Shamblin et al. (2014) using mitochondrial gene sequences from samples from 42 nesting rookeries identified 59 different haplotypes. However, the authors made no taxonomic recommendations, and we agree.

6. ***Eretmochelys imbricata***: Gaos et al. (2016) examined mtDNA haplotype diversity among nesting populations of Hawksbills along the eastern Pacific Ocean. Despite the low genetic diversity across their samples, their phylogenetic analysis suggested that Eastern Pacific Hawksbills are more closely related to those from the Indo-Pacific rather than to those in the Atlantic, despite the recent closure of the Panamanian Portal. In addition, despite the low haplotype diversity overall, differences among the four major eastern Pacific rookeries (El Salvador, Nicaragua, Costa Rica, and Ecuador) led the authors to recommend that these four rookeries should be considered separate management units for conservation purposes.

7. ***Lepidochelys olivacea***: This species was described by Eschscholtz in 1829 in two separate publications (Eschscholtz 1829a, 1829b), the earlier of them in general overlooked until recently (Flores-Villela et al. 2016). Historically, and in our previous checklists, the *Zoologischer Atlas* (Eschscholtz 1829b) has always been credited as the source for the name *Chelonia olivacea*, and although we previously listed his other publication from the journal *Die Quatember* (Eschscholtz 1829a) as the source for two other new names (*Chelonia castanea* and *Chelonia grisea*) (TTWG 2014), we assumed that his *Zoologischer Atlas* had been published first and had nomenclatural priority. However, Flores-Villela et al. (2016) have now shown that the *Quatember* article was published earlier (January 1829) than the *Atlas* (after May 1829), and is therefore the original source for the name *olivacea*. In addition, the relatively overlooked name *Chelonia grisea*, previously synonymized by others and us under *Eretmochelys imbricata*, has been shown by Flores-Villela et al. (2016) to more likely represent an anomalous *Chelonia mydas*, and we follow their suggestion to reassign it as such.

8. ***Chelonia mydas***: Okamoto and Kamezaki (2014) examined plastral coloration and head and shell morphometrics for *Chelonia*

captured in the Western Pacific off Japan. Their data demonstrated the presence of two distinct phenotypes ("yellow" and "black") and they argued that the black form represented *C. agassizii*, and should be recognized as a full species. However, given previous studies (see annotation 07:4), we continue to consider *C. agassizii* to be a synonym of *C. mydas*, unless integrated range-wide analyses of morphology, coloration, and genetics conclusively demonstrate significant lineage divergence.

Naro-Maciel et al. (2014) examined 15 microsatellite markers across 19 green turtle rookeries across the Atlantic Ocean. These data revealed a strong barrier to dispersal between the northern and southern Atlantic, but not a degree meriting taxonomic changes.

9. **Wagler 1830b and 1830c**: Gutsche and McCranie (2016) stated that Wagler's 1830 publication *Natürliches System der Amphibien* was issued as two separate parts: first the text (Wagler 1830b), and then the plates (Wagler 1830c), although dates for the publication of each were not provided. We and others had always treated these two parts as a single publication, but evidently they appeared as separate issues. As a result, the name *Dermatochelys* was established in Wagler 1830b, but the species *Dermatochelys porcata* first appeared in Wagler 1830c. Similarly, the name *Cinosternon hirtipes* was only a *nomen nudum* in Wagler 1830b, but described by association with the figures in Wagler 1830c, as we previously noted in our annotation 09:11. These changes do not affect any taxonomic or nomenclatural considerations. We also note in passing that the description of *Testudo boiei* Wagler 1830a (= *Chelonoidis carbonarius*) appears to have preceded these others.

10. ***Dermochelys coriacea***: Using mtDNA sequences and nuclear microsatellite markers, Molfetti et al. (2013) and Dutton et al. (2013) demonstrated considerable genetic structure within *Dermochelys coriacea* in the Atlantic Ocean basin. Although they advised the recognition of their units for conservation purposes, they made no taxonomic recommendations.

11. ***Kinosternon***: Iverson et al. (2013) sequenced three mitochondrial and three nuclear markers for all recognized species of kinosternid turtles, and their analysis revealed strong support for a monophyletic clade of *Sternotherus*, a second monophyletic clade of primarily Meso-American taxa that they named *Cryptochelys*, and a third restricted monophyletic clade of the remaining species formerly included in *Kinosternon*. However, their support for the non-monophyly of the traditional inclusive genus *Kinosternon* was weak. Subsequently, Spinks et al. (2014b) sequenced 14 additional nuclear loci for most (but not all) recognized species, and their analysis of the nuclear data alone supported the reciprocal monophyly of *Sternotherus* and the traditional *Kinosternon* (sensu lato), but did not support a monophyletic *Cryptochelys*. Because two independent data sets have produced different conclusions, we retain the alternative generic arrangement from our last edition until new data emerge or new analyses are performed to settle this complicated issue.

12. ***Kinosternon steindachneri***: Bourque (2016) treated this taxon as a distinct species based on morphology, and argued that no morphological or genetic data have been presented to support its continued recognition as a subspecies of *K. subrubrum* (Iverson 1998; Bourque 2012a, b; Iverson et al. 2013; Spinks et al. 2014; Bourque and Schubert 2015). We concur, and therefore now list *K. steindachneri* as a distinct species.

13. ***Kinosternon stejnegeri***: Iverson (1979a) synonymized extant *K. flavescens stejnegeri* Hartweg 1938 with the Pliocene–Pleistocene fossil taxon, *K. arizonense* Gilmore 1923, based on similar morphology. Considered a subspecies, *K. f. arizonense*, by Iverson (1979b), it was subsequently recognized as a distinct species based on genetic analysis by Serb et al. (2001). Recently, McCord (2016) examined all available Pliocene material of *K. arizonense* and compared it with extant specimens, and concluded that the fossil material differs significantly from the extant material and is actually more similar morphologically to *K. flavescens* (sensu stricto). As a consequence, he restricted the name *arizonense* to the Pliocene fossils and resurrected the old name *stejnegeri* for the extant species. This conclusion was also tentatively accepted by Joyce and Bourque (2016), and we follow these recommendations here, accepting the resurrected name *K. stejnegeri* for the extant species previously known as *K. arizonense*.

14. ***Kinosternon subrubrum hippocrepis***: Bourque (2016) elevated this taxon to a full species based on morphological data from living and fossil forms; however, without a range-wide analysis of morphometric and/or molecular data supporting that change, we continue to recognize *hippocrepis* as a subspecies of *K. subrubrum*.

15. ***Sternotherus depressus***: Scott and Rissler (2015) reported a 32–56% decline in the historical range of *S. depressus*, as well as significant unidirectional mtDNA introgression from *S. minor peltifer*. This hybridization is changing the morphology of *S. depressus* and severely threatens its continued distinction.

16. ***Sternotherus minor peltifer***: Bourque (2016) argued that this taxon should be recognized as a full species based on previous published phylogenetic analyses using molecular (Iverson et al. 2013) and morphological data (Bourque and Schubert 2015). In addition, Guyer et al. (2016), based on color differences and the mitochondrial DNA study by Walker et al. (1995), also recommended elevating *S. m. peltifer* to species status. However, Walker et al. (1995) sampled part of only one mitochondrial gene and included no samples from the previously hypothesized area of intergradation along the Gulf Coast (Iverson 1977). Because animals that appear to be morphological intergrades have been described (Iverson 1977), we consider these recommendations premature and continue to recognize *peltifer* as a subspecies of *S. minor*.

17. **Emydidae**: Seidel and Ernst (2017) provided an extensive review of the history and taxonomic status of the phylogeographic relationships of the family and its two subfamilies, but recommended no significant taxonomic changes.

18. ***Chrysemys picta***: Jensen et al. (2014a) examined genetic variation among populations of *C. picta* at the northwestern range limit in British Columbia (*C. p. bellii*). Although they documented very little variation in regional mitochondrial sequences, they found two unique mitochondrial haplotypes when compared to previously published range-wide data. In contrast, based on nine microsatellite loci, they identified six distinct local population clusters. They urged that these six geographic units be managed separately, but made no taxonomic recommendations; however, their data did support the continued recognition of *C. dorsalis* and *C. picta* as separate species. In addition, Jensen et al. (2015a) examined variation in one mitochondrial and one nuclear gene across the range of the genus. The nuclear gene provided no resolution, but the mitochondrial data demonstrated the reciprocal monophyly of *C. dorsalis* versus *C. picta* (*sensu stricto*), but no clear pattern among the subspecies of the latter. Because the available evidence for the recognition of *C. dorsalis* as a species vs. subspecies is primarily mitochondrial (see TTWG annotations 07:11 and 10:16), we continue to list two alternatives for its classification.

19. ***Graptemys***: Praschag et al. (2017) examined over 3200 bp of mtDNA sequence data and 7800 bp of nuclear DNA (across 12 loci) for 89 specimens of all recognized taxa of the genus

Graptemys. The mtDNA data supported the distinctiveness of *G. geographica* (sister to all other *Graptemys*), and the divergence of the broad-headed clade from the narrow-headed clade. Most species in the broad-headed clade were resolved as reciprocally monophyletic, but in the narrow-headed clade only *G. caglei* and *G. versa* were well supported as monophyletic. Principal component analyses using coded phased nuclear DNA sequences revealed eight clusters: 1) *G. geographica*; 2) *G. barbouri*; 3) *G. caglei*; 4) *G. versa*; 5) *G. sabinensis*; 6) *G. ernsti*, *G. gibbonsi*, *G. pearlensis*, and *G. pulchra*; 7) *G. flavimaculata*, *G. nigrinoda*, and *G. oculifera*; and 8) *G. ouachitensis* and *G. pseudogeographica*. The authors concluded that species recognitions of *G. geographica*, *G. barbouri*, *G. caglei*, *G. versa,* and *G. sabinensis* were all well supported, but that the remaining taxa were oversplit. They suggested 1) that *G. flavimaculata* and *G. nigrinoda* should be relegated to subspecies of *G. oculifera* (see also Mertens and Wermuth 1955); 2) that *G. ernsti*, *G. gibbonsi*, *G. pearlensis*, and *G. pulchra* are conspecific; and 3) that *G. ouachitensis* should be relegated to a subspecies of *G. pseudogeographica*. Their results supported the earlier view by Walker and Avise (1998) that *Graptemys* is taxonomically oversplit, and they made some suggestions for possible changes, but they presented no explicit taxonomic revisions, and we await further clarification before changing the checklist.

Selman (2017), in an analysis of the incidence of presence of carapacial rings vs. blotches in *G. flavimaculata*, documented that blotches are the typical pattern in all populations examined, both for recently observed as well as historically preserved specimens. This was interpreted as representing the pervasive presence of a derived character, and distinctly different from *G. oculifera*, which consistently shows the ancestral pattern of carapacial rings, but he made no taxonomic recommendations.

20. ***Graptemys caglei***: Ward et al. (2013) examined microsatellite variation across the range of *Graptemys caglei* in the Guadalupe and San Marcos Rivers of Texas. They found weak but identifiable divergence between populations in the Upper Guadalupe Rive versus those in the Middle Guadalupe and San Marcos Rivers. They made no taxonomic recommendations, but noted that turtles in these two regions also differed in life history, morphology, and coloration.

21. ***Graptemys ernsti* and *G. barbouri***: Godwin et al. (2014) confirmed the previously unrecognized presence of both *Graptemys ernsti* and *G. barbouri* in the Choctawhatchee River basin, and demonstrated hybridization between those two species in that basin. Based on the available evidence they concluded that both species were likely present in that basin prior to human intervention. In a follow-up study, Ennen et al. (2016) examined morphometric, colorimetric, microsatellite and mitochondrial DNA variation in *G. ernsti*, across the three inhabited basins. They demonstrated no morphometric differences between turtles in two of the basins (no data for the Pea River, a tributary of the Choctawhatchee), weak colorimetric differences between turtles from the Yellow vs. Conecuh/Pea basins, and both microsatellite and mtDNA evidence for the distinction of turtles from the Yellow River vs. those from the other basins. They declined to recognize those populations taxonomically, and hesitated to even recommend their recognition as Evolutionarily Significant Units, and we concur with these conclusions. Although it is now clear that both *G. ernsti* and *G. barbouri* are established in the Choctawhatchee River basin, whether either of them is native to that system is still an open question (Godwin et al. 2014; Ennen et al. 2016).

22. ***Graptemys nigrinoda***: Ennen et al. (2014) examined morphometric and colorimetric characters, as well as sequence variation in a single mitochondrial gene, across the range of *Graptemys nigrinoda*. Morphological variation was primarily clinal, and mitochondrial haplotypes differed by less than 0.3% and were not related to geography. They recommended the synonymy of *G. n. delticola* with the nominate form, and we have followed their recommendation.

23. ***Graptemys pseudogeographica***: Lindeman et al. (2015) demonstrated that False Map Turtles from the Calcasieu River basin in southwestern Louisiana differ from those in all other basins in having a unique eye color and a variable chin pattern. They made no taxonomic recommendations, but encouraged further range-wide morphological and genetic study of this species in light of these findings.

24. ***Malaclemys terrapin***: Hart et al. (2014) examined 12 nuclear microsatellite loci from 21 populations of *Malaclemys terrapin* from across the species' range, and identified four genetic clusters that did not correspond to currently accepted, morphology-based subspecies descriptions. Despite gaps in their coastal sampling along the east coast of Florida and Georgia, and the Gulf Coast of Florida, their recommended management units were Massachusetts (part of the range of *M. t. terrapin*), New York to South Carolina (most of the range of *M. t. terrapin*, and part of the range of *M. t. centrata*), the Florida Keys to Tampa Bay (the range of *M. t. rhizophorarum* and part of that of *M. t. macrospilota*), and Louisiana and Texas (the combined ranges of *M. t. pileata* and *M. t. littoralis*). In addition, based on 16 microsatellite loci (12 shared by Hart et al. 2014), Drabeck et al. (2014) also found low diversity and an absence of structure among populations of *M. terrapin* along the Gulf Coast of Louisiana and Texas. Both studies questioned the current subspecies designations, but made no explicit taxonomic recommendations, and we agree. More studies with better geographic sampling are clearly needed.

25. ***Pseudemys concinna***: In a generally overlooked publication, Guérin (1829) provided an illustration as indication of a species that he named *Emys concinna*, preceding the description of *Testudo concinna* by Le Conte (1830). However, the species figured appears to represent what is now considered *Trachemys scripta elegans*, described by Wied (1839). Whereas *Emys concinna* Guérin 1829 is technically a senior homonym of *Testudo concinna* Le Conte 1830 (later placed in the genus *Emys*) and precedes the description of *Emys elegans* Wied 1839, it is also a name and attribution that has never been used since its appearance and we therefore declare it a *nomen oblitum*, not requiring any change in status or usage of the two subsequently published widely-used and accepted names.

26. **Central American *Trachemys***: The taxonomy of Mesoamerican *Trachemys* sliders has been a quagmire for decades. Because of the level of disagreement among recent authors concerning this group, with no clear resolution in sight, our last checklist listed as many as three taxonomic options for some taxa. However, in an attempt to settle the confusion, Parham et al. (2015) examined variation in one mitochondrial and one nuclear gene across every named *Trachemys* taxon from Mexico. Their analysis revealed that the samples of "*ornata*" from Acapulco used by Fritz et al. (2012) clustered with turtles from the Caribbean versant, and not with confirmed *ornata* from near its type locality. Hence, the species name *ornata* should be restricted to the western versant of Mexico, and the name *venusta* should be restricted to the eastern drainages of Mexico and Central America. Furthermore, they confirmed the finding of Fritz et al. (2012) that *grayi* is not closely related to *venusta*, but the sister taxon of *emolli*. We agree with these insights (although we remain equivocal regarding

whether *emolli* is a distinct species or a subspecies of *grayi*) and have modified our checklist accordingly. Additionally, Fritz et al. (2012) showed that *panamensis* is very closely related to *grayi*, and should be considered a subspecies of that taxon, rather than of *venusta*, further corroborating the split between western and Caribbean versant taxa; we have now made that change in our checklist. Also, as a consequence of the recognition that *ornata* is a western versant taxon, *callirostris* is now considered either a distinct species or a subspecies of *venusta,* rather than of *ornata,* as it was designated in our previous checklist.

27. ***Trachemys adiutrix* or *T. dorbigni adiutrix***: Using a niche modelling approach, Rodrigues et al. (2016) supported the subspecies status of the Maranhao slider. The invasive potential of the nominotypical subspecies was better explained when the different climatic niches of both taxa were combined, reflecting the common pattern of lack of niche conservatism between subspecies.

28. ***Trachemys grayi***: The species *Callichelys concinna* Gray 1873a, described from San Mateo, Tehuantepec, Oaxaca, Mexico, has unfortunately been overlooked in all previous checklists, including our own (Siebenrock 1909a; Wermuth and Mertens 1961, 1977; Fritz and Havaš 2007; TTWG 2014). However, Gray (1873f) and Boulenger (1889) synonymized it with *T. grayi*, and Harfush-Meléndez and Buskirk (2008) noted it in their analysis of the distribution of *T. grayi*, and we now include it in our checklist.

29. ***Clemmys guttata***: Davy and Murphy (2014) examined variation in 11 nuclear microsatellite loci across Canadian populations of *Clemmys guttata*. They identified significant genetic structure, with a minimum of six distinct subpopulations, with the most distinctive population being in Hastings County, Ontario. They made no taxonomic recommendations, but strongly urged management and protection of the latter population, which numbers less than 50. An expansion of this study across the entire range of *C. guttata* would be invaluable.

30. ***Emys orbicularis orbicularis***: The identity of the Pleistocene fossil names *Clemmys schlotheimii* † Fitzinger 1835 and *Trionyx schlotheimii* † Fitzinger 1835 has previously been uncertain, and we did not even include *T. schlotheimii* in our previous checklists. However, Karl and Paust (2014) examined the original fossil material, designated lectotypes of both taxa, and confirmed that both are synonyms of *Emys orbicularis*.

31. ***Emys orbicularis orbicularis***: The Pleistocene fossil taxon *Testudo (Emys) canstadiensis* † Plieninger 1847 was included under the synonymy of *Testudo hermanni* in our previous checklist (TTWG 2014), based on presumed synonymy suggested by Auffenberg (1974); however, the specimen is actually an *Emys orbicularis,* based on synonymization by Karl and Tichy (2002), and we corrected it in our fossil checklist (TEWG 2015), and herein.

32. ***Emys orbicularis occidentalis***: Based on both mitochondrial DNA sequences and 15 nuclear microsatellite markers, Stuckas et al. (2014) identified two distinct genetic units within *Emys orbicularis* in North Africa, one from Morocco (identified as *E. o. occidentalis*) and the other from eastern Algeria and Tunisia (undescribed). The former was found to be very similar to Iberian specimens (identified as *E. o. fritzjuergenobsti*). The authors declined to name the new taxon for want of morphological data, but synonymized *E. o. fritzjuergenobsti* under *E. o. occidentalis*, and we reflect that change here.

33. ***Emys orbicularis persica***: We spell the name of this taxon as *Emys orbicularis persica*, following Fritz (1998). However, Eichwald (1831:196) recognized three varieties ("var.") of *Emys europaea* Schneider 1783: the nominotypical, not named, α by inference, and β and γ, with names given as "*ibericae* var. β" and "minoris var. γ *persicae*." One might therefore assume that the valid names should be *Emys europaea persicae* and *Emys europaea ibericae*. However, the names *ibericae* and *persicae* are adjectives, referring to the countries of Iberia and Persia, respectively, and as a result, ICZN Article 11.9.2 applies: "An adjectival species-group name proposed in Latin text but written otherwise than in the nominative singular because of the requirements of Latin grammar is available provided that it meets the other requirements of availability, but it is to be corrected to the nominative singular if necessary." Therefore, *persica* and *iberica* are the valid names, and these were subsequently used by Eichwald (1840:47).

34. ***Emys trinacris***: Vamberger et al. (2015) examined mitochondrial and nuclear microsatellite variation (15 markers) in *Emys* from southern Italy. Their results revealed negligent gene flow between *E. orbicularis* and *E. trinacris*, with intergradation evident between *E. o. galloitalica* and *E. o. hellenica*. Their data support the continued recognition of *E. trinacris* as a species, and *galloitalica* and *hellenica* as subspecies of *E. orbicularis*.

35. ***Emys* or *Actinemys pallida***: Spinks et al. (2014a) examined 89 nuclear single nucleotide polymorphisms (SNPs) and a mitochondrial gene sequence from range-wide samples of *Emys* or *Actinemys marmorata*, and compared those results with earlier work (Spinks et al. 2010) using nuclear gene sequence data. The mitochondrial data resolved four poorly supported clades, whereas the previous nuclear sequence data revealed only two main groups with considerable admixture between them. However, the SNP analysis demonstrated strong support for two geographic clusters: a northern group from the southern San Joaquin valley to Washington, and a southern group from the Central Coastal Range of California and southern California to Baja California. These results are remarkably (though not perfectly) consistent with Seeliger's (1945) morphological work, who described the subspecies *pallida* for the southern populations. Furthermore, secondary analyses by Spinks et al. (2014a) of the molecular data within each of these two groups recognized two subgroups in the southern cluster, one from the coastal range and southern California, and the other from Baja California. Although populations from Baja were also recognized as morphologically distinct (though undescribed) by Seeliger (1945), Spinks et al. only noted that species recognition may emerge from future studies. Hence, they recommended that the two California lineages be recognized as separate species (rather than subspecies as defined by Seeliger 1945), and we follow that recommendation here.

36. ***Emys* or *Emydoidea blandingii***: Based on variation across 12 microsatellite loci, Davy et al. (2014) identified four distinct genetic units among populations of *Emydoidea blandingii* in Ontario, Canada, and suggested that they should be managed separately. Similarly, based on eight microsatellites, Sethuraman et al. (2014) identified moderate but significant differentiation among Midwestern USA populations, with four or five unique genetic clusters, but were unable to explain the close genetic relationship between a population in western Nebraska to those in eastern Illinois, rather than with intervening populations in Iowa. McCluskey et al. (2016) examined variation in seven microsatellites in this species in New York, and identified two or possibly three genetic units there. None of these studies made taxonomic recommendations. Range-wide genetic studies of *E. blandingii* are clearly needed, as is careful population management of this genetically diverse species.

37. ***Terrapene carolina* complex**: These North American box turtles remain the center of considerable taxonomic controversy (see TTWG 2014, annotation 14:27). Based primarily on

mtDNA data, Martin et al. (2013) recommended the recognition of the western forms (*triunguis*, *mexicana*, and *yucatana*) as a polytypic species (*T. mexicana* being the oldest name) separate from the eastern forms (under *T. carolina*). However, in a brief summary of the turtle taxonomy issues, Fritz and Havas (2013) declined to accept this major change for the genus *Terrapene*, primarily because of evidence for introgression between the proposed species. Martin et al. (2014) responded with evidence of interspecific hybridization between other well-accepted species pairs, and reaffirmed their conclusion that *T. mexicana* was a distinct species by the phylogenetic species concept. Fritz and Havas (2014) replied with three lines of evidence as to why they considered it to be premature to recognize *T. mexicana* as distinct from *T. carolina*. First, intergradation is common where they are sympatric, and indeed, Butler et al. (2011) demonstrated panmixia (rather than occasional hybridization) in those areas. Second, *mexicana* was resolved as monophyletic by Martin et al. (2013) with relatively weak support based on mtDNA, and no support when based on a single nuclear gene. Third, previous study of mitochondrial and nuclear DNA sequence data (Spinks et al. 2009; seven nuclear loci) did not resolve *triunguis* as reciprocally monophyletic relative to eastern forms of *T. carolina*. A recent analysis of 30 nuclear and one mitochondrial loci (Spinks et al. 2016) indicated that while *triunguis* appears to be monophyletic and distinct, it is nested within a paraphyletic *carolina*; given the phylogenetic uncertainty surrounding much of this complex and the demonstrated hybridization among taxa, these authors also recommended that the traditional *carolina* taxonomy (all taxa as subspecies of *carolina*) be retained pending a comprehensive, genomic-level analysis of all contained taxa. Unfortunately, some authors (e.g., Guyer et al. 2015; Powell et al. 2016) have chosen to recognize the western populations as *T. triunguis* (rather than *T. mexicana*), without justification. Since the taxonomic issues here appear relatively unresolved, we continue to recognize the competing alternative taxonomies, pending additional sampling of the nuclear genome.

38. ***Terrapene carolina carolina***: In a nearly range-wide study of variation across eleven microsatellite loci for the subspecies *T. c. carolina*, Kimble et al. (2014) found surprisingly little genetic structure, except that the Appalachian Mountains represented a modest barrier to gene flow among populations.

39. ***Platysternon megacephalum***: In the present checklist we reallocate the placement of *Platysternon megacephalum tristernalis* Schleich and Gruber 1984 by moving it from the synonymy of *P. m. megacephalum* into the synonymy of *P. m. peguense*. Ernst and Laemmerzahl (2002) originally placed *P. m. tristernalis* in the synonymy of the nominotypical subspecies, which was followed by Fritz and Havaš (2007) and all previous editions of our checklist. However, Vetter and van Dijk (2006) identified the holotype of *tristernalis* from southwestern Yunnan as representing *peguense*, the taxon occurring in adjacent northwestern Laos, and Zheng et al. (2013) identified animals apparently from the *tristernalis*-topotypic area of southwestern Yunnan as *peguense*, both morphologically and genetically, and we agree with these assessments. In addition, Ernst and Laemmerzahl (2002) noted that the populations on Hainan appear to be intergrades between *P. m. peguense* and *P. m. shiui*, as also reflected on our current map.

Using the duplicate control region sequences of the mitochondrial genome of 20 *P. megacephalum* representing all three subspecies, Zheng et al. (2013) found these morphologically defined taxa to also be genetically distinct, with *P. m. megacephalum* and *P. m. shiui* identified as sister taxa. More comprehensive geographic surveys and the application of additional genetic markers to samples from across the species' entire range should hopefully refine current taxonomy and provide a better understanding of the geographic ranges of the individual taxa.

40. ***Cuora***: Tiedemann et al. (2014) sampled 16 nuclear microsatellite markers across all members of the *Cuora trifasciata* complex (*C. aurocapitata, C. pani, C. zhoui, C. trifasciata*, and the controversial Vietnamese *C. cyclornata*) (see previous annotations on the status of *cyclornata* Blanck et al. 2006a: TTWG 2007b, 07:36; TTWG 2009, 09:23; TTWG 2012, 12:22). The analyses by Tiedemann et al. (2014) confirmed the genetic distinction of each of these five taxa, and they recommended their recognition at the species level. In addition, their data corroborated the genetic distinction of the two morphotypes within *cyclornata* that were previously described as *C. c. cyclornata* and *C. c. meieri* (Blanck et al. 2006a). Finally, they also corroborated the genetic distinction of two morphotypes within the restricted *C. trifasciata*, one from the Chinese mainland (*C. t. trifasciata* according to the authors) and the other an undescribed subspecies from Hainan Island.

Independently, Li et al. (2015) sequenced the entire mitochondrial genome of nine species of *Cuora*; their phylogenetic analysis revealed that *C. trifasciata* (*sensu lato*) is polyphyletic, and that Chinese (*trifasciata*) and Vietnamese (*cyclornata*) populations are distinctly different. They also recommended the species recognition of *C. cyclornata*.

Given that morphology and mitochondrial and nuclear DNA data each support the recognition of *C. cyclornata* as a species distinct from *C. trifasciata*, with the former comprising two genetic lineages, we now follow Blanck et al. (2006a) in recognizing *C. cyclornata* with two subspecies, *C. c. cyclornata* and *C. c. meieri*.

41. ***Cuora amboinensis***: In a morphological and colorimetric study of populations of *Cuora amboinensis*, Ernst et al. (2016) recommended the synonymy of *C. a. lineata* with *C. a. kamaroma*, and of *C. a. couro* with *C. a. amboinensis* (suggesting that *C. a. couro* was an intergrade between *C. a. kamaroma* and *C. a. amboinensis*). However, their samples of *lineata* and *couro* were small, their analyses and conclusions were based primarily on color patterns, and they did not discuss the size of the inguinal scute (apparently diagnostic for at least *lineata*), nor did they present statistical or graphical results of their morphometric analyses (i.e., separately from color data).

Subsequently, Protiva et al. (2016) analyzed shell shape and mitochondrial DNA from *C. amboinensis* from primarily Borneo, Sumatra, and Seram. They disagreed with the findings of Ernst et al. (2016), and documented morphologic and genetic differentiation between Bornean vs. Sumatran populations, affirming the distinctiveness of *C. a. couro* from Sumatra and *C. a. kamaroma* from Borneo. Additionally, they identified a deeply divergent lineage from Seram that they indicated might require taxonomic recognition based on further work and improved sampling. Based on this, we consider the synonymizations by Ernst et al. (2016) to be premature, and await comprehensive genetic studies of *C. amboinensis* before altering the taxonomy.

42. ***Cuora aurocapitata, C. cyclornata*, and *C. trifasciata***: Blanck et al. (2017) analyzed variation in these three *Cuora* species from across their range, using morphometric principal components analysis (PCA) and microsatellite data, comparing their results with previous genetic work by Tiedemann et al. (2014) and Li et al. (2015). They concluded that all three species are polytypic and described a new subspecies within each: *C. aurocapitata dabieshani*, *C. cyclornata annamitica*, and *C. trifasciata luteocephala*. We tentatively accept these named taxa as new subspecies pending further analysis, but note that the

described lineages are not completely distinctive and that the mixing of individuals across the clades suggests that this may be too fine an application of the lineage approach to defining taxa.

43. ***Cuora flavomarginata***: The map for this species has been updated and revised extensively by re-evaluating most previously recorded localities. We have also added many localities provided by T. Blanck based on compilations of Chinese survey literature and field data.

44. ***Cyclemys atripons* and *C. oldhamii***: Vamberger et al. (2017b) examined a recently discovered *Cyclemys* population from Phnom Kulen National Park in northwestern Cambodia using external morphology, 17 unlinked microsatellite loci, and the mitochondrial cytochrome b gene. Morphologically, the turtles resemble *C. oldhamii*, but have mitochondrial haplotypes of *C. atripons*, while having microsatellite loci distinct from *C. atripons*. The authors concluded that this population represents either a natural hybrid swarm of *C. atripons* and *C. oldhamii* or a distinct undescribed species with introgressed mitochondria of *C. atripons*, without drawing taxonomic consequences. This underscores that genetic differentiation in *Cyclemys* is complex and still incompletely understood.

45. ***Cyclemys pulchristriata***: Using a turtle kept in Shanghai Zoo, Li et al. (2017) published a complete mitochondrial genome (mt genome) assigned to *Cyclemys pulchristriata* and calculated a phylogenetic tree using complete mt genomes of other geoemydid species from GenBank. The topology of their tree conflicted with the trees published by Fritz et al. (2008) and Stuart and Fritz (2008) using the mitochondrial cytochrome b gene. When the cytochrome b sequences of the mt genomes used by Li et al. (2017) are compared to the data set of Fritz et al. (2008), it turns out that the sequences of '*C. atripons*' and '*C. pulchristriata*' used by Li et al. match the *C. pulchristriata* from the data set of Fritz et al., while the sequence of '*C. dentata*' used by Li et al. match the *C. atripons* from the data set of Fritz et al. (Fritz, pers. comm.). The data of Fritz et al. (2008) are considered taxonomically reliable. This underlines the pitfalls of sequencing animals with unclear identification and using uncritical taxonomic identifications of GenBank data.

46. ***Malayemys* species**: Brophy (2004) examined morphometric variation in *Malayemys subtrijuga* Schlegel and Müller 1845 (sensu lato) across its known range and concluded that turtles from the Mekong River basin (Laos, Cambodia, and Vietnam) differed (primarily in color pattern) from those in the Chao Phrya River basin (Thailand), and resurrected the name *macrocephala* (Gray 1859) for *Malayemys* from the latter basin.

Despite the facts 1) that Schlegel and Müller (1845) reported the type locality of *subtrijuga* as "Java", 2) that at least three syntypes are known (RMNH 6082, 6084–6085: Hubrecht 1881; although two others [BMNH 1947.3.4.53 (specimen "m" listed in Boulenger 1889) and MNHN 7964 may also be among the original type series]; King and Burke 1989; Iverson 1992), 3) that field data associated with the RMNH syntypes indicate collection "most probably in the most western province of Bantam [=Bantan]" (Hubrecht 1881), 4) that numerous specimens of this taxon from "Java" were available in the 1800s (in at least eight European Museums; see Specimens Examined in Brophy 2004), 5) that this species has been recorded from at least six localities on Java (Brophy 2002); and 6) that Brophy's own morphometric analysis (2002: Figs. 30–31; 2004: Figs. 6–7) demonstrated that Javan specimens were distinct from specimens from both the Chao Phrya and Mekong basins (with the latter two samples actually overlapping in morphometric hyperspace), Brophy (2004) argued a) that the type locality of *subtrijuga* ("Java") was in error, b) that *Malayemys* does not occur nor has it occurred on Java, and c) that the holotype must have originated from the Mekong basin. Hence, Brophy (2004) assigned the name *subtrijuga* to the population of *Malayemys* inhabiting the Mekong basin (but refrained from restricting the type locality of *subtrijuga*, citing uncertainty about whether the Javan specimens might be native), and the name *macrocephala* to the population in the Chao Phrya basin. Furthermore, Brophy (2004) distinguished these two populations primarily on color patterns of the head.

More recently, Sumontha et al. (2016) and Ihlow et al (2016) observed that the head pattern in *Malayemys* from the Mekong tributaries of the Khorat Plateau (northeastern Thailand) and adjacent Laos, differed from that of specimens from elsewhere in the Mekong basin. Based solely on color differences, Sumontha et al. (2016) described a population from the northern Khorat Plateau as *Malayemys isan*. Nearly simultaneously (but see below), Ihlow et al. (2016) examined color pattern and some morphometrics, as well as mtDNA and nuclear microsatellite variation across three Southeast Asian mainland regions of *Malayemys* distribution (Chao Phraya basin, Mekong basin, and Khorat Plateau), and concluded that each of these regions has its own distinctive species, based on each of their data sets, and therefore described the form that they recorded from three locations on the Khorat Plateau as *M. khoratensis*. Two of those locations of *M. khoratensis* are effectively sympatric with the *M. isan* population, and color patterns in the two taxa are very similar, suggesting that the two taxa are subjectively synonymous. Although the description of *M. isan* by Sumontha et al. appeared online first, their paper did not comply with ICZN standards for digital publication, whereas that by Ihlow et al. did (see below); therefore, we conclude that *M. isan* is a junior subjective synonym of *M. khoratensis*.

Unfortunately, neither of these papers mentioned the possibility of taxonomically recognizing the Javan population as a fourth, distinctive taxon, whose continued occurrence is confirmed by ongoing exports for commercial trade (UNEP-WCMC 2017). If further phylogenetic research demonstrates the Javan population to be taxonomically distinct, the name *Emys subtrijuga* Schlegel and Müller 1845 would apply to that population, as would its later synonyms *Cistuda gibbosa* Bleeker 1857b, *Emys nuchalis* Blyth 1863, and *Damonia oblonga* Gray 1871. Furthermore, Gray 1870c also described *Damonia crassiceps* from "China", the locality probably erroneous but possibly representing the Mekong River basin population. Finally, none of these papers have addressed Schweigger's 1812 name *Emys herrmanni*, which is considered by most authors a *nomen dubium*, synonymous with *M. subtrijuga*.

It is problematic that none of these type specimens have been included in any morphometric or genetic analysis to date. For example, if a Javan population does or did exist, and it was found to be distinctive (as Brophy's morphometric analyses suggested), then the name *subtrijuga* should be applied there, and the Mekong population might be identifiable as *crassiceps*.

In conclusion, until a more comprehensive analysis of coloration and pattern, morphometrics, and both mitochondrial and nuclear DNA variation among all populations (including Java) is undertaken, with the inclusion of all of the type specimens mentioned above, we cannot be certain which name applies precisely to which population of *Malayemys*. Finally, the TTWG is not unanimous in its support for the recognition of *macrocephala* or *khoratensis* as full species, and whether or not *isan* is synonymous with or distinct from *khoratensis*. However, to minimize taxonomic changes as we await further data, we here recognize three species in the genus *Malayemys*: *subtrijuga, macrocephala,* and *khoratensis*.

47. ***Malayemys khoratensis***: In early 2016 a distinctive clade of Snail-eating turtles (*Malayemys*) from the Khorat Plateau of eastern Thailand was described as a new species with two different names in two separate articles (Ihlow et al. 2016; Sumontha et al. 2016). The name *M. khoratensis* Ihlow et al. 2016 was published on 6 April 2016, the date when the electronic version of the article, published in the journal *PLoS One*, met the ICZN Code for nomenclatural availability of electronic articles under article 8.5.3 (ICZN 2012). The name *M. isan* Sumontha et al. 2016 was published electronically on 26 March 2016 in the journal *Taprobanica*; however, the Zoobank registration of this article failed to meet the requirements of ICZN article 8.5.3.1, rendering the electronic version unavailable for the purposes of nomenclature. It must instead be considered as published when it first met the requirements of ICZN article 8.4.1, i.e., when numerous identical hard copies printed on paper became available. There is no evidence of the journal *Taprobanica 8(1)* having been printed prior to 13 April 2016, when copies were requested and were simultaneously sent to the archiving libraries as listed on the journal's website (Thomson and Lambertz, in press). Therefore, the date of publication of the journal *Taprobanica 8(1)* and the contained article by Sumontha et al. (2016) is to be corrected to 13 April under ICZN article 21.4, the first date for which there is evidence of its physical existence. As a result, the name *Malayemys khoratensis* has nomenclatural priority, and *Malayemys isan* becomes a junior subjective synonym (see above annotation).

48. ***Damonia crassiceps* Gray 1870c**: This taxon has been listed under the synonymy of *Malayemys subtrijuga* by most authors since Smith (1931). However, Sumontha et al. (2016) questioned its identification as representing either this species or genus, based on the description of the drawing of the species as lacking facial stripes, but did not suggest an alternative taxonomy.

49. ***Mauremys annamensis* and *M. mutica***: Zhao et al. (2016a) sequenced the entire mitochondrial genomes of three specimens of *Mauremys mutica* without published locality data, but purported to originate from Taiwan, China, and Vietnam or Hainan. Phylogenetic analysis revealed that the latter genome was more similar to that of *M. annamensis* than to the other more northerly mutica genomes, rendering *M. mutica* paraphyletic. Zhao et al. (2016b) examined variation in the mitochondrial barcode gene COI among larger sample sizes of *M. annamensis* and *M. mutica*. They identified reciprocally monophyletic northern (including Taiwan) and southern (Vietnam, Hainan and *M. annamensis*) clades, but the latter showed no monophyly among the constitutent populations. They speculated that *M. annamensis* might be of hybrid origin. Furthermore, Zhou et al. (2015) compared the entire mitochondrial genome of samples of eight species of *Mauremys*, and their results also nested *annamensis* within *mutica*, sister to *mutica* from southern China (near Vietnam). Unfortunately, they included no material from Vietnam, and most of their samples were purchased from the pet trade or food markets. More extensive geographic sampling (including *M. m. kami* from the Ryukyus) and nuclear analysis will be necessary before any taxonomic changes are warranted.

Independently, Somerová et al. (2015) examined variation in a mitochondrial gene and a nuclear intron in European zoo specimens of *M. annamensis*, and also resolved *M. mutica* as paraphyletic with respect to *annamensis*. In addition, their analysis also revealed two distinct, reciprocally monophyletic mitochondrial clades within *annamensis*, which they recommended be maintained separately in captive breeding operations. Unfortunately, the natural geographic provenance of these two clades was unknown.

50. ***Mauremys caspica* and *Mauremys rivulata***: Using microsatellite loci and nuclear and mitochondrial DNA sequences, Vamberger et al. (2017a) showed that the two species hybridize only rarely along their contact zone in Turkey. However, there is evidence for introgression between both species. In addition, they found hybrid evidence on Cyprus and, unexpectedly, terrapin populations in Israel and Jordan turned out to be a hybrid swarm of the two species, morphologically resembling *M. rivulata*. Ecological paleomodeling suggested that the two species formerly had temporary contact across what is now the Syrian Desert during more humid climatic episodes.

51. ***Mauremys leprosa***: An analysis of variation in two mitochondrial markers and one nuclear gene across the range of *Mauremys leprosa* by Veríssimo et al. (2016) confirmed two distinct genetic lineages that generally correspond to the two currently recognized subspecies. One is distributed from southern France through Iberia to Morocco, north of the Atlas Mountains (*M. leprosa leprosa*); the other occurs from northern Libya and Tunisia westward to Morocco, both north and south of the Atlas mountains (*M. leprosa saharica*); in northern Morocco there is secondary contact between these subspecies. In northeastern Iberia and southern France, some native populations have been genetically impacted by introduced *M. l. saharica* (Palacios et al. 2015).

52. ***Mauremys reevesii***: The historic native distribution of this species has been difficult to determine accurately, as the species has been traded extensively in China for several thousand years, and has apparently been introduced to Taiwan and Japan in historic times (see the genetic analysis by Suzuki et al. 2011). The populations in Korea may also have been introduced prehistorically, but could represent natural distribution during an interglacial warming period. Our previous distribution map in the last checklist was based on Iverson (1992) and the EmySystem database plus input from the CBFTT account by Lovich et al. (2011). We have now updated and revised this map extensively by re-evaluating most localities and restricting the distribution to areas below approximately 600 m elevation. We have also added more localities provided by T. Blanck (based on compilations of Chinese survey literature and field data) and D. Gaillard. While generally a lowland species, some populations (e.g., in Anhui) appear to occur up to elevations of ca. 500 m in hill regions, but in more southern regions (e.g., Hunan and Jiangxi) the species appears to be limited to lowland areas below 300 m (T. Blanck, unpubl. data). Most northern Chinese localities for *M. reevesii* appear to be trade specimens from ports and market centers (as also concluded by Pope 1935:46). Many southern and eastern coastal specimens are also trade specimens from coastal ports and markets or possibly locally invasive from markets. However, ancient Chinese writings seem to indicate that this species apparently occurred along the south coast, at least in Guangdong (T. Blanck, unpubl. data). Native wild populations do occur in the Chengdu basin of the upper Yangtze in Sichuan and all along the central Yangtze lowland basin, notably in Anhui, Guizhao, Hubei, Hunan, and Jiangxi. There also appears to be a native population in the Wei Valley of Shaanxi. Other scattered records north of the Yangtze may or may not represent native populations. Further genetic studies of Korean and southern and eastern coastal specimens with comparisons to specimens from the central Yangtze and Sichuan portions of the range are clearly needed.

Oh et al. (2017) examined geographic variation in mitochondrial cyt b sequences across the range of *M. reevesii*. Their results were complicated by the translocation of this species by humans since prehistoric times. They suggested that the two

main natural populations in China and Korea were weakly but distinctly divergent genetically; however, introgression as a result of translocations is diluting that difference, precluding any taxonomic recognition.

53. ***Mauremys rivulata***: Vamberger et al. (2014) examined variation in a mitochondrial gene fragment and across 13 microsatellite loci for samples from throughout the range of *Mauremys rivulata*. The mitochondrial sequence data showed no evident structuring. However, the microsatellite data revealed a distinct genetic break in southern Turkey, separating eastern and western populations. This break is likely to be caused by introgressed alleles from *M. caspica* in the eastern portion of the distribution range of *M. rivulata* (Vamberger et al 2017a). Vamberger et al. (2014) attributed the lack of clear substructure among the western populations of *M. rivulata* to trans-Mediterranean dispersal.

54. ***Melanochelys trijuga parkeri***: This taxon was described as a large-bodied, low-shelled subspecies endemic to Sri Lanka, but recent surveys at all historically recorded localities have encountered mainly the more common and widespread smaller Sri Lankan subspecies *M. t. thermalis* (A. de Silva, unpubl. data). These two taxa need genetic evaluation to determine if and how they may be distinct, and if distinct, whether they are undergoing introgression and intergradation.

55. ***Aldabrachelys* and *Cylindraspis***: Based on contemporary Indian Ocean currents, and historic fluctuations in sea levels, Wilmé et al. (2017) proposed that insular Indian Ocean populations of tortoises were the result of introductions by humans approximately 4000 ybp. However, given that previous work dates the colonization of these islands by tortoises at 9.5–22 mybp, and fossils of *Aldabrachelys* have been dated to at least 138,000 ybp (Cheke and Hume 2008; Gerlach and Paquette 2014; Cheke et al. 2017; Hansen et al. 2017; Hawlitschek et al. 2017), this hypothesis is untenable.

56. ***Aldabrachelys gigantea* and *Testudo***: Besnard et al. (2016) used shotgun sequencing to elucidate the entire mitochondrial genome of *Aldabrachelys gigantea*. Phylogenetic analysis of the aligned sequence of this tortoise with the available mitochondrial genomes of twelve other tortoise species generally supported the results of Le et al. (2006), except for the placement of *Malacochersus* and *Testudo horsfieldii*. However, the analysis by Besnard et al. suggested a paraphyletic genus *Testudo*, although with reduced bootstrap support (77–78%). Synthesis of these data with nuclear markers is needed before any taxonomic changes are warranted.

57. ***Aldabrachelys gigantea***: Turnbull et al. (2015) examined variation in body size and sexual size dimorphism among four subpopulations of Aldabra tortoises. They speculated that these differences might have a genetic basis, and recommended population genetic studies.

58. ***Chelonoidis***: The gender of the tortoise genus name *Chelonoidis* Fitzinger (1835) has long been assumed to be feminine (e.g., Agassiz 1857) because its root is the feminine Greek noun *Chelone* (not *Chelonos* as assumed by Olson and David [2014]), and the Latinized suffix *-oides* (from the Greek *-eides*, meaning form or shape [or "like" in English]). However, according to the ICZN (Article 30.1.4.4) genus names ending in *-oides* must be considered masculine unless the original author indicated gender directly or indirectly (i.e., by usage). Because Fitzinger gave no direct indication or orthography indicating that he considered the name *Chelonoidis* to be feminine (or neuter), Olson and David (2014) argued that it should be considered masculine. However, Fitzinger did provide indirect evidence that he considered the genus name masculine, by his clear rendition of other reptile genera he described as masculine (e.g., *Dracontoidis* and *Elapoidis*). In either case, the conclusion is the same—that a strict application of the Code would render *Chelonoidis* masculine, and require the emendation of the suffix of many of the species currently recognized within that genus. The name *vicina* is treated as a noun in apposition (Art. 31.2.2) and thus is unaffected by the gender of the genus name. While the conversions to *carbonarius, denticulatus, niger*, and *phantasticus* imply disruption to a few well-established and widely-used names, they should not lead to any significant confusion, and in the interest of Code compliance, we adopt these changed endings.

59. ***Chelonoidis chilensis***: Sánchez et al. (2015) examined variation in the karyotype of *Chelonoidis chilensis* across its range. They identified two karyomorphs, one from tortoises in the Dry Chaco Ecoregion, and one from the Monte of Steppes and Plains Ecoregion. However, these karyomorphs were independent of the external morphotypes of *donosobarrosi, petersi*, or *chilensis*, and therefore they followed Fritz et al. (2012a) in recognizing only a single species (*C. chilensis*) in this complex.

60. ***Chelonoidis niger* complex**: Molecular studies of Galápagos tortoises have surged over the last several years, although most of the work has been more directed at population genetics than establishing species boundaries and their taxonomic implications. The general working assumption is that separate island populations previously recognized as subspecies of *Chelonoidis niger* [= *C. nigra*] (or synonyms thereof) are now accepted as species (e.g., Caccone et al. 2002; Russello et al. 2005, 2007; Poulakakis et al. 2008, 2012, 2015; Chiari et al. 2009; TTWG 2009 [annotation 09:32], 2014; Edwards et al. 2014; Garrick et al. 2014), and we continue to recognize them as such, now also resurrecting the three previously synonymized southern Isabela taxa (*guntheri*, *microphyes*, and *vandenburghi*) from their synonymy under *C. vicina*. However, Loire et al. (2013) examined the population genomics of five Galápagos tortoise taxa (purportedly representing three named island populations) based on 248 nuclear genes. Their results suggested panmixis across their samples, with little genetic differentiation, and they questioned the species-level recognition of the various island taxa. Expansion of this study to include Galápagos-wide sampling would clearly be helpful in settling some of the taxonomic issues facing these tortoises.

Edwards et al. (2014) examined 14 microsatellite loci for tortoises from southern Isabela from the ranges of *C. vicina* and *C. guntheri* (the latter was synonymized with the former based on mtDNA data in Poulakakis et al. 2012). Not only did they find support for the distinction of those two taxa, but they also identified a third, unnamed, geographically intermediate genetic cluster they referred to as the "*aplastados*" [flattened] type. Although they made no taxonomic recommendations, and an expansion of this study to include other Isabela populations is needed, these data warrant our removal of *C. guntheri* from the synonymy of *G. vicina*, with full species recognition. Simultaneously, based on 12 microsatellite loci and mtDNA sequence data, Garrick et al. (2014; see also Emerson and Faria 2014) identified two distinct but coalescing genetic lineages within *C. becki* on northern Isabela that appear to represent two different colonizations from Santiago (*C. darwini*). They also found some evidence of introgression of *C. vandenburghi* into the genome of *C. becki*. Hence, they concluded that "species boundaries in the group may be somewhat porous," and questioned the species-level status of *C. darwini* relative to *C. becki*.

Clearly, the evolutionary history of colonizations and divergences by tortoises in the Galápagos has been very complex, and much more reticulate than previously realized. Sorting out

this history is an on-going challenge. However, as we noted in a previous checklist (TTWG annotation 12:31), genotyping of the many type specimens of named Galápagos tortoises is desperately needed, so that the correct names may be applied to all genetic lineages. Until those data are available, confusion and nomenclatural uncertainty will no doubt continue, such as some authors' use of *elephantopus* instead of *niger* or *nigra* (see TTWG annotation 09:33), and *ephippium* instead of *duncanensis* (e.g., Poulakakis et al. 2012; Jensen et al. 2015b; Hennessy 2015).

61. ***Chelonoidis donfaustoi***: Chiari et al. (2009) and Poulakakis et al. (2015) analyzed mitochondrial DNA and nuclear microsatellite characters in the two giant tortoise populations on Santa Cruz (Reserva and Cerro Fatal). Both studies found the populations to be genetically different and Poulakakis et al. (2015) demonstrated that the Reserva population represented the previously described *C. porteri*, and that the Cerro Fatal population was distinct and most similar to *C. chathamensis* from San Cristóbal. Despite minimal morphological differences from *C. porteri*, and that the holotype of *C. porteri* is a hybrid with Reserva nuclear DNA and Cerro Fatal mtDNA, they described the Cerro Fatal population as a new species, and we tentatively agree.

62. ***Chelonoidis niger***: Olson (2015) investigated the history of some early names applied to Galapagos tortoises. He concluded that the provenance of the single type specimen (MNHNP 9550) of both *Testudo californiana* Quoy and Gaimard 1824a and *Testudo niger* Quoy and Gaimard 1824b (= *Chelonoidis niger*) was "extremely unlikely" to be determined based on historical information, and hence the names should be considered *nomina dubia* and their use abandoned. Olson also concluded that one of the two syntypes of *Testudo nigrita* Duméril and Bibron 1835, designated the lectotype by Günther (1875a:268), was apparently lost, and since the paralectotype (MNHNP 9313) is a juvenile, he also recommended treating that name as a *nomen dubium*.

In addition, Olson and Humphrey (2017) investigated the origin of the type specimen of *Testudo elephantopus* Harlan 1827, and concluded that it may have come from Charles Island (Floreana), and suggested that the name *elephantopus* therefore replace the name *Testudo niger* Quoy and Gaimard 1824b, currently used for that island's species.

However, genetic analysis of the types currently in progress will hopefully demonstrate their geographic origins satisfactorily, and the allegedly lost lectotype of *nigrita* (BMNH 1949.1.4.37) actually remains extant at the British Museum (P. Campbell, in litt., 2017). We therefore consider all these recommendations by Olson (2015) and Olson and Humphrey (2017) as premature and unnecessary at this time.

63. ***Chelonoidis phantasticus***: In our previous checklists we indicated that this species was Extinct, based on that supposition by Pritchard (1996), but its formal conservation status has not previously been assessed using IUCN Red List criteria (IUCN 2001). This has now been done by the TFTSG using updated Red Listing guidelines in regard to determining whether a species is actually Extinct or not (IUCN 2016). Although only a single individual of this species has ever been collected (in 1906), sightings and signs from 1964, 2009, and 2013 suggest that a few individual tortoises may remain extant in the exceedingly fragmented and hard-to-access landscape of Fernandina, most of which is covered by uninhabitable lava flows (A. Rhodin, L. Cayot, J. Gibbs, R. Kiester, and W. Tapia, in press). As such, the TFTSG now determines this species to be Critically Endangered (Possibly Extinct) and has submitted that assessment to the IUCN Red List for publication.

64. ***Chersobius, Homopus,* and *Psammobates***: Based on three mitochondrial and two nuclear genes, Hofmeyr et al. (2016) resolved a paraphyletic *Homopus* with respect to *Chersina*, and resurrected the genus *Chersobius* for the five-toed species (*signatus*, *boulengeri*, and *solus*) formerly in the genus *Homopus*, and restricted the genus *Homopus* to the four-toed species (*areolatus* and *femoralis*). We have tentatively accepted those changes here. The authors also noted strong support (Hofmeyr and Daniels, in prep.) for deep genetic divergence among the currently recognized subspecies of *Psammobates tentorius*, suggesting that they deserved species status. They also indicated the presence of phylogeographic structure within *Chersina angulata* and *Homopus signatus*, suggesting possible future taxonomic changes in those taxa. We await these forthcoming publications before making any further changes to the checklist.

65. ***Geochelone elegans***: Schweigger (1812:325) described *Testudo stellata* based on the same specimens and plate previously described and figured by Schoepff (1795:111) as *Testudo elegans*. However, Schweigger coined the new name *stellata* as a *nomen novum* because Schoepff had based his description of *elegans* partly on a Seba (1734) specimen (pl. 79, fig. 3) that Schweigger (1812:325) concluded had been incorrectly identified, and he instead synonymized that figure under *Testudo rotunda* Latreille. Schweigger therefore coined a new name for Schoepff's species, renaming it *stellata* and stating: "Habitat in India orientali. (Schoepf. sub falso nomine: test. elegans Seb.)". However, the description of *T. elegans* by Schoepff was nomenclaturally available, and therefore *T. stellata* Schweigger has the same type specimens as *T. elegans*, according to Article 72(e) of the ICZN Code, and thus becomes its objective junior synonym.

66. **Date of Publication of Blyth 1854 ["1853"]**: The date of publication of this article in issue number 7 of volume 22 of the Journal of the Asiatic Society of Bengal has historically been listed as 1853, the printed date on its page-headers. However, a note in the Proceedings published in the same issue 7 on p. 684 is dated 4 January 1854, indicating that the issue was actually not published until 1854, consistent also with the imprint date of 1854 on the bound volume of all 7 issues of volume 22. This change of date affects the following taxa: *Testudo phayrei* [= *Manouria emys phayrei*], *Testudo elongata* [= *Indotestudo elongata*], *Testudo megalopus* [= *Geochelone elegans*], *Testudo iberia* [= *Testudo graeca ibera*], and *Homopus burnesii* [= *Testudo horsfieldii horsfieldii*].

67. ***Gopherus***: In the recent book on the biology of North American tortoises (edited by Rostal et al. 2014), Bramble and Hutchison (2014) reviewed and augmented the previous morphological data for the five known living species at that time, as well as the fossil forms, and concluded that the available evidence (including molecular data) supported the reciprocal monophyly of *Xerobates*, including *agassizii, berlandieri*, and *morafkai*, and *Gopherus* (*sensu stricto*), including *flavomarginatus* and *polyphemus*. They recommended recognition of *Xerobates* and *Gopherus* as sister genera. In the same volume, Murphy (2014) provided a critical review of the systematics of the broad genus *Gopherus* and its members, and also concluded that *flavomarginatus* and *polyphemus* are sister taxa, and that *berlandieri* is sister to the *agassizii* group (including *morafkai*; see also Reid et al. 2011, not cited in Rostal et al. 2014). However, he made no recommendation about the use of *Xerobates*, and included all species in the broader genus *Gopherus*, as most authors since Crumly (1994) have done. Although most of the other authors of chapters in this book used the genus *Gopherus* (*sensu lato*), in his review of fossils, Franz (2014) recognized *Xerobates* and *Gopherus*. As noted by Murphy (2014), broad nuclear sampling is needed to resolve definitively

the relationships within this species group. Until such time, and considering that the name *Gopherus* could still apply to all currently included species even if the two identified clades are reciprocally monophyletic, we retain *Gopherus* as the sole genus name.

68. ***Gopherus evgoodei***: The genetic distinctiveness of the southern Sonoran / northern Sinaloan population of Desert Tortoises has long been recognized (reviews in Edwards et al. 2015a,b, 2016), and has now been formally described as a new species by Edwards et al. (2016).

69. ***Indotestudo forstenii***: The type specimen of *I. forstenii* was recorded by Schlegel and Müller (1845) as having been collected by Forsten on "Gilolo, Indischen Archipel" (now Halmahera, Indonesia). However, no further specimens of *I. forstenii* have ever been recorded or found anywhere on that island since that time (D. Iskandar, A. Riyanto, pers. comm.), and the species does not appear to occur on Halmahera or its adjacent islands. The collector, Eltio Alegondas Forsten, spent a few months in 1841 collecting botanical and zoological specimens on Ternate island just off the west coast of Halmahera, where his collectors also obtained some material from mainland Halmahera. However, he also made extensive collections later in 1841–1842 on northern Sulawesi, while headquartered at Gorontalo (http://www.nationaalherbarium.nl/FMCollectors/F/ForstenEA.htm), where *I. forstenii* does occur. We hypothesize that the type specimen was therefore probably obtained by Forsten near Gorontalo, Sulawesi, Indonesia, and that it was then mislabeled as to its exact origin, or possibly that it was acquired from Ternate or Halmahera as a regionally traded specimen originating from Sulawesi. We no longer consider Halmahera to be part of the natural range of *I. forstenii*, and hereby formally restrict its type locality to "near Gorontalo, Sulawesi, Indonesia".

70. ***Testudo***: Based on a phylogenetic analysis of morphological traits for twelve fossil and the five extant species in the genus *Testudo* (sensu lato), Luján et al. (2016) recognized three monophyletic subgenera: *Chersine* for *hermanni*, *Agrionemys* for *horsfieldii*, and *Testudo* for *graeca, marginata,* and *kleinmanni*. Additionally, Vasilyev et al. (2014) studied variation in the 12S rRNA mitochondrial gene and three RAPD markers among individuals of a number of species of *Testudo* (sensu lato). Although *graeca, marginata, kleinmanni* (including synonymous *werneri*), and *horsfieldii* were resolved as monophyletic in the mtDNA analysis, *hermanni* was not; however, the RAPD analysis resolved each of those taxa as monophyletic. Support for the recognition of three monophyletic clades (corresponding to *Chersine*, *Agrionemys*, and *Testudo* [sensu stricto]) was ambiguous, with no support from the mtDNA, and only weak support from the RAPD data. Based on the combination of morphology of extant and fossil species and acknowledging the results of molecular genetics studies of *Testudo* by others, Luján et al. (2016) recommended that *Chersine* and *Agrionemys* (as well as the fossil *Paleotestudo*) be recognized as valid subgenera of *Testudo* (sensu lato). We now adopt that recommendation here, discontinuing our previous listing of alternative generic designations.

71. ***Testudo (Testudo) graeca***: In a paper previously not recorded in our checklist, Türkozan et al. (2010) analyzed morphometric variation in a large sampling of *Testudo graeca* from throughout Turkey. They determined that the putative subspecies *anamurensis* and *antakyensis* are not distinct from each other or from *terrestris* (and therefore synonymized under *terrestris*), and that *armeniaca* and *perses* are distinct. Further, they noted that the populations from northern and southern Turkey, possibly corresponding to the *ibera* and *terrestris* mtDNA clades, respectively, also appeared to be morphometrically distinct. They made no taxonomic recommendations other than maintaining a conservative approach pending additional morphologic and genetic assessment of more material from both within and outside Turkey. Our checklist has reflected these conclusions for many years, although we have listed *perses* as a synonym under the distinct taxon *buxtoni* since 2007, a placement reconfirmed by Parham et al. (2012) (see TTWG annotations 07:73 and 12:36).

Our current updated map with its subspecies delineations has benefitted from review and input by Oguz Türkozan and Peter Mikulíček. Notably, unpublished mtDNA genetic work in progress by Türkozan and colleagues now appears to confirm the earlier impression that *ibera* and *terrestris* represent well-separated northern and southern populations of *T. graeca*. Their distribution patterns reflect clear separation by the so-called Anatolian Diagonal, with only a few areas of intergradation in southwestern Turkey. Additionally, *buxtoni* appears to intergrade slightly with *terrestris* in the southeastern corner of Turkey.

Using the cyt b gene, Javanbakht et al. (2017) examined the phylogeography of the subspecies of *T. graeca* in Iran and Transcaucasia and refined the knowledge of their distribution. Based on species distribution models, they showed that the distribution ranges changed little since the Last Glacial Maximum.

Using three mitochondrial DNA fragments (cyt b, 12S, ND4 plus adjacent DNA coding for tRNAs), Graciá et al. (2017a) studied differentiation of the *Testudo graeca* complex. According to fossil-calibrated molecular clock calculations, they inferred a dual diversification burst. The eastern subspecies, including the last common ancestor of the North African taxa, radiated in the Mio-Pliocene, whereas a second radiation in North Africa took place during the Pleistocene. Based on a Libyan tortoise of unknown exact provenance, a new North African lineage was discovered. The recent introduction of most Western European populations was confirmed, with the exception of populations in southeastern Spain, which are older.

72. ***Testudo (Testudo) graeca* and *T. (T.) g. terrestris***: Meiri et al. (2011) examined body size variation in *Testudo graeca* across the Levant, and demonstrated that these tortoises follow Bergmann's Rule, with the smallest tortoises found at the southern end of the range in the Negev Desert. The small Negev tortoises had earlier been decribed as *T. floweri* by Bodenheimer (1935), and these authors agreed that this taxon is synonymous with *T. graeca*. Werner et al. (2016) then expanded that analysis to include all *T. graeca* (sensu lato; see TTWG 2014) from Morocco to Iran. They also found a general correlation of body size with latitude. However, their analyses of sexual size dimorphism demonstrated that it seems to scale differently among tortoises in Anatolia versus the Levant, and concluded that this might suggest that those two populations might deserve consideration as "separate entities" (presumably with taxonomic consequences).

73. ***Testudo (Testudo) kleinmanni***: Based on morphological differences between *Testudo kleinmanni* on opposites sides of the Nile River, Perälä (2001) described the eastern population as *T. werneri*. Subsequent studies (see TTWG 2007, annotation 07:74) did not support this distinction and *werneri* was synonymized with *kleinmanni*. However, Werner (2016) has re-emphasized the apparent morphological differences between the populations and has claimed that some tortoises from west of the Nile have been translocated to the east to northern Sinai, potentially confounding the recent studies. Therefore, he suggested that *werneri* should be recognized as a distinct subspecies. Until further genetic work tests this scenario, we continue to retain *werneri* in synonymy.

74. ***Testudo (Chersine) hermanni***: Based on an analysis of 17 nuclear microsatellite loci and broad geographic sampling,

Zenboudjii et al. (2016) identified three major genetic clusters within *Testudo hermanni hermanni*: one continental (Spain, France and Italy), one insular (Corsica, Sardinia, and Sicily), and one an island supporting two clusters (Menorca). There is still debate as to which populations are autochthonous and which are the result of human introductions (or reintroductions). Perez et al. (2014; see also TTWG 2014, annotation 14:36), based on mtDNA and microsatellites, concluded that the Spanish, Corsican, and Sardinian populations were likely introduced from Sicily by humans. However, although Zenboudji et al. (2016) agreed that the contemporary population on Sardinia is the result of introductions from Sicily following an earlier extirpation on Sardinia, they argued that the Corsican population is natural and genetically distinct. They also concluded that the population in northeastern Spain (Albera) is a relict, natural population. Menorca supports two distinct genetic populations. The one in the west is closely related to mainland populations, and hence is likely an introduction from a now extirpated mainland source. The eastern population is more distinct, but more closely related to the other insular populations, but whether this represents an ancient autochthonous divergence or an ancient human introduction of a lineage of unknown provenance could not be determined. Zenboudji et al. (2016) also noted a number of examples of mismatched genotypes in several populations, representing introduced individuals (and their offspring) from other populations. Finally, they recommended that six populations be considered genetic management units for conservation purposes: 1) Albera (Spain) + western Menorca; 2) France (Var); 3) Italy; 4) Sardinia + Sicily; 5) Corsica; and 6) eastern Menorca.

75. ***Cyclanorbis senegalensis***: Based on mitochondrial DNA sequence data, Mazuch et al. (2016) reported the presence of *C. senegalensis* in western Ethiopia for the first time, and also found significant genetic divergence between western (Togo and Benin) and eastern (Ethiopia) populations. They called for further phylogeographic study, but made no taxonomic recommendations.

76. ***Amyda cartilaginea* or *A. ornata***: Fritz et al. (2104a) examined variation in mitochondrial and nuclear DNA and color patterns across the range of *Amyda cartilaginea* (sensu lato). Their mtDNA tree was not highly resolved; however, because of the concordance of the identified clades with color pattern and geography (paleodrainages), the authors recognized two named species with four named subspecies within what was previously recognized as *A. cartilaginea*. They restricted *A. cartilaginea* (sensu stricto) to the southern portion of the Greater Sundas, with the nominate subspecies in southern Borneo and Java, and a new subspecies, *maculosa,* in the northern portion of the Greater Sundas (northwestern Borneo and southern Sumatra). Populations of *A. cartilaginea* (sensu lato) in northern Sumatra and Peninsular Malaysia were not assessed or assigned to subspecies. They also identified, but did not describe, a potential candidate species from northeastern Borneo. They resurrected the older name *ornata* (Gray 1861) for the Southeast Asian mainland species, with the nominate subspecies confined to the Mekong basin, and resurrected the name *phayrei* (Theobald 1868) for the subspecies in Thailand and Myanmar. They also identified, but did not describe, a third possible subspecies from Bangladesh. Regrettably, no specimens from southern Myanmar, southern peninsular Thailand, or Peninsular Malaysia were included. In view of the relatively weak resolution of their named mtDNA clades, but reasonable concordance of those clades with paleogeographic drainage basins and color patterns, we list their proposed taxonomic changes provisionally, pending additional geographic sampling and further genetic and morphologic work.

77. ***Apalone mutica calvata***: In a guide to Alabama turtles, Guyer et al. (2015) elevated *Apalone mutica calvata* to a full species based on its distinctive color pattern, its geographic isolation, and the mtDNA data (part of only one gene) presented by Weisrock and Janzen (2000). Powell et al. (2016) followed their recommendation. However, because of the small sample size and small DNA fragment available to Weisrock and Janzen (2000) and incomplete sampling in the presumed area of overlap in southeastern Louisiana, we consider this change premature, and continue to recognize *calvata* as a subspecies of *A. mutica*.

78. ***Nilssonia* and *N. nigricans***: Based on mitochondrial Cytochrome C Oxidase Subunit I (mtCOI) barcode sequences, Kundu et al. (2016) provided a phylogenetic analysis of the Asian softshell turtles allied with the genus *Nilssonia*. Their results confirmed the presence of *N. nigricans* in the wild in Assam, India, as well as provided additional support for the synonymy of *Aspideretes* with *Nilssonia* (see also TTWG 2011, annotation 11:15).

79. ***Pelochelys cantorii***: Hoser (2014a) coined a new subgeneric and two new species names for two purported varieties of *Pelochelys cantorii*. Since the ICZN has been petitioned by Rhodin et al. (2015) (see Annotation 4) to declare these and other Hoser names unavailable under the Code (Article 82.1), we maintain prevailing usage and do not recognize these names.

80. ***Pelodiscus sinensis* and *P. maackii***: Suzuki and Hikida (2014) examined mitochondrial cytochrome b sequence data from specimens of *Pelodiscus* across Japan and compared them with previously published data from Fritz et al. (2010b) from across the wider species range. They identified two lineages from Japan, corresponding to the previously recognized *P. sinensis* and *P. maackii*. The latter was widely distributed in Japan, whereas the former had only a sporadic distribution, leading the authors to conclude that *maackii* was native to Japan and *sinensis* was introduced. They also noted that if future nuclear DNA data supported this scenario, the older name *japonicus* (Temminck and Schlegel 1838) could be available for the lineage currently recognized as *maackii* (Brandt 1857).

81. ***Pelodiscus sinensis***: The publication date of F.J.F. Meyen's *Reise um die Erde*, in which *Trionyx (Aspidonectes) sinensis* (= *Pelodiscus sinensis*) was first described by A.F.A. Wiegmann, has been a source of controversy. Although frequently cited as appearing in 1835, Bauer and Adler (2001) in a previously overlooked publication determined that the description of *sinensis* first appeared in print in 1834, and we have now corrected that date here.

82. ***Pelodiscus sinensis***: As clarified by Adler (2016), the name *Trionyx tuberculatus* was first used by Cantor (1842a), but without a description or indication, and thus a *nomen nudum*; then subsequently formally and validly described a few months later (Cantor 1842b).

83. ***Rafetus euphraticus***: We note that in the original description of *Testudo euphratica* published by Daudin (1801) that he specifically credited Olivier with providing him with the description of the new species. We therefore amend the authorship of the original name to *Testudo euphratica* Olivier *in* Daudin 1801.

84. ***Rafetus euphraticus***: Ihlow et al. (2014) examined variation in two mitochondrial genome fragments across nearly the entire range of the species, and found no significant genetic variation.

85. ***Rafetus swinhoei***: Le et al. (2014) analyzed sequence data from two mitochondrial loci and one nuclear gene from all known populations of *Rafetus swinhoei* in China and Vietnam. Their results demonstrated minimal divergence among populations, and warranted no taxonomic changes. Despite the long history in China of human use and transport of turtles, the authors cautioned against speculation that the Chinese distribution is unnatural.

86. **Chelidae**: A few recent authors have followed Storr (1978) in using the family name Cheluidae (Michael and Lindermeyer 2010; Wilson and Swann 2013), a grammatically correct derivation from the Greek type genus *Chelus*, genitive singular *Cheluos*. However, the spelling Chelidae has been in prevailing usage globally since Lindholm (1929) and most authors continue to use it. Under ICZN Article 29.5, the original spelling of a family-level name is to be maintained when it is in prevailing usage, whether or not its derivation from the name of the type genus is in accordance with grammatical procedures. We therefore regard the name Cheluidae as an unjustified emendation, given the long-standing prevalence of Chelidae in the literature, and we strongly recommend and concur with the continued usage of Chelidae.

87. ***Acanthochelys radiolata***: Garbin et al. (2016) examined morphological variation in *Acanthochelys radiolata* across its range. Although they described significant variation in this species (especially in color and shape), they could identify no geographic pattern to this variation and concluded that *A. radiolata* is a single, highly variable species. In addition, they considered records from Mato Grosso and Sao Paulo States to be in error.

88. ***Chelus fimbriata***: Zug (1977) clarified that the genus name for the matamata is *Chelus*, not *Chelys*, as originally proposed by Dumeril (1805:76). Most authors since then have treated the generic name as feminine, rendering the species name as *Chelus fimbriata*. However, Ferreira et al. (2016), following the recommendation of Vlachos (cited as a pers. comm., but also discussed in Vlachos 2015), argued that the genus name *Chelus* is actually masculine (and the species name therefore *Chelus fimbriatus*) because it was supposedly based on Latinization of the classical Greek feminine word *χέλυς*, and according to ICZN (1999) Art. 30.1.3, a Latinized suffix should take the gender of the Latin suffix. However, according to Appendix B of the 1961 and 1985 ICZN Codes, as well as Art. 30.1.2 and 30.1.3 of the 1999 Code, there is a distinction between transcription or transliteration vs. Latinization of a Greek word. Specifically, for the Greek letter *upsilon* (*υ*), its Latin equivalent (i.e., transliteration) is '*u*', whereas the Latinized version is '*y*' (ICZN 1985, App. B). Hence, the name *Chelus* is considered a transliteration, not a Latinization, of *χέλυς*, whereas *Chelys* is considered a Latinization. Unfortunately, Vlachos (2015) transposed the terms "transliteration" and "Latinization" in his Table 1—he rightly used "Latinized form" to name his column L (where he gives "*y*" as the Latinized form of *upsilon*), but used "transliteration" for it in the caption, causing considerable confusion. *Chelus* and *Chelys* should not be considered homonyms (1999: Art. 56.2; 1985: Art. 56.b), and in accordance with ICZN 1999 Art. 30.1.2 (1985: Art. 30a), the gender of both *Chelus* and *Chelys* is feminine. The correct species name is therefore *Chelus fimbriata*, as it has been rendered for several decades, and we continue to use it as such.

89. ***Mesoclemmys raniceps***: Rivas et al. (2015) discussed the alleged distribution of this species in Venezuela, concluding that of the three specimens recorded from there, two were misidentified, and one (the type specimen of *Hydraspis maculata*), was misidentified and incorrectly restricted to Venezuela. Hence, we delete Venezuela from the range of *M. raniceps*, and synonymize *H. maculata* under *M. raniceps* instead of under *M. nasutus* where it was previously placed.

90. ***Phrynops geoffroanus* and *P. tuberosus***: In a previous checklist (TTWG 2010, Annotation 10:44), we noted that the distribution and taxonomy of these two taxa remained highly problematic and subject to differing opinions as to their extent and inter-relationships, and in our last checklist (TTWG 2014) we provided coarse and uncritical distribution maps for them. In this checklist we now present new revised distributional maps that document most known localities of these taxa, sourced from a combination of the EmySystem database (with several corrections), recently published literature, and previous research on many collected specimens by Rhodin and Mittermeier during their work on the *P. geoffroanus* complex (Rhodin and Mittermeier 1983; unpubl. data). Morphological analysis at that time indicated the presence of several apparently allopatric and differentiated populations of *P. geoffroanus* corresponding to various level 3 and 4 hydroshed basins, with several areas of close parapatry and possible intergradation. We now depict these distributional patterns in our revised maps, showing the distributional limits of the two taxa to delineate the hydroshed-restricted extent of their mostly separate populations, and showing the various subpopulations of *P. geoffroanus*. Many of these differentiated populations have now also been preliminarily substantiated as genetically distinct lineages by Carvalho et al. (2016). We anticipate that the *P. geoffroanus* complex will eventually be recognized as a polytypic species complex with several distinct lineages, notably the southeastern Brazilian coastal, the Rio São Francisco basin, the Rio Paraná basin, the lower Amazon basin, the Colombian, and the Peruvian-Bolivian populations.

91. ***Platemys platycephala melanonota***: Mendes-Pinto et al. (2011) reported the collection of a *Platemys platycephala* in southwestern Pará, Brazil, that was diagnosable as the subspecies *P. p. melanonota*. This record lies nearly 2000 km from the known range of *melanonota*, well within the known range of the nominate subspecies, and calls into question the validity of the subspecies *melanonota* which was described based primarily on color patterns. A re-evaluation of geographic variation and genetics in this species is needed.

92. ***Chelodina (Chelodina) longicollis***: Hodges et al. (2015) studied mitochondrial phylogeography of *Chelodina longicollis*, a highly terrestrially mobile freshwater species, to determine if its population genetic structure would correspond to hydrological boundaries or not. They found two ancient haplogroups broadly with east-west partitioning across the Great Dividing Range, but made no taxonomic recommendations. Each haplogroup was characterized by complex genetic structure, demographically stable subpopulations, and signals of isolation by distance; but the patterns were also overlaid with signatures of introgression and recent gene flow, likely facilitated by late Pleistocene and ongoing anthropogenic landscape changes.

93. ***Chelodina (Macrochelodina) expansa***: Hodges et al. (2014) carried out a phylogeographic study of *Chelodina expansa* based on mitochondrial gene variation to identify two major clades of mitochondrial haplotypes. The first comprised populations from the inland Murray-Darling Basin and the Mary River in southeast Queensland; the second comprised populations from coastal catchments north of the Mary River. They did not regard it as appropriate to provide taxonomic recognition for these populations east and west of the Great Dividing Range (as previously proposed for other similarly distributed taxa by Cann 1998), because the mitochondrial analysis demonstrated that the morphological variation observed was not concordant with the spatial population structure defined by the molecular data (views subsequently discussed further by Spinks et al. 2015). Nevertheless, Hoser (2014b) inappropriately applied novel names to two of the mitochondrial clades identified by Hodges et al. (2014). However, since the ICZN has been petitioned by Rhodin et al. (2015) (see Annotation 4 on Hoser) to declare these and other Hoser names unavailable under the Code (Article 82.1), we maintain prevailing usage and do not use his names.

94. ***Chelodina (Macrochelodina) kuchlingi* and *C. walloyarrina***: Both of these purported taxa remain enigmatic and poorly known, with their apparent distinctiveness incompletely evaluated, and we remain uncertain whether they are indeed valid and recognizable taxa (as either species or subspecies), or poorly differentiated lineages of *C. oblonga* (formerly *C. rugosa*) and *C. burrungandjii*, respectively, or possibly their hybrid intergrades. Ellis and Georges (2015), in their catalogue of turtle type specimens held at the Western Australian Museum, synonymized *C. kuchlingi* under *C. oblonga* and *C. walloyarrina* under *C. burrungandjii*, following the earlier recommendation by Georges and Thomson (2010), but their action was not based on new data or analysis. However, we note that prior to the description of *Chelodina walloyarrina* from the Kimberleys by McCord and Joseph-Ouni (2007b), and not addressed in our earlier comment (TTWG 2010, annotation 10:38), is that Thomson et al. (2000) noted morphological differences between Kimberley specimens (= *C. walloyarrina*) and *C. burrungandjii* from Arnhem Land, while Georges et al. (2002) compared the still undescribed Kimberley form and *C. burrungandjii* from Arnhem Land species using allozyme data (45 independent nuclear loci), which showed no fixed differences between these populations. As we noted in our prior checklist (TTWG 2014, annotation 14:42), further analysis of the phylogeographic relationships among all these lineages is still in progress by Kuchling, Georges, and others, and based on our precautionary principles in regard to data-driven analysis in the recognition and protection of biodiversity, we remain reluctant to formally synonymize these taxa until more conclusive genetic and morphologic data emerge.

95. ***Elseya***: Thomson et al. (2015) divided the broad genus *Elseya* into three subgenera based on genetics and skeletal morphology: *Elseya (Elseya)*, *Elseya (Hanwarachelys)*, and *Elseya (Pelocomastes)*.

96. ***Elseya flaviventralis***: Allopatric populations of the *Elseya dentata* group from the Arnhem Land region of Northern Australia were first suggested to be unique by Legler (1981) based on morphology. Subsequent allozyme electrophoretic analyses by Georges and Adams (1992, 1996) and morphological work by several authors (reviewed in Thomson and Georges 2016) supported the distinction of these populations at the species level, and Thomson and Georges (2016) formally described this species as *Elseya (Elseya) flaviventralis*, which we accept.

97. ***Elseya rhodini***: As indicated in our last checklist (Annotation 14:45), the population of *Elseya* (formerly included under *E. novaeguineae*) from the southern versant of New Guinea, previously noted by Rhodin and Genorupa (2000) and by Georges et al. (2014) to be genetically and morphologically differentiated from other New Guinean *Elseya*, has since been formally described as *Elseya (Hanwarachelys) rhodini* by Thomson et al. (2015). We accept this new species as distinct.

98. ***Emydura macquarii krefftii***: Todd et al. (2014) examined variation in mitochondrial and nuclear microsatellite markers across the widespread range of *Emydura macquarii krefftii*. The mitochondrial data revealed 1) a distinct divergence between northern (Burdekin River northward) and southern (Fitzroy River and southward) populations of *E. m. krefftii*, 2) that *E. m. emmotti* was most closely related to but highly divergent from the northern *krefftii* clade, 3) that *E. m. nigra* and *E. m. macquarii* were nested within the southern *krefftii* clade, and 4) that populations in the upper Burnett River were highly divergent from other southern clade populations. Their examination of twelve microsatellite loci within only *krefftii* also demonstrated support for the same north-south divergence as for the mtDNA data, but did not support the distinction of the upper Burnett population (possibly a human translocation, according to the authors), or the taxonomic distinction among the subspecies *nigra*, *macquarii*, and southern *krefftii*. They made no explicit taxonomic recommendations, but did note that the north-south divergence was within the range exhibited for other accepted chelonian species. Further analysis is clearly indicated.

99. ***Myuchelys purvisi***: Legler (1981) foreshadowed splitting the genus *Elseya* into two major clades, one containing *Elseya dentata* and related species, the other containing *Elseya latisternum* and its close relatives, many of which were undescribed at that time. A subsequent study based on 54 allozymes loci (Georges and Adams 1994) established that Legler's "*latisternum* group" was indeed a clade (monophyletic), and this was the foundation for the description of the new genus *Myuchelys* (Thomson and Georges 2009) with four contained species: *M. purvisi, M. georgesi, M. bellii*, and *M. latisternum* as type. Unfortunately, morphological characters that diagnose that genus are symplesiomorphies.

Two subsequent analyses based on a limited set of nuclear and mitochondrial sequence data were equivocal on the monophyly of *Myuchelys*. Georges et al. (1998) recovered *Myuchelys* as paraphyletic with respect to *Elseya* based on analyses of two mitochondrial genes (12S rRNA and 16S rRNA), but without statistical support. More recently, analyses of a single nuclear locus (c-mos) provided moderate support (83% bootstrap support values) for grouping *Emydura macquarii*, *Myuchelys latisternum*, and *M. georgesi* as a clade to the exclusion of *M. purvisi*, a result confirmed by analysis of mtDNA (Fielder et al. 2012). However, Georges and Adams (1994), Georges et al. (1998), and Fielder et al. (2012) all maintained that the uncertainty surrounding incongruence among these analyses should preclude taxonomic revisions and therefore did not propose revisions to correct the potential paraphyly of *Myuchelys* with respect to *Emydura*.

Subsequently, Le et al. (2013) generated phylogenies for the chelid genera *Elseya, Emydura, Myuchelys, Elusor,* and *Rheodytes* using two mtDNA markers and a single nuDNA marker. Their phylogeny also recovered *Myuchelys* as paraphyletic, again owing to the position of *M. purvisi*, and they assigned *purvisi* to a new genus, *Flaviemys,* to maintain monophyly of *Myuchelys*. A more comprehensive analysis (Spinks et al. 2015) using 13 independent nuclear DNA markers recovered *Myuchelys*, including *M. purvisi*, as a well-supported clade, in agreement with the previous allozyme data. Thus, based on the weight of evidence, the taxonomic revision of Le et al. (2013), using their more limited sequence information, was considered by Spinks et al. (2015) to be premature.

On the basis of conflicting evidence from the mitochondrial and nuclear DNA evidence, and because *M. purvisi* and *M. georgesi* are morphologically similar and have been regarded as a cryptic species pair (but see Thomson and Georges 1996), we have retained *Myuchelys* based on the weight of evidence suggesting that it is a well-supported monophyletic group, and placed *Flaviemys* into its synonymy, following the recommendation of Spinks et al. (2015).

100. **Pseudemydurinae, *Pseudemydura, P. umbrina***: The affinities of *Pseudemydura* among the Chelidae are not well established. Early work using serological comparisons revealed that *Pseudemydura, Emydura-Elseya*, and *Chelodina* formed an unresolved trichotomy (Burbidge et al. 1974). Many of the defining morphological characters of *Pseudemydura* have been regarded as autapomorphies, and so not useful for phylogenetic analysis. Nevertheless, Gaffney (1977) placed *Pseudemydura* as sister to all the remaining extant chelids of both Australasia and South America (as the new subfamily Pseudemydurinae),

while admitting that his case, based on a single retained primitive character, was weak. Subsequent DNA sequence studies were unable to resolve the conundrum. 12S mitochondrial rRNA data were unable to conclusively establish the relationships of *Pseudemydura*, but tentatively resolved it as sister to the other Australasian shortnecked genera—*Emydura, Elseya, Myuchelys, Rheodytes* and *Elusor* (Seddon et al. 1997). Additional sequence analysis from mt 16S rRNA and nuclear c-mos supported this arrangement, but bootstrap support remained poor (Georges et al. 1998). A more recent analysis, using the same data drawn from Genbank, resolved *Pseudemydura* as sister to *Chelodina* (Guillon et al. 2012). Subsequently, in a broad analysis of previously published sequence data representing 13 mitochondrial and nuclear DNA loci and including 83% of all extant turtle species (as per our checklist), Pereira et al. (2017) resolved *Pseudemydura* as sister to all short-necked Australasian chelids, with those two clades sister to *Chelodina*. Most recently, Zhang et al. (2017) analyzed the whole mitogenome of *Pseudemydura* and demonstrated it to be sister to all Australasian chelid turtles (subfamily Chelodininae), with strong bootstrap support; consequently, they proposed resurrection of the subfamily Pseudemydurinae Gaffney 1977, which we adopt here.

101. ***Pelomedusa***: Vargas-Ramírez et al. (2010) and Wong et al. (2010) reported deeply divergent mitochondrial clades within what was then recognized as the monotypic species *Pelomedusa subrufa*, with less, but concordant, variation in nuclear DNA markers. The extent of mitochondrial divergences of up to 20% of the cytochrome b gene exceeds pairwise divergences between any other congeneric chelonian species. Based on mitochondrial DNA variation, Petzold et al. (2014) and Nagy et al. (2015) identified at least thirteen terminal clades (see also Fritz et al. 2014b). Petzold et al. (2014) recommended full species status for some of these clades. They restricted *P. subrufa* (sensu stricto) to southern Angola, Botswana, southeastern Democratic Republic of the Congo, Madagascar (presumably introduced), Malawi, Namibia, South Africa, and Tanzania. Older names were resurrected from the synonymy of *P. subrufa* for three of the clades: *P. galeata* (Schoepff 1792; South Africa), *P. gehafie* (Rüppell 1835; Eritrea and possibly Sudan), and *P. olivacea* (Schweigger 1812; Benin, Burkina Faso, Niger, Nigeria, and Senegal). Six other species were newly described: *P. barbata* (Saudi Arabia and Yemen), *P. kobe* (Tanzania), *P. neumanni* (Kenya and Tanzania), *P. schweinfurthi* (Central African Republic and South Sudan), *P. somalica* (Somalia and Ethiopia; see also Fritz et al. 2015b), and *P. variabilis* (Ghana and Ivory Coast). The authors also identified two clades that they considered candidate species but did not describe: one from Cameroon, and the other from Sudan. Further candidate species could correspond to distinct clades within *P. galeata* and *P. somalica* (Fritz et al. 2015b), and Nagy et al. (2015) added another possible candidate species from the southeastern Democratic Republic of the Congo. All these studies, however, relied primarily on mitochondrial data and preliminary geographic sampling, but also included some morphologic work and sequencing and allocation of type specimens (see also Fritz et al. 2015a). We remain uncertain whether all taxa described and/or identified are valid and at what systematic level (species vs. subspecies vs. ESUs), pending corroborating data from nuclear genes. However, based on the data and extensive analyses presented, we tentatively accept the proposed taxonomic arrangement while urging and awaiting further work, notably analysis of nuclear loci, more detailed morphologic work, and further geographic sampling, especially from areas between assigned species. We document these unsampled and unassigned areas as *Pelomedusa subrufa* (sensu lato) species complex.

102. ***Pelusios***: Kindler et al. (2016) examined sequence variation in three mitochondrial and three nuclear genes in *Pelusios*, and found no phylogenetic structure in *P. chapini*, *P. gabonensis*, or *P. nanus*; however, they identified significant structure within *P. rhodesianus* (with two deeply divergent clades), *P. carinatus*, and *P. castaneus*. Both their mtDNA and nDNA data also suggested that *rhodesianus* was paraphyletic with respect to *carinatus*. But because their geographic sampling was incomplete and there was discordance between their mtDNA and nDNA data, the authors made no new taxonomic decisions regarding these six taxa.

103. ***Pelusios castaneus seychellensis***: Kindler et al. (2016), in their wider phylogeographic study of *Pelusios*, found that their mtDNA data nested the lectotype of *P. seychellensis* deep within a variable *P. castaneus*, and sister to specimens from the Republic of Congo, agreeing with Stuckas et al. (2013), leading them to treat *seychellensis* as a junior synonym of *castaneus*. We addressed the status of *seychellensis* previously in Annotation 14:47 and interpreted it at that time as a subspecies of *P. castaneus*. We maintain that interpretation at this time; however, we acknowledge the possibility that the types of *seychellensis* could conceivably have been mislabeled or based on transported specimens, in which case *seychellensis* should indeed be synonymized with *castaneus*.

104. ***Podocnemis erythrocephala***: Santos et al. (2016) examined variation in a single mitochondrial gene across the range of *Podocnemis erythrocephala*. They identified considerable genetic structure among populations, with four distinct genotypes that they deemed "management units," but made no taxonomic recommendations.

105. ***Podocnemis sextuberculata***: *Podocnemis sextuberculata* and *Pentonix americana* (nomen dubium) (= *Pelomedusa subrufa*) were first described on p. 13 of Cornalia (1849), but the descriptions (with minor changes) were reprinted on p. 312 in the Appendix of Osculati (1850), who collected the holotype of *sextuberculata* described by Cornalia. The two publications have created some confusion about dates and pagination for these two names, and we correct our previously cited paginations here.

PREVIOUS CHECKLIST ANNOTATIONS

2007 Checklist Annotations

TTWG 2007b (CRM 4:173–199) (07:1-105)

07:1. Both IUCN (The World Conservation Union, http://www.iucnredlist.org) and CREO (Committee on Recently Extinct Organisms, http://creo.amnh.org) have designated 1500 AD as their official cutoff date for determining what constitutes a recently extinct species, and we follow their criteria in our checklist.

07:2. ***Chelydra***: Phillips et al. (1996) elevated *acutirostris* and *rossignoni* to full species status and retained the subspecies *osceola*. See Shaffer et al. (in press) for a complete review.

07:3. ***Macrochelys*** **[formerly** ***Macroclemys*****]**: Although *Macroclemys* has been the most commonly used name, Webb (1995b) showed that *Macrochelys* is the oldest available name.

07:4. ***Chelonia mydas***: Bowen et al. (1992) showed that recognition of the taxon *agassizii* Bocourt 1868 renders *mydas* paraphyletic, and *agassizii* is no longer generally recognized as either a distinct species or subspecies. See Parham and Zug (1996) and Karl and Bowen (1999) for a complete review.

07:5. ***Eretmochelys imbricata***: Fritz and Havas (2006, 2007) did not list *bissa* as a valid taxon, but no argumentation for this opinion was given. Genetic data (Okayama et al., 1999) have suggested significant separation of Atlantic from Pacific stocks.

07:6. ***Kinosternon*** **species**: Serb et al. (2001) elevated two former subspecies of *flavescens* (*arizonense* and *durangoense*) to full species status.

07:7. ***Kinosternon chimalhuaca***: This new species name appeared prematurely and erroneously first in the hobbyist literature, with the full original description published a few months later (Berry et al., 1996, 1997).

07:8. ***Kinosternon scorpioides scorpioides***: Includes the previously

recognized subspecies *seriei* Freiberg 1936 and *carajasensis* Cunha 1970 in synonymy (Cabrera and Colantonio, 1997).

07:9. ***Sternotherus***: This genus was included as a junior synonym of *Kinosternon* by Iverson (1992) and David (1994) based on work by Seidel et al. (1986) and Iverson (1991). However, this view was never widely accepted, and Iverson (1998) showed that the species referred to either *Sternotherus* or *Kinosternon* formed reciprocally monophyletic clades and recommended that both genera be used.

07:10. ***Sternotherus depressus***: Whereas some earlier authors had placed this taxon as a subspecies of *minor*, Walker et al. (1998) showed that *depressus* was genetically distinct from *minor*.

07:11. ***Chrysemys picta dorsalis***: This subspecies of *Chrysemys picta* was elevated to full species status by Starkey et al. (2003), who recognized two distinct genetic lineages: *C. dorsalis* and *C. picta*. They did not find genetic support for the other subspecies of *C. picta* (*belli, marginata*) but did not recommend that they be abandoned. Fritz and Havas (2006, 2007) argued that full specific status of *dorsalis* was not fully demonstrated and retained it and the other two taxa as subspecies of *C. picta*, agreeing also with Ernst et al. (2006).

07:12. ***Graptemys ouachitensis sabinensis***: Based on molecular and morphologic data, Stephens and Wiens (2003) suggested that *sabinensis* may not be closely related to *ouachitensis*. However, statistical support for this was weak, and they did not discuss or recommend a taxonomic change. Further study of this complex may warrant the elevation of the sympatric taxon *sabinensis* to full species status.

07:13. ***Pseudemys concinna concinna***: Includes the previously recognized subspecies *hieroglyphica* Holbrook 1836, *mobilensis* Holbrook 1838, and *metteri* Ward 1984 in synonymy (Seidel, 1994).

07:14. ***Pseudemys concinna floridana***: This taxon was previously considered a separate species, but was designated a subspecies of *concinna* by Seidel (1994). Jackson (1995) argued for the retention of *floridana* as a full species, but Seidel (1995) rejected this argument.

07:15. ***Pseudemys concinna suwanniensis***: Previously considered a subspecies of *concinna*, Seidel (1994) argued for the elevation of this taxon to full species status, but Jackson (1995) argued for its subspecific status.

07:16. ***Pseudemys gorzugi***: This taxon was previously considered a subspecies of *concinna*, but was elevated to species status by Ernst (1990) without argumentation, but then supported through analysis by Seidel (1994).

07:17. ***Pseudemys peninsularis***: This taxon was previously considered a subspecies of *floridana*, but was elevated to species status by Seidel (1994). Jackson (1995) argued for the retention of *peninsularis* as a subspecies of *floridana*, but Seidel (1995) reaffirmed his recognition.

07:18. ***Trachemys* species**: Seidel (2002) recommended elevating nine Mesoamerican taxa, previously recognized as subspecies of *Trachemys scripta*, to species rank.

07:19. ***Trachemys* subspecies**: Seidel (2002) also recommended reassigning five taxa, previously subspecies of *scripta*, to subspecies of his various elevated *Trachemys* species.

07:20. ***Trachemys dorbigni***: Includes the previously recognized subspecies *brasiliensis* Freiberg 1969 in synonymy, based on morphologic work (del Barco and Larriera, 1993).

07:21. ***Emydoidea* and the turtles formerly known as *Clemmys***: The four traditional species of *Clemmys* (*guttata* [type], *insculpta, muhlenbergii*, and *marmorata*) do not form a monophyletic group with respect to the two monotypic genera *Emys orbicularis* and *Emydoidea blandingii* in phylogenies based on DNA data (Bickham et al., 1996; Burke et al., 1996; Lenk et al. 1999; Feldman and Parham, 2002). While there is a general agreement that *insculpta* and *muhlenbergii* are sister-species and should be placed in the genus *Glyptemys* (Holman and Fritz, 2001; Parham and Feldman, 2002), there are two schemes presented for *marmorata* and *blandingii*. Holman and Fritz (2001) recommended that *marmorata* be placed in the monotypic genus *Actinemys*, retaining both *Emys orbicularis* and *Emydoidea blandingii* as additional monotypic genera. Other authors (Bickham et al., 1996; Feldman and Parham, 2002; Parham and Feldman, 2002) recommended that *marmorata* and *blandingii* be placed into an expanded *Emys*, a scheme favored in the most recent analysis of variation in *marmorata* (Spinks and Shaffer, 2005).

07:22. ***Emys* or *Actinemys marmorata***: Previously, two subspecies were distinguished, including *pallida* Seeliger 1945, but genetic analysis by Spinks and Shaffer (2005) demonstrated that the typical and previously recognized subspecies *pallida* were within the same phylogeographic clade and so *pallida* should not be considered valid.

07:23. ***Emys orbicularis iberica***: Includes the recently described subspecies *kurae* Fritz 1994 in synonymy (Fritz, 1998).

07:24. ***Emys orbicularis persica***: Includes the recently described subspecies *orientalis* Fritz 1994 in synonymy (Fritz, 1998).

07:25. **Mexican *Terrapene carolina***: Stephens and Wiens (2003) suggested that Mexican subspecies of *T. carolina* may warrant full species status. While this convention has also been adopted previously (Smith et al., 1996), almost all other workers recognize these as subspecies.

07:26. **Platysternidae**: Krenz et al. (2005) confirmed that nuDNA placed *Platysternon* solidly within the Testudinoidea, and Parham et al. (2006a) supported this finding with mtDNA.

07:27. ***Platysternon megacephalum***: Ernst and Laemmerzahl (2002) synonymized two subspecies of *megacephalum* (*vogeli* Wermuth 1969 and *tristernalis* Schleich and Gruber 1984) with the nominate subspecies.

07:28. **Testudinoidae or Testuguria**: Shaffer et al. (1997) coined the name 'Testudinoidae' for the clade that united Testudinidae with Bataguridae/Geoemydidae. Joyce et al. (2004) listed Testudinoidae as an undesirable derivative of *Testudo* being to similar to both 'Testudinidae' and 'Testudinoidea.' In that same paper, the authors coined the new clade name 'Testuguria' for that same clade (while neglecting to list Testudinoidae as an objective senior synonym). Parham et al. (2006a) explicitly argued for the use of Testuguria over Testudinoidae.

07:29. **Bataguridae or Geoemydidae**: Both names are being used to refer to this group of predominantly Asian testudinoids. McDowell (1964) used the name Batagurinae for this group (as a subfamily) which was changed to Bataguridae (as a family) by Gaffney and Meylan (1988). Bour and Dubois (1986) showed that Geoemydidae has priority, and David (1994), Spinks et al. (2004) and others have embraced this view. However, this approach was questioned by Joyce et al. (2004) who, working in a rank-free phylogenetic taxonomy framework, recommended the continued use of Bataguridae. In the interest of reconciling phylogenetic nomenclature with traditional Linnaean rules of priority, Parham et al. (2006a) endorsed a phylogenetic codification of Geoemydidae.

07:30. ***Batagur***: Praschag et al. (2007b) and Le et al. (2007) demonstrated that species of *Kachuga* were genetically paraphyletic with respect to those referred to *Batagur* and *Callagur* and recommended that only one genus be recognized, and the name *Batagur* has priority.

07:31. ***Batagur baska***: The subspecies *ranongensis* Nutaphand 1979 is not well differentiated and has been synonymized under *baska* by Fritz and Havas (2006, 2007), but no specific morphologic or genetic analysis has yet been performed to formally evaluate the status of this taxon.

07:32. ***Cuora***: Phylogenies based on DNA data (Honda et al., 2002a; Stuart and Parham, 2004; Parham et al., 2004; Spinks et al., 2004) have shown that continued recognition of the genus *Pyxidea* for *mouhotii* would render *Cuora* paraphyletic. All of these studies recommended expanding *Cuora* to include *mouhotii*. Other schemes for *Cuora* have not been published in the recent scientific literature, though there has been some use of *Cistoclemmys* for *flavomarginata* and *galbinifrons* (e.g., Zhao et al., 1997; Zhao, 1997; Yasukawa and Ota, 1999).

07:33. **Hybrid species**: The validity of six taxa of *Cuora, Mauremys* [including *Ocadia*], and *Sacalia* recently described from pet trade specimens has been refuted by genetic studies that have shown them to be based on hybrids (Parham et al., 2001; Wink et al., 2001; Spinks et al., 2004; Stuart and Parham, 2004, 2007). The taxa shown to be hybrids are: *Cuora galbinifrons serrata* Iverson and McCord 1992b, *Mauremys iversoni* Pritchard and McCord 1991, *Mauremys pritchardi* McCord 1997, *Ocadia glyphistoma* McCord and Iverson 1994, *Ocadia philippeni* McCord and Iverson 1992, and *Sacalia pseudocellata* Iverson and McCord 1992a.

07:34. ***Cuora flavomarginata sinensis***: Some authors recognize this taxon as a valid subspecies (McCord and Iverson, 1991; Fong et al., 2002) while others synonymize it with *flavomarginata* (Yasukawa and Ota, 1999; Fritz and Havas, 2006, 2007).

07:35. ***Cuora galbinifrons***: The taxa *bourreti* and *picturata*, originally described as subspecies of *Cuora galbinifrons*, were elevated to species rank by Stuart and Parham (2004) based on concordance of morphological with molecular differentiation. Fritz et al. (2006c) returned *bourreti* to subspecies rank based on osteological characters shown by market specimens, and suggested that *picturata* warrants the same ranking; Fritz and Havas (2006, 2007) subsequently listed *picturata* at subspecies rank based on morphologically intermediate pet trade specimens. Includes the previously recognized *hainanensis*

Li 1958 in synonymy (Zong and Pan, 1989; Iverson and McCord, 1992b).

07:36. ***Cuora trifasciata***: Blanck et al. (2006a) recommended that *Cuora trifasciata* be split into two species (including their newly named species *cyclornata* and its new subspecies *meieri*) based on paraphyletic mtDNA haplotypes and morphological differences. Spinks and Shaffer (2007) showed that *trifasciata* as traditionally recognized is monophyletic based on nuDNA and therefore recommended that *cyclornata* should not be recognized, pending additional study.

07:37. ***Cuora yunnanensis***: This species has been listed as extinct by the IUCN since 2000 (www.iucnredlist.org), based on several decades of not finding any surviving animals despite intensive searches. Recently, a pair of animals representing this species were found in markets (Zhou and Zhao, 2004; Zhou, 2005), with subsequent confirmation through genetic analysis (He et al., 2007).

07:38. ***Cyclemys***: Iverson (1992) recognized two taxa of *Cyclemys* (*dentata* and *tcheponensis*). Later, *atripons* and *pulchristriata* were described and *oldhamii* was resurrected (Iverson and McCord, 1997; Fritz et al., 1997). Genetic analysis by Guicking et al. (2002) also supported the validity of *shanensis*.

07: 39. ***Geoemyda***: Yasukawa et al. (1992) elevated *japonica* to species status (previously considered a subspecies of *spengleri*).

07:40. ***Hardella thurjii***: Praschag et al. (2007b) found no genetic or morphologic evidence for continued recognition of the subspecies *indi* Gray 1870b, and synonymized it under *thurjii*.

07:41. ***Heosemys annandalii* [formerly in *Hieremys*]**: Spinks et al. (2004) showed that *annandalii* was nested among species of *Heosemys*. Diesmos et al. (2005) formally moved *annandalii* into *Heosemys*.

07:42. ***Leucocephalon yuwonoi* [formerly in *Geoemyda* or *Heosemys*]**: Originally described as a species of *Geoemyda* (McCord et al., 1995), Fritz and Obst (1996) placed *yuwonoi* in *Heosemys*. McCord et al. (2000) showed that *yuwonoi* was not closely related to the type species of *Geoemyda* or *Heosemys*, but instead sister to *Notochelys platynota*, and erected a new genus, *Leucocephalon*, for *yuwonoi*.

07:43. ***Malayemys macrocephala***: Brophy (2004) proposed the recognition of this species as distinct from *subtrijuga* based on morphological grounds.

07:44. ***Mauremys* [including species formerly in *Annamemys*, *Chinemys*, or *Ocadia*]**: Iverson and McCord (1994) included *annamensis* under an expanded *Mauremys*. Subsequent phylogenies based on DNA data (Honda et al., 2002b; Barth et al., 2004; Feldman and Parham, 2004; Spinks et al., 2004) showed that the genera *Ocadia* and *Chinemys* rendered *Mauremys* paraphyletic. Based on these results, some authors (Feldman and Parham, 2004; Spinks et al., 2004) recommended synonymizing *Ocadia* and *Chinemys* under *Mauremys*. Barth et al. (2004) presented this same scheme as well as one that would retain *Chinemys* and *Ocadia* and further divide *Mauremys* into the genera *Cathaiemys* and *Emmenia*. Barth et al. (2004) did not favor one scheme over the other and a competing scheme for *Mauremys* has not been formally proposed in the scientific literature.

07:45. ***Mauremys leprosa***: Fritz et al. (2006a) explicitly synonymized several subspecies of *leprosa* recently described by Schleich (1996a) (*atlantica, erhardi, marokkensis, wernerkaestlei*, and *zizi*) plus *vanmeerhaeghei* Bour and Maran 1998 [1999], and only recognized *leprosa* and *saharica*.

07:46. ***Mauremys reevesii***: Iverson et al. (1989) and Barth et al. (2003, 2004) refuted the validity of the terminal taxon *megalocephala* Fang 1934, but it has continued to be recognized by Chinese researchers (Guo et al., 1997; Zhao, 1997; Zhang et al., 1998), and Fritz and Havas (2006, 2007) listed it as a separate taxon with speculation about its relationships.

07:47. ***Melanochelys trijuga edeniana***: The subspecies *wiroti* Reimann 1979 was recognized by Iverson (1992), but David (1994) suggested that it was synonymous with *edeniana*, and Fritz and Havas (2006, 2007) followed this arrangement.

07:48. ***Pangshura* [formerly in *Kachuga*]**: Das (2001) and Schleich and Kästle (2002) used the name *Pangshura* to refer to small-bodied *Kachuga*. A phylogeny based on DNA data (Spinks et al., 2004) showed that *Kachuga* was paraphyletic and so removed *flaviventer, smithii, sylhetensis, tecta*, and *tentoria* into the genus *Pangshura*. Praschag et al. (2007b) using mtDNA confirmed the well-supported monophyly of *Pangshura*.

07:49. ***Pangshura tentoria flaviventer***: Schleich and Kästle (2002) elevated *flaviventer* to full species status based on sympatry with *circumdata*, but Praschag et al. (2007b) performed a phylogeographic analysis and retained *flaviventer* as a subspecies of *tentoria*.

07:50. ***Siebenrockiella leytensis* [formerly in *Heosemys*]**: Diesmos et al. (2005) placed *leytensis* into the genus *Siebenrockiella* based on strong genetic evidence for its sister relationship to *S. crassicollis*.

07:51. ***Vijayachelys silvatica* [formerly in *Geoemyda*]**: This species was originally named as a species of *Geoemyda*. However, a molecular study by Praschag et al. (2006) suggested a distant relationship with that genus and they recommended that it be placed in the new monotypic genus *Vijayachelys*.

07:52. **The *Geochelone* complex**: This generic complex includes the genera *Geochelone, Aldabrachelys, Astrochelys, Angonoka, Centrochelys, Chelonoidis, Dipsochelys*, and *Stigmochelys*. Lapparent de Broin (2000b), Gerlach (2001, 2004), Le et al. (2006), and Fritz and Bininda-Emonds (2007) recommended dividing the *Geochelone* complex into several genera, although their schemes differ somewhat. A general consensus on a generic-level revision for some members of the group is lacking while in other areas (e.g., *Astrochelys radiata*, *Chelonoidis*) there is agreement.

07:53. ***Aldabrachelys* or *Dipsochelys***: Bour (1982a) originally recommended that Aldabran tortoises (*dussumieri* or *gigantea*) be placed in the genus *Dipsochelys* instead of *Aldabrachelys*. However, *Aldabrachelys* is still widely used, including sometimes by Bour (Austin et al., 2003), though *Dipsochelys* is favored by others (Palkovacs et al., 2002, 2003; Gerlach, 2004). There is recent disagreement regarding the type specimen of *Testudo gigantea*, the type species of *Aldabrachelys*, that was presumed lost. Frazier (2006) designated a neotype for *T. gigantea*, an act that would seemingly validate the use of both *Aldabrachelys* and the terminal taxon *gigantea*. Around the same time, Bour (2006) rediscovered the original lost type specimen, which is actually an individual of the South American tortoise *Chelonoidis denticulata*. If this claim is correct, then the names *Aldabrachelys* or *gigantea* might not be applicable to Aldabran tortoises. Whether Frazier's neotype designation or Bour's specimen rediscovery prevails nomenclaturally remains a matter of ongoing debate, but since Bour (2006) was the most recently published authority we use the name *dussumieri* rather than *gigantea* in our list.

07:54. ***Aldabrachelys* or *Dipsochelys* species**: Gerlach and Canning (1998) recognized six species of tortoises in Aldabra, Madagascar, and the Seychelles (three of which were extinct: *abrupta, daudinii*, and *grandidieri*). The two species from Madagascar became extinct prior to modern times (*abrupta* Grandidier 1868 in ca. 1250 AD and *grandidieri* Vaillant 1885b in ca. 950 AD) so we do not include them in our list of modern taxa. Palkovacs et al. (2002, 2003) questioned the validity of multiple extant species based on their analysis of genetic data, recognizing only a single living taxon (*Dipsochelys dussumieri*). Gerlach and Bour (2003) reemphasized the validity of the extant species based on the observation that the hatchlings are diagnostic. Fritz and Havas (2006, 2007) recognized only one extant species of Indian Ocean giant tortoise which they referred to *Aldabrachelys gigantea*, but did not address the findings of Gerlach and Bour (2003) or Bour (2006). As we consider the issues surrounding the validity of these species as remaining unresolved, we list all these species as potentially valid.

07:55. ***Aldabrachelys* or *Dipsochelys dussumieri***: Iverson (1992) listed this species as *Geochelone gigantea* Schweigger 1812. Many authors now use *dussumieri* for the Aldabra tortoise (see above), but others persist in using the older name *gigantea* (e.g., Fritz and Havas, 2006, 2007), and others have used the name *elephantina* Duméril and Bibron 1835 (David, 1994; Devaux, 2007).

07:56. ***Astrochelys* or *Angonoka yniphora***: Le et al. (2006) named *Angonoka* for *yniphora* because of its uncertain phylogenetic position. Fritz and Bininda-Emonds (2007) recovered a weak sister relationship between *yniphora* and *Astrochelys radiata* under some algorithms and recommended that *yniphora* be placed in *Astrochelys*.

07:57. ***Chelonoidis petersi***: According to Cabrera (1998), citing morphologic and osteologic work by Fernández (1988), *Chelonoidis chilensis* should be divided into two species, *chilensis* and *petersi* Freiberg 1973, but he considered the taxon *donosobarrosi* Freiberg 1973 to be synonymous with *chilensis*. Fritz and Havas (2006, 2007) speculated that *petersi* may not be valid and synonymized it under *chilensis*, citing phenotypic plasticity in other tortoise species as a reason for not accepting the reported differences between *petersi* and *chilensis*.

07:58. ***Chelonoidis nigra***: Most recent authors have considered the various taxa of Galapagos tortoises as subspecies of *nigra* (e.g., Pritchard, 1996; Caccone et al., 1999; Fritz and Havas, 2006, 2007), but Caccone et al. (2002) and Russello et al. (2005, 2007) treated them as distinct species. The nomenclatural and survival status of these taxa were discussed in detail by Pritchard (1996).

07:59. ***Chelonoidis nigra chathamensis***: This taxon described from western Chatham Island (San Cristóbal) appears to have been extirpated from its original range, but a population of tortoises persists on eastern Chatham Island

that was considered a possible separate subspecies by Pritchard (1996). Pending genetic analysis and resolution of this issue we continue to list *chathamensis* as the extant taxon from Chatham, whereas Fritz and Havas (2006, 2007) listed it as extinct, but made no mention of the extant population.

07:60. ***Chelonoidis nigra duncanensis***: This taxon from Duncan Island (Pinzón) was historically usually referred to *ephippium* Günther 1875a, but Pritchard (1996) demonstrated that *ephippium* was a synonym of *abingdonii* and therefore resurrected the old nomen nudum *duncanensis* Garman 1917.

07:61. ***Chelonoidis nigra nigra***: The nominotypical subspecies *nigra* from Charles Island (Santa Maria or Floreana) is considered to be extinct and is therefore included separately on this list.

07:62. ***Chelonoidis nigra phantastica***: This taxon was listed by Fritz and Havas (2006, 2007) as extant, but Pritchard (1996) considered it probably extinct.

07:63. ***Chelonoidis nigra porteri***: This taxon from Indefatigable Island (Santa Cruz) has often been referred to *nigrita* Duméril and Bibron 1835, but most recent authors, including Pritchard (1996) and Fritz and Havas (2006, 2007) have used *porteri*.

07:64. ***Chelonoidis nigra vicina***: This widespread taxon from Albemarle Island (Isabela) was previously recognized as one of several valid taxa on that island, including *becki* Rothschild 1901, *microphyes* Günther 1875a, *guentheri* Baur 1889, and *vandenburghi* De Sola 1930. Pritchard (1996) synonymized *microphyes, guentheri*, and *vandenburghi* under vicina, and recognized only *vicina* and *becki* from Albemarle.

07:65. ***Cylindraspis indica***: Includes the recently described *borbonica* Bour 1978 in synonymy, based on genetic work by Austin and Arnold (2001).

07:66. ***Cylindraspis vosmaeri***: Fritz and Havas (2006) credited Fitzinger 1826 with authorship of this name, but corrected it to Suckow 1798 in their 2007 checklist.

07:67. ***Homopus***: A separate taxon of *Homopus* was referred to *H. bergeri* Lindholm 1906 by Branch (1989). However, that name was a junior synonym of *Psammobates tentorius verroxii* Smith 1839 (Branch, 1992; Boycott and Bourquin, 2000), and the new taxon was recently described as *H. solus* by Branch (2007).

07:68. ***Indotestudo travancorica***: This taxon was previously considered a subspecies of *forstenii* (Hoogmoed and Crumly, 1984; Iverson, 1992), but was resurrected to species status by Pritchard (2000) based on morphology, a conclusion supported by mtDNA analysis by Iverson et al. (2001c).

07:69. ***Kinixys belliana***: Fritz and Havas (2006, 2007) recognized only *belliana* and *nogueyi*, following Broadley (1993) uncritically, but others (Iverson, 1992; David, 1994; Iverson et al., 2001a) also recognized *domerguei* and *zombensis*. As the phylogeography of this broadly distributed species complex has not been analyzed, we list the four most widely recognized subspecies.

07:70. ***Pyxis arachnoides***: The three recognized subspecies have recently been confirmed as genetically distinct lineages (Chiari et al., 2005).

07:71. ***Stigmochelys* or *Psammobates pardalis***: Based on genetic analysis, Le et al. (2006) recommended that this taxon be included in an expanded genus *Psammobates*. Fritz and Bininda-Emonds (2007) argued for the retention of a monophyletic *Psammobates* exclusive of *pardalis*. Le at al. (2006) also found a high level of mitochondrial divergence between two specimens assigned to the two subspecies *pardalis* and *babcocki*. In conjunction with morphological distinctions between these two taxa (Loveridge and Williams, 1957; Broadley, 1989), the preliminary genetic data suggest that they may be different at the species level.

07:72. ***Testudo* or *Agrionemys***: The species *horsfieldii* and *hermanni* have been alternatively placed in the genera *Testudo* or *Agrionemys* (Khosatzky and Mlynarski, 1966; Gmira 1993, 1995) and *hermanni* also recently in *Eurotestudo*. Lapparent de Broin (2000a,b) and Parham et al. (2006b) supported the placement of *horsfieldii* in the genus *Agrionemys*, but suggested that a new genus name was needed for *hermanni*. Later Lapparent de Broin et al. (2006a) created the name *Eurotestudo* for *hermanni*, but Fritz and Bininda-Emonds (2007) demonstrated that older genus names (*Chersine* and *Medaestia*) are available for that species. Fritz and Bininda-Emonds (2007) recovered a weakly monophyletic clade that included *horsfieldii, hermanni*, and the three core species of *Testudo* (*graeca, kleinmanni*, and *marginata*). Based on this phylogeny they recommended that all of these species be placed in the genus *Testudo*. The genetic support for some nodes within this clade is not strong and the decision to lump or split is subjective (e.g., whether *Agrionemys* should be used for *horsfieldii* is open to debate), therefore the taxonomy of this group may remain in flux for some time.

07:73. ***Testudo graeca***: This species complex has been the subject of massive taxonomic revisions at the species and subspecies level. These revisions have resulted in the naming and elevation of numerous taxa (e.g., Perälä, 2002a,b,c). Several studies (van der Kuyl et al., 2002, 2005; Harris et al., 2003; Carretero et al., 2005; Parham et al., 2006b,c; Fritz et al., 2007) have explicitly refuted the validity of many of these taxonomic acts. Fritz et al. (2007) proposed a taxonomic scheme that recognized five mitochondrial clades in the eastern part of the range of *T. graeca* as subspecies, but did not address the status of several North African subspecies. Since this is the most recent taxonomic suggestion, it is listed here. However, in their recent checklist, Fritz and Havas (2006, 2007) included not only the eleven taxa we list, but also *anamurensis* Weissinger 1987, *antakyensis* Perälä 1996, *floweri* Bodenheimer 1935, *nikolskii* Chkhikvadze and Tuniyev 1986, *pallasi* Chkhikvadze and Bakradze 2002, and *perses* Perälä 2002c. The relationships within this species complex remain uncertain and we expect its taxonomy to continue fluctuating.

07:74. ***Testudo kleinmanni***: Baha el Din (2006), Široký and Fritz (2007), and Attum et al. (2007) explicitly refuted the validity of *werneri* Perälä 2001 as a species distinct from *kleinmanni*.

07:75. ***Testudo marginata***: Fritz et al. (2005b) explicitly refuted the validity of *weissingeri* Bour 1996 as a subspecies of *marginata*.

07:76. ***Testudo hermanni***: Fritz et al. (2006b) explicitly refuted the validity of *hercegovinensis* Werner 1899 (previously resurrected by Perälä, 2002b) and recommended that *boettgeri* be considered a subspecies of *hermanni*.

07:77. ***Testudo horsfieldii***: In a conference proceedings, Perälä (2002a) elevated two subspecies of *horsfieldii* (*kazachstanica* and *rustamovi*) to full species status. This was accepted by Lapparent de Broin et al. (2006b), but warrants reconsideration, especially considering the evidence for unjustified taxonomic inflation in related tortoises in the same work (van der Kuyl et al., 2002, 2005; Fritz et al., 2005b, 2006b; Parham et al., 2006b,c).

07:78. ***Carettochelys insculpta canni***: This subspecies from northern Australia described by Wells (2002a) was only weakly defined as different from the nominotypical subspecies from New Guinea. We list it tentatively pending further analysis, as did Fritz and Havas (2006), although they excluded it from their 2007 checklist.

07:79. ***Apalone spinifera atra***: This taxon has usually been designated a subspecies of *spinifera* (usually with the original spelling *ater*), but others (e.g., Flores-Villela, 1993; David, 1994) have listed it as a full species, though usually without specific argumentation.

07:80. ***Aspideretes* or *Nilssonia***: Engstrom et al. (2004) found *Aspideretes* to be paraphyletic with respect to *Nilssonia formosa* based on morphologic and genetic criteria. Praschag et al. (2007a) formally synonymized *Aspideretes* into an expanded concept of *Nilssonia* based on their analysis of mtDNA of all five included taxa.

07:81. ***Aspideretes* or *Nilssonia nigricans***: Recent morphologic and genetic work on this species previously known only from a single captive population has demonstrated that it also occurs in the wild (Praschag and Gemel, 2002; Praschag et al., 2007a).

07:82. ***Pelodiscus***: The genus has recently been recognized as including up to four separate species by some authorities (David, 1994; Zhao, 1997; Chen et al., 2005, 2006; Fritz and Havas, 2006, 2007). Relationships within the genus are far from resolved and also complicated by translocation and mixing of huge numbers of farm-raised individuals from many parts of the range.

07:83. ***Rafetus swinhoei***: Includes the recently described *Pelochelys taihuensis* Zhang 1984 (Farkas, 1992) and *Rafetus leloii* Duc 2000 in synonymy (Farkas and Webb, 2003).

07:84. ***Acanthochelys macrocephala***: Includes the recently described *Phrynops chacoensis* Fritz and Pauler 1992 in synonymy (Fritz and Pauler, 1999).

07:85. ***Chelodina***: This genus was split into three genera by Wells and Wellington (1985), using *Chelodina* for the narrower-headed shorter-necked species (*longicollis, novaeguineae*), and establishing *Macrochelodina* for the broader-headed longer-necked species (*oblonga, expansa, rugosa, siebenrocki*), and *Hesperochelodina* for *steindachneri*. Iverson et al. (2001b) refuted the availability of the name *Hesperochelodina*, but validated *Macrochelodina*. Georges et al. (2002) retained *Chelodina* for the entire genus, but identified three phylogenetic clades within the genus and recommended recognition of three subgenera (but did not name them). Fritz and Havas (2006, 2007) accepted two of these clades (*Chelodina* and *Macrochelodina*) as separate genera.

07:86. ***Chelodina canni***: This taxon is the same as the previously described *rankini* Wells and Wellington 1985, but that name was declared invalid as a *nomen nudum* by Iverson et al. (2001b). Wells (2007a) recently disputed this interpretation and redescribed *rankini*, but *canni* McCord and Thomson

2002 retains nomenclatural precedence and *rankini* Wells 2007a is therefore a junior synonym of *canni*.

07:87. ***Chelodina mccordi roteensis***: This recently named subspecies described in the hobbyist literature needs genetic confirmation of its distinctiveness, but we recognize it pending further analysis.

07:88. ***Chelodina oblonga***: Thomson (2000) showed that the holotype of *oblonga* Gray 1841 is a specimen of what is currently regarded as *Chelodina rugosa* Ogilby 1890. An application is before the International Commission for Zoological Nomenclature (ICZN) to conserve current usage of the name *C. rugosa* Ogilby 1890 for the northern snake-necked turtle and to apply the earlier available name *Chelodina collei* Gray 1856a to the long-necked species of southwestern Australia, while retaining the nomenclatural availability of the name *oblonga* for potential future designation of distinct populations of *rugosa* (Thomson, 2006). Though no decision has yet been rendered by the ICZN, Fritz and Havas (2006, 2007) used the name *colliei* for this southwestern population. Georges et al. (2002) found support that this taxon represents a third subgenus under *Chelodina*, but did not formally establish it under a generic-level name.

07:89. ***Chelodina timorensis***: This species recently described in the hobbyist literature by McCord et al. (2007b) was also described a few months later as a new subspecies of *mccordi* ('*timorlestensis*') by Kuchling et al. (2007), but the McCord et al. description has chronologic precedence. Concerns surrounding the history and methodology of the description of *timorensis* by McCord et al. are discussed by Kuchling et al. (2007) and serve to emphasize our recommendations (made in our other chapter in this volume) to follow certain procedural guidelines for descriptions of new taxa (Turtle Taxonomy Working Group, 2007a).

07:90. ***Chelodina kuchlingi***: This species was described from a single specimen, leading to doubts about its validity (Georges and Thomson, 2006; Fritz and Havas, 2006, 2007), but it remains listed pending further exploration of its remote area of provenance.

07:91. ***Chelodina rugosa***: The species *siebenrocki* Werner 1901 was considered valid by Rhodin and Mittermeier (1976) and Rhodin and Genorupa (2000), but synonymized under *rugosa* by Georges et al. (2002) based on weakly differentiated allozymes within the broader *rugosa* complex.

07:92. ***Elseya***: This genus has been recognized as consisting of two separate lineages (Georges and Rose, 1996; Georges and Thomson, 2006). It was subsequently split into two genera, *Elseya* and *Wollumbinia*, by Wells (2007c), with *latisternum* designated genotype of *Wollumbinia*. Papers by Wells (2002a,b; 2007a,b,c) and Wells and Wellington (1985) have been self-published without any peer review and also highlight our recommendations to follow certain procedural guidelines for descriptions of new taxa (Turtle Taxonomy Working Group, 2007a).

07:93. ***Elseya branderhorsti***: This species was considered valid by Rhodin and Genorupa (2000), Thomson et al. (2006), and Georges and Thomson (2006).

07:94. ***Elseya jukesi***: The name *jukesi* Wells 2002b was a *nomen nudum* since no type specimen was designated, but the species was recently redescribed by Wells (2007b).

07:95. ***Elseya schultzei***: This species was listed by Thomson et al. (2006) and Georges and Thomson (2006), but neither morphologic nor genetic data have been analyzed from the type population and its status remains unclear.

07:96. ***Elseya stirlingi***: The previously named taxon *stirlingi* Wells and Wellington 1985 was declared invalid as a *nomen nudum* by Iverson et al. (2001b) (though spelled erroneously as *sterlingi*), but was recently redescribed as a valid species by Wells (2007b).

07:97. ***Elseya* or *Wollumbinia bellii***: The taxon *dorriani* Wells 2002b is a *nomen nudum* without a type designation, but was recently considered a valid subspecies of *bellii* by Wells (2007c).

07:98. ***Emydura macquarii***: The taxonomy of *E. macquarii* was previously reviewed by Georges and Adams (1996). Later, Cann et al. (2003) and McCord et al. (2003) described two new subspecies, but taxa previously described by Cann in 1998 (*binjing*, *dharra*, *dharuk*, and *gunabarra*), plus *signata* Ahl 1932 were not specifically evaluated by those authors. However, these taxa were all recognized as subspecies of *macquarii* by Fritz and Havas (2006, 2007), and since phylogeographic variation in the *macquarii* species complex has not yet been fully resolved with adequate genetic work, we tentatively list all these subspecies as valid, pending further analysis.

07:99. ***Emydura subglobosa worrelli***: Originally described as *Tropicochelymys worrelli*, this taxon was synonymized under *Emydura victoriae* Gray 1842 by Iverson (1992) and the nomenclatural validity of the species name confirmed by Iverson et al. (2001b). Cann (1998) considered it a distinct species, but Georges and Thomson (2006), partially based on electrophoretic work by Georges and Rose (1996), concluded that it was best referred to as a subspecies of *subglobosa* Krefft 1876. Fritz and Havas (2006, 2007) also listed it as a subspecies of *subglobosa*, but Georges et al. (2006) referred to it as a species, though without providing data or argument.

07:100. ***Phrynops***: Wermuth and Mertens (1977) divided this genus into three subgenera: *Phrynops*, *Batrachemys*, and *Mesoclemmys*. Cabrera (1998) and Georges et al. (1998) elevated these subgenera to generic level. McCord et al. (2001) further divided the remaining monophyletic *Phrynops* into a total of four genera (*Bufocephala*, *Phrynops*, *Ranacephala*, and *Rhinemys*). Joyce et al. (2004) did not accept the taxonomic acts of McCord et al. (2001). Bour and Zaher (2005) synonymized *Bufocephala* and *Ranacephala* with *Mesoclemmys*, but recognized *Rhinemys* as distinct.

07:101. ***Mesoclemmys heliostemma***: Rueda-Almonacid et al. (2007) questioned the validity of this taxon which is completely sympatric with *raniceps*, suggesting that it may simply represent a juvenile color morph of that taxon, and recommended genetic analysis.

07:102. ***Pelomedusa subrufa***: Gasperetti et al. (1993) recommended that the two previously recognized subspecies (*nigra* Gray 1863b and *olivacea* Schweigger 1812) be abandoned.

07:103. ***Pelusios seychellensis***: The taxonomic status of this species is unclear. Gerlach and Canning (2001) concluded that it is extinct.

07:104. **Podocnemididae or Podocnemidae**: Cope (1868) used the name Podocnemididae to refer to this clade. Baur (1893b) later referred to this group as Podocnemidae. Joyce et al. (2004) phylogenetically defined Baur's name (Podocnemidae) to refer to this clade.

07:105. ***Podocnemis unifilis***: This long-recognized species was briefly referred to as *P. cayennensis* Schweigger 1812 by David (1994), but that name was previously often used for what is now recognized as *P. erythrocephala* (Mittermeier and Wilson, 1974), and most authors have continued to use *unifilis*.

2008 Checklist Annotations

Rhodin et al. 2008 (000.1-38.checklist.v.1) [(08:2-25)]

08:2. ***Chelodina* or *Macrodiremys***: The southwestern long-necked turtle of Australia (*Chelodina oblonga* or *colliei*, see annotation below) represents one of three lineages that were considered unnamed subgenera of *Chelodina* by Georges et al. (2002). McCord and Joseph-Ouni (2007b) created the name *Macrodiremys* for *oblonga*/*colliei*, designating *Chelodina oblonga* Gray 1841, as type species by original designation and monotypy, and elevated this to a full monotypic genus. Whether *Chelodina* sensu stricto will be a subgenus of *Chelodina* sensu lato along with *Macrodiremys* and *Macrochelodina* or if all three will be used as full genera is subjective and not yet stable.

08:3. ***Chelodina* or *Macrodiremys oblonga***: Within *Chelodina*, the specific epithet *oblonga* has long been applied to a long-necked species in southwestern Australia. Thomson (2000) showed that the holotype of *oblonga* Gray 1841 is a specimen of what is currently regarded as *Chelodina rugosa* Ogilby 1890 from northern Australia. An application (Thomson 2006, 2007) is before the International Commission of Zoological Nomenclature (ICZN) to conserve current usage of the name *C. rugosa* Ogilby 1890 for the northern snake-necked turtle and to apply the next available name, *Chelodina colliei* Gray 1856a, to the long-necked species of southwestern Australia. Separately, McCord and Joseph-Ouni (2007b) designated the holotype of *colliei* as the neotype of *oblonga* which would render *colliei* a junior synonym of *oblonga* which would be incompatible with an identification of the holotype and name *oblonga* as pertaining to the northern Australian taxon. We list the southwestern long-necked species as *oblonga* because McCord and Joseph-Ouni (2007b) is the latest published action but note that, given the differing taxonomic acts and opinions, this name may remain unstable in the coming years.

08:4. ***Macrochelodina* or *Chelodina walloyarrina***: McCord and Joesph-Ouni (2007b) described the new species *Macrochelodina walloyarrina* based on morphological criteria.

08:5. ***Chelydra serpentina***: Shaffer et al. (2008) recommended synonymization of *Chelydra serpentina osceola* Stejneger 1918 into *Chelydra serpentina* (Linnaeus 1766) based on range-wide patterns in variability of mtDNA.

08:6. ***Cyclemys***: Fritz et al. (2008b) performed a revision of the genus based on molecular and morphological data that included the description of three new species (*enigmatica*, *fusca*, and *gemeli*).

08:7. ***Cyclemys dentata***: Stuart and Fritz (2008) analyzed mtDNA from type specimens of *Cyclemys belli* Gray 1863e, *Cyclemys orbiculata* Bell 1834 and *Cyclemys ovata* Gray 1863e, and confirmed their previous morphology-based synonymizations with *Cyclemys dentata* (Gray 1831d) as accurate.

08:8. ***Cyclemys oldhamii***: Stuart and Fritz (2008) placed the names *shanensis* Annandale 1918, and *tcheponensis* Bourret 1939a, into the synonymy of *oldhamii*, based on the absence of significant genetic variation between the type specimen of *oldhamii*, topotypes of *shanensis*, and samples of *tcheponensis* from near the type locality.

08:9. ***Batagur***: Praschag et al. (2008) examined mtDNA variation within *Batagur baska* sensu lato and recommended that the southern populations should be elevated to full species status and for which the available name *affinis* Cantor 1847 should be used.

08:10. ***Carettochelys insculpta***: Fritz and Havas (2007) and Georges et al. (2008) indicated that *Carettochelys insculpta canni* Wells 2002a is not an available name because it had not been published in accordance with criteria established by the International Code of Zoological Nomenclature.

08:11. ***Kinixys nogueyi***: This taxon was treated as a full species by McCord et al. (2005) with minimal argumentation for the change from traditional recognition as a subspecies of *K. belliana*.

08:12. ***Rhinoclemmys punctularia***: *Testudo scabra* Linnaeus 1758 has previously been referred (as a nomen dubium) to the synonymies of both *Melanochelys trijuga* (Schweigger 1812) and *Rhinoclemmys punctularia* (Daudin 1801) (see Fritz and Havas 2007). Examination of the holotype specimen still extant in the Uppsala Linnaean collection indicates that it appears to be a *Rhinoclemmys punctularia* (Rhodin and Carr, in press) [2009]. However, since the name *Testudo scabra* has not been used as the name for a recognized taxon since the early 1800s, it remains a nomen oblitum and does not replace the name *punctularia* Daudin 1801, recognized and used as valid since its description, and also protected by the ICZN (1963) as a nomen conservandum.

08:13. ***Aldabrachelys* or *Dipsochelys***: The generic and specific names of the Aldabra tortoise are still being debated (reviewed in TTWG 2007). The original type specimen of *Testudo gigantea* Schweigger 1812 is a *Chelonoidis denticulata* from Brazil (Bour 2006), but since the name *gigantea* had been associated with tortoises from Aldabra for a long time, Frazier (2006) designated a neotype from Aldabra, leading to some confusion. The matter is currently being petitioned to the International Commission on Zoological Nomenclature (Frazier 2008).

08:14. ***Chelonoidis nigra vicina***: The type locality for *Testudo microphyes* Günther 1875a was given as follows: "I suppose that the specimen… has come from Hood's Island," and Pritchard (1996) concluded that the name *microphyes* was a *nomen dubium* since its type specimen was not identifiable as either a Hood Island tortoise or any other recognizable taxon. Fritz and Havas (2007) indicated that Günther (1877) had subsequently designated the type locality for *microphyes* as "Tagus Cove, northern Albemarle Island" and they placed *microphyes* in the synonymy of *Testudo vicina* Günther 1875a, but this is not necessarily correct. Günther (1877) simply referred later-collected specimens from Tagus Cove to his type-based concept of *microphyes*—the name *microphyes* therefore remains a nomen dubium until such time as the original type specimen can perhaps be identified as to its exact provenance using genetic analysis.

08:15. ***Agrionemys* or *Testudo horsfieldii***: Vasilyev et al. (2008) demonstrated minimal mitochondrial variation between populations of *horsfieldii* Gray 1844 and *kazachstanica* Chkhikvadze, Amiranashvili, and Ataev 1990 and so recommended that these taxa be considered subspecies of *Agrionemys horsfieldii*. Elsewhere in the paper they referred to *A. h. rustamovi* as a third subspecies, but made no definitive comment on taxonomic status or validity.

08:16. ***Podocnemis unifilis***: The terminal taxon *lata* Bell *in* Gray 1830e has previously been included under the synonymy of *Peltocephalus dumerilianus* (Schweigger 1812) by many previous authors, including Fritz and Havas (2007), but Bell (*in* Gray 1830e) described *Chelys (Hydraspis) lata* as having a depressed black shell and orange-spotted head more typical of *Podocnemis unifilis* or *P. expansa*. Later, Gray (1870f) placed *Hydraspis lata* in the synonymy of his concept of *Chelonemys dumeriliana* (= *Podocnemis unifilis*) and added *P. unifilis, P. cayennensis*, and *P. erythrocephala* to the same synonymy, while differentiating *Peltocephalus tracaxa* (= *Peltocephalus dumerilianus*) as a distinct taxon. Though *Chelys (Hydraspis) lata* Bell *in* Gray 1830e is an older name than *Podocnemis unifilis* Troschel 1848, it is a nomen oblitum not used for a valid taxon since its description, and therefore does not replace *unifilis* as the valid name for the species.

08:17. ***Trachemys decussata***: Authorship of this taxon was actually first by Bell (*in* Griffith and Pidgeon 1830) with a plate. Seidel (1988a) listed the author as Gray 1831:28 (= Gray 1831d), and Fritz and Havas (2007) listed the author as Gray 1831:11 (= Gray 1830e). Griffith and Pidgeon 1830 was published in September 1830, whereas Gray 1830e was published in December 1830, and Gray 1831d was published in May 1831.

08:18. ***Graptemys geographica***: The name *lesueuri* Gray 1830d (= *lesueurii* Gray 1830e) was shown by Bour and Dubois (1983) to be a junior synonym of *geographica* LeSueur 1827 rather than a senior synonym of *pseudogeographica* Gray 1831d as recorded by Fritz and Havas (2007).

08:19. ***Graptemys pseudogeographica***: The name *pseudogeographica* Gray 1831d was originally published only as a nomen nudum of a LeSueur manuscript name in junior synonymy under *geographica* LeSueur 1827, but gradually achieved wide usage by many authors. Holbrook (1842) was the first to actually describe the taxon under the name *pseudogeographica*, and arguably his name should perhaps be associated with it, but Stejneger and Barbour (1917) established the name as *pseudogeographica* Gray 1831d as pointed out by Bour and Dubois (1983), who agreed that Gray should be listed as the author.

08:20. **Cryptodira and Pleurodira**: These subordinal names were based on the French vernacular names, Cryptodères and Pleurodères, originally used by Duméril and Bibron 1834. Cope (1864, 1865, 1868b) has generally been credited with authorship of these names, and he was the first to use the exact names Cryptodira in 1868 and Pleurodira in 1865, but previously used the name Pleurodera in 1864. Cope was preceded by Lichtenstein (1856) who used Cryptodera and Pleurodera as subordinal names, but in a printed catalogue distributed to zoological colleagues and museums, and not apparently sold in bookstores, so therefore perhaps not nomenclaturally available.

08:21. ***Cuora evelynae***: In the previous checklist (TTWG 2007), *Cuora flavomarginata* (Gray 1863e) had three subspecies. Ernst et al. (2008) recommended returning *Cuora evelynae* Ernst and Lovich 1990 to full species status, based on new morphological and previously published molecular data. They also argued that the mainland populations assigned to taxon *sinensis* Hsü 1930 are synonymous with nominotypical *flavomarginata*.

08:22. ***Apalone spinifera***: In the previous checklist (TTWG 2007), seven subspecies of *spinifera* LeSueur 1827 were listed. McGaugh et al. (2008) performed a rangewide phylogeographic study that uncovered patterns of discordant molecular and morphological variation. These authors conservatively refrained from making sweeping nomenclatural changes, but noted that there was "little utility" in recognizing the taxon *hartwegi* Conant and Goin 1948 and synonymized it under *spinifera*.

08:23. ***Apalone spinifera atra***: In the previous checklist (TTWG 2007), *atra* Webb and Legler 1960 was referred to as a subspecies of *spinifera* LeSueur 1827 as it is here. This taxon is sometimes considered a full species (e.g., argumentation cited in Flores-Villela 1993). Several recent studies on *atra* (McGaugh 2008, McGaugh and Janzen 2008, McGaugh et al. 2008) have argued in support of subspecies status based on low levels of genetic distinctiveness and habitat-driven color variation. The subspecific status of *atra* was followed by Cerdá-Ardura et al. (2008).

08:24. ***Sacalia quadriocellata***: Shi et al. (2008) performed a mitochondrial survey of *S. quadriocellata* based on known-locality and trade specimens. They found that populations on Hainan are genetically distinct and can also be diagnosed by morphological characters. They did not elevate these populations to species status, but noted that eventual study might validate this conclusion, in which case the name *Sacalia insulensis* (Adler 1962) would be available. They also noted that samples of *S. quadriocellata* from northern Vietnam are genetically distinct from those from Laos and the type region of central Vietnam, but there appear to be no obvious morphological differences between these populations.

08:25. ***Rhinoclemmys flammigera***: Barrio-Amorós and Narbaiza (2008) elevated *Rhinoclemmys punctularia flammigera* Paolillo 1985 to species status based on distinct head coloration pattern and allopatric isolated distribution.

2009 Checklist Annotations

TTWG 2009 (000.39-84.checklist.v.2) [09:3-49]

09:3. **Chelydridae**: Chandler and Janzen (2009) analyzed the phylogenetic position of the Chelydridae based on nucleotide sequence data, and found weak support for a sister group relationship with either the Kinosternoidea

(Kinosternidae + Dermatemydidae) or Chelonioidea (Cheloniidae + Dermochelyidae). In a more extensive analysis, Barley et al. (in press) show that Chelydridae is sister to Kinosternoidea.

09:4. ***Macrochelys temminckii***: Roman et al. (1999) showed that *M. temminckii* could be divided into three major mitochondrial clades which they treated as Evolutionarily Significant Units (ESUs). They noted that samples from the Suwannee drainage in Florida showed high divergence from the rest of the range. Echelle et al. (2009) performed a microsatellite study and further subdivided *M. temminckii* into six ESUs. They also noted that the Suwannee population was the most distinct and concluded that it might eventually be recognized as a distinct taxonomic unit.

09:5. ***Cheloniidae***: Bowen and Karl (2007) reviewed population genetics and phylogeography of marine turtles and while they noted mtDNA divergence between Indo-Pacific and Atlantic *Chelonia mydas* and *Eretmochelys imbricata*, they recognized no taxa below the species level.

09:6. **Lacépède 1788 and Bonnaterre 1789**: The International Commission on Zoological Nomenclature (ICZN) previously rejected the names created by Lacépède in his 1788 *Histoire Naturelle des Serpens* and subsequent editions since they were published in non-binomial works (ICZN 1987). However, all names published in his earlier 1788 volume, *Histoire Naturelle de Quadrupèdes Ovipares* (which contained all his turtle descriptions), continued to be nomenclaturally available until recently, when they were also rejected as being published in a non-binomial work (ICZN 2005). A few of these turtle names from the 1788 *Histoire Naturelle de Quadrupèdes Ovipares* volume had already been individually suppressed by the ICZN (1963). Therefore, Bonnaterre (1789), who republished Lacépède's descriptions with proper binomials, becomes the authorship source for these rejected Lacépède turtle names.

09:7. ***Testudo nasicornis***: *Testudo nasicornis* Lacépède 1788 was described as distinct from *Testudo caouana* Lacépède 1788 (= *Caretta caretta*) based on the possession of a soft nasal projection and on being fit for human consumption like *Testudo marina* (= *Chelonia mydas*). The species was included in the synonymy of various other marine turtle taxa until Loveridge and Williams (1957) placed it alongside *T. caouana* in the synonymy of *Caretta caretta* (Linnaeus, 1758). Bonnaterre (1789) provided an amplified description and drawing of *Testudo nasicornis*, but his concept of the taxon differed from that of Lacépède, illustrating a specimen (pl. 3, fig. 3; hereby designated as the holotype) with 13 large carapacial scutes, costal tubercles forming an interrupted lateral keel, a strongly serrated carapacial margin, and apparently two pairs of prefrontal scales. The 13 carapacial scutes are inconsistent with *Caretta* but correspond to *Chelonia* or *Eretmochelys*, while the serrated carapacial margin and apparently split prefrontals indicate that the figured specimen is an *Eretmochelys imbricata* (Linnaeus, 1766). As long as the name *Testudo nasicornis* was nomenclaturally occupied by Lacépède's 1788 description, Bonnaterre's 1789 description could simply be dismissed as an incorrect subsequent attribution. However, now that ICZN Opinion 2104 (ICZN 2005) has rejected availability of all of Lacépède's turtle names, Bonnaterre's becomes the first available usage of the name *Testudo nasicornis*. Bonnaterre's description is clearly attributable to *Eretmochelys imbricata*, and thus we consider *Testudo nasicornis* Bonnaterre 1789 to be a subjective junior synonym of that taxon, while retaining *Testudo nasicornis* Lacépède 1788 as a *nomen rejectum* attributable to *Caretta caretta*.

09:8. **Meyer 1790 species names**: Meyer (1790), in a long-overlooked review article, provided short diagnoses and replacement names (*nomina nova*) for four species described by Lacépède (1788). These names have never appeared in any subsequent synonymies and are clearly *nomina oblita*. The Meyer names are *Testudo bomarii* for *Testudo viridisquamosa* (= *Lepidochelys kempii* or *Chelonia mydas*), *Testudo lauanna* for *Testudo caouana* (= *Caretta caretta*), *Testudo sonnerati* for *Testudo punctata* (= *Lissemys punctata punctata*), and *Testudo rubra* for *Testudo subrufa* (= *Pelomedusa subrufa*).

09:9. ***Eretmochelys imbricata***: This checklist (TTWG 2007b; Rhodin et al. 2008) has previously treated *bissa* as a valid subspecies of *imbricata* in the absence of a definitive, data-based synonymization. Whereas genetic results have demonstrated distinct genetic lineages in the Atlantic and Indo-Pacific Oceans, no genetic studies or reviews (Okayama et al. 1999; Bowen and Karl 2007) have argued for continued recognition of the subspecies *bissa*. The phylogenetic structure within *Eretmochelys* is comparable to that within *Chelonia*, for which only a single monotypic species is currently recognized, and thus we now treat *bissa* as a synonym of *imbricata*.

09:10. ***Kinosternon arizonense***: The authorship of this name was given as *arizonense* Gilmore 1922 in our previous checklist as well as TTWG (2007b) and Fritz and Havas (2007). However, the article appeared in February 1923 and the year is therefore corrected.

09:11. ***Kinosternon hirtipes***: The authorship of this name was given as Wagler 1833 in our previous checklist as well as in TTWG (2007b) and Fritz and Havas (2007), whereas previous authors (e.g., Iverson 1992) have recognized *hirtipes* Wagler 1830, a name sometimes interpreted as a *nomen nudum*. However, the ICZN (1999) rules for availability of names published prior to 1931 (Article 12) state that species names must be accompanied by a "description or definition" or by an "indication". The 1830 citation for *hirtipes* is not accompanied by a description or definition, but is accompanied by an indication—the associated illustration of the holotype of the taxon being named (see Article 12.2.7). Wagler 1830 is therefore the correct authorship designation.

09:12. **Deirochelyinae**: Spinks et al. (2009b) performed a phylogenetic analysis of the Emydidae based on mitochondrial and nuclear DNA. Their mitochondrial phylogeny did not recover a monophyletic Deirochelyinae, instead it placed *Deirochelys* as the sister to the rest of Emydidae. In contrast, their nuclear data recovered a monophyletic Deirochelyinae.

09:13. ***Pseudemys***: Spinks et al. (2009b) performed a phylogenetic analysis of Emydidae based on mitochondrial and nuclear DNA. Although their sampling within *Pseudemys* was limited and uneven, their samples of *concinna* and *floridana* did not yield a monophyletic *P. concinna* with respect to *peninsularis* (mtDNA and nuclear DNA) or *nelsoni* (nuclear DNA only). Further genetic and morphological study of known locality samples will be necessary in order to resolve the taxonomic status of the terminal taxa within *Pseudemys*.

09:14. ***Trachemys***: Seidel (2002) made several recommendations about the specific and subspecific taxonomy of *Trachemys*, as reflected in our earlier checklist. Jackson et al. (2008) performed a mitochondrial survey of the genus and supported those taxonomic revisions.

09:15. ***Trachemys scripta***: Rhodin and Carr (2009) demonstrated that the original authorship of the taxon name *scripta* should be attributed to Thunberg *in* Schoepff (1792), rather than just Schoepff.

09:16. ***Emys* or *Actinemys* and *Emys* or *Emydoidea***: Using nuclear markers, Spinks and Shaffer (2009) re-emphasized a close phylogenetic relationship among *marmorata*, *orbicularis*/*trinacris*, and *blandingii* as was previously shown from mitochondrial DNA (see Feldman and Parham 2002 and case summary in annotation 21 of TTWG 2007b). Spinks and Shaffer (2009) also showed that those species share a complex evolutionary history including prehistoric hybridization, and that *blandingii* and *orbicularis*/*trinacris* are sister taxa. In light of this evidence they strongly recommended that all these species be included in the genus *Emys* rather than continued recognition of the genera *Actinemys* and *Emydoidea*. Other authors (Iverson et al. 2008) argue for the continued recognition of all three genera in this clade.

09:17. ***Emys orbicularis orbicularis***: Fritz et al. (2009b) demonstrated that the mitochondrial DNA differentiation of the two previously recognized subspecies *colchica* and *luteofusca* were insufficient to continue to recognize them as distinct and therefore synonymized both under *orbicularis*.

09:18. ***Emys orbicularis fritzjuergenobsti***: Velo-Antón et al. (2008) performed a genetic analysis of multiple populations of *Emys orbicularis* on the Iberian peninsula and found no significant genetic divergence between the two previously-defined subspecies *hispanica* and *fritzjuergenobsti*, and therefore synonymized the former under the latter.

09:19. ***Emys orbicularis persica***: Fritz et al. (2009b) demonstrated that the mitochondrial DNA differentiation of the previously recognized subspecies *iberica* was insufficient to continue to recognize it as distinct and therefore synonymized it under *persica,* thereby also bringing *kurae* under the synonymy of *persica*.

09:20. **Geoemydidae and *Rhinoclemmys***: Le and McCord (2008) evaluated the molecular phylogeny of *Rhinoclemmys* and other geoemydid genera and affirmed the monophyly of the Geoemydidae, but recommended that *Rhinoclemmys* be afforded subfamilial recognition as the Rhinoclemminae, a grouping concept first proposed by Gray (1873j) as the Tribe Rhinoclemmyina.

09:21. ***Batagur affinis edwardmolli***: Praschag et al (2009) assessed the taxonomic status of *B. affinis* using mitochondrial and nuclear genetic analysis, and described the populations of Cambodia and the eastern coast of Peninsular Malaysia as the new subspecies *edwardmolli*, with the populations of western Peninsular Malaysia and Sumatra (Indonesia) retained as the nominotypical subspecies *affinis*.

09:22. ***Cuora galbinifrons* complex**: In our previous checklists we listed the three taxa *galbinifrons*, *bourreti*, and *picturata* as subspecies of *galbinifrons*. However, the preponderance of well-documented evidence now supports the elevation of these three taxa to recognition as three closely related

full species, based on both morphology and genetics (Stuart and Parham 2004, Spinks et al. 2009a).

09:23. ***Cuora trifasciata***: Spinks et al. (2009a) assessed the validity of the recently described *Cuora cyclornata* Blanck, McCord, and Le 2006a using a combination of mitochondrial and nuclear genetic markers. Their genetic evidence elucidates a complex history of introgression involving *Cuora trifasciata* and the *Cuora pani* complex. They also provide a critique of the morphological analysis of Blanck et al. (2006), concluding that the available evidence is not sufficient to diagnose *C. cyclornata*. Following their previous analysis of this group (Spinks et al. 2006), they continue to recommend that *C. cyclornata* be considered a junior synonym of *C. trifasciata*.

09:24. ***Cyclemys* species**: Praschag et al. (2009b) analyzed mitochondrial and nuclear genes in these species, and found that *gemeli* and *fusca* were distinct but closely related, and that *atripons*, *dentata*, and *pulchristriata* were also well-differentiated and formed a well-supported clade. The taxonomy of the genus *Cyclemys* has been subject to intense debate over the past several years and will likely continue for some time before it is stabilized.

09:25. ***Geoemyda spengleri***: Gong et al. (2009) demonstrated phylogeographic structure in mitochondrial DNA within this taxon.

09:26. ***Mauremys***: Hirayama et al. (2007) recommended splitting the genus *Mauremys* (sensu Feldman and Parham 2004) into five genera (*Mauremys*, *Cathaiemys*, *Chinemys*, *Ocadia*, and an unnamed new genus) based on the morphology of the palate. The relative utility of single character typological taxonomies and monotypic genera versus restricting familiar names to well-defined evolutionary clades has been discussed elsewhere for *Mauremys* and turtles in general (Parham and Feldman 2002; Feldman and Parham 2004; Spinks et al. 2004; Turtle Taxonomy Working Group 2007a; Spinks et al. 2009). Following the philosophy outlined in these papers we retain the larger aggregate *Mauremys* and recommend consideration of subgenera for phenetically distinctive subclades (e.g., Parham and Feldman 2002; Smith and Chizsar 2006).

09:27. ***Mauremys caspica***: Fritz et al. (2008a) performed a rangewide genetic survey of *Mauremys caspica*. Their study revealed discordant patterns of morphological and genetic differentiation in this species. They did not recommend abandoning the current subspecies, but highlighted the need for future taxonomic revision.

09:28. ***Rhinoclemmys punctularia flammigera***: Barrio-Amorós and Narbaiza (2008) elevated this taxon to species status based on a brief statement about head coloration and allopatric distribution, a change we reflected in our previous checklist; however, based on the relative lack of supportive data, we treat it again as a subspecies pending further analysis.

09:29. ***Aldabrachelys* or *Dipsochelys***: The nomenclatural validity of the generic and specific names of the Aldabra tortoise (*Aldabrachelys gigantea* or *Dipsochelys dussumieri*) is currently being debated (reviewed in TTWG 2007b and Rhodin et al. 2008). There is recent disagreement regarding the type specimen of *Testudo gigantea*, the type species of *Aldabrachelys*, that was presumed lost. Frazier (2006) designated an Aldabran neotype for *T. gigantea*, an act that would validate the use of both *Aldabrachelys* and the terminal taxon name *gigantea*. Around the same time, Bour (2006) reported to have rediscovered the original lost type specimen, which is actually an individual of the South American tortoise *Chelonoidis denticulata,* making *gigantea* and *Aldabrachelys* junior synonyms of *denticulata* and *Chelonoidis*, respectively, which would thereby result in the use of *Dipsochelys dussumieri* as the valid name for the Aldabra tortoise. Whether Frazier's neotype designation or Bour's specimen rediscovery prevails nomenclaturally remains a matter of major ongoing debate. The matter has been petitioned to the International Commission on Zoological Nomenclature (Frazier 2009), with multiple commentaries on both sides of the issue (Zug et al. 2009; Bour et al. 2009; Takahashi et al. 2009), but no decision has yet been made by the ICZN.

09:30. ***Aldabrachelys* or *Dipsochelys* species**: Gerlach and Canning (1998) recognized six species of tortoises in Aldabra, Madagascar, and the Seychelles (three extant: *gigantea* or *dussumieri*, *arnoldi*, and *hololissa*; and three extinct: *abrupta*, *daudinii*, and *grandidieri*). The two species from Madagascar became extinct prior to modern times (*Testudo abrupta* Grandidier 1868 in ca. 1250 AD and *Testudo grandidieri* Vaillant 1885b in ca. 950 AD) so we do not include them in our list of modern taxa. Palkovacs et al. (2002, 2003) rejected the validity of multiple extant species inhabiting the Indian Ocean Islands based on their analysis of genetic data, recognizing only a single living taxon (*gigantea* or *dussumieri*). Gerlach and Bour (2003) re-emphasized the validity of their recognized species based on the observation that the hatchlings are diagnostic. Further morphologic and genetic research is clearly needed to determine whether more than one taxon of giant tortoise persists on the Indian Ocean Islands. Based on their lack of demonstrable genetic differences, we suggest that these morphologically-defined taxa be listed as subspecies of *gigantea/dussumieri* pending further analysis.

09:31. ***Astrochelys yniphora***: Le et al. (2006) proposed the genus name *Angonoka* for the single taxon *yniphora*, but Fritz and Bininda-Emonds (2007) showed that this species is closely related to *radiata* and so placed both species in the genus *Astrochelys* Gray 1873j. The genus name *Angonoka* has not been adopted by other authors and we recommend the use of the genus name *Astrochelys* for both *radiata* and *yniphora*.

09:32. ***Chelonoidis nigra* species complex**: Many recent authors and our previous two checklists have considered the various taxa of Galápagos tortoises as subspecies (e.g., Pritchard 1996; Caccone et al. 1999; Beheregaray et al. 2003; Fritz and Havas 2007; TTWG 2007b; Rhodin et al. 2008). However, previous authors have considered them as full species based on morphology (Bour 1980; Fritts 1983; Ernst and Barbour 1989) and recently several researchers (Caccone et al. 2002; Russello et al. 2005, 2007; Poulakakis et al. 2008; Chiari et al. 2009) have re-elevated them to species based on congruent patterns of mitochondrial and nuclear variation. Given the allopatric distribution of Gálapagos taxa, combined with the concordant patterns of mitochondrial, nuclear, and morphological variation, we support their recognition as distinct species. In raising these taxa to species, we prefer to highlight their close monophyletic relationship (as distinct from mainland South American *Chelonoidis*) by listing them as a species complex.

09:33. ***Chelonoidis nigra***: The correct epithet for the extinct Floreana tortoise is *nigra* Quoy and Gaimard 1824. Poulakakis et al. (2008) used the epithet *elephantopus* Harlan 1827, but this is in error because that name is younger and the now-lost holotype of *elephantopus* cannot be assigned to any island based on descriptions (Pritchard 1996). Extinct on Floreana since the 1850s, hybrid descendants of this species were recently discovered on Isla Isabela (Poulakakis et al. 2008; Parham 2008) indicating that the lineage persists but has interbred with *becki* Rothschild 1901. Captive cross-breeding of these *becki* x *nigra* hybrids could be used to partially reconstitute the *nigra* lineage.

09:34. ***Chelonoidis abingdonii***: Hybrid descendants of *C. abingdonii* have recently been found on Volcan Wolf on Isla Isabela (Russello et al. 2007), and since only a single male (Lonesome George) of this species survives, the lineage could be partially reconstituted by captive cross-breeding.

09:35. ***Chelonoidis porteri***: Chiari et al. (2009) performed an extensive analysis of morphological, mitochondrial, and nuclear genetic variation in the two separate populations of tortoises on Santa Cruz presently referred to the taxon *porteri*. They demonstrated that the Cerro Fatal population is genetically and morphologically distinct from the La Caseta population and warrants a formal new taxon description, currently in preparation.

09:36. ***Chelonoidis vicina***: Pritchard (1996) previously synonymized *guentheri* Baur 1898 under this taxon (see TTWG 2007b) based on lack of morphological distinctiveness. Recent genetic work by Ciofi et al. (2006) has confirmed a lack of significant genetic distinctiveness between these previously recognized taxa on southern Isabela Island.

09:37. ***Chersina angulata***: Daniels et al. (2007) have demonstrated that this taxon includes two parapatric mitochondrial lineages. These lineages are morphometrically distinct and also show ecological and behavioral differences. Taken together, these data suggest the existence of more than one taxon within *C. angulata* and the matter is under further study (Daniels et al. 2007; Hofmeyr 2009).

09:38. ***Cylindraspis indica***: In our previous checklist (Rhodin et al. 2008) we followed Fritz and Havas (2007) in synonymizing *Testudo tabulata africana* Schweigger 1812 under *Chersina angulata* (Schweigger 1812). However, Bour (1985) previously identified the type specimen of *africana* as being a *Cylindraspis graii*, and Bour (2008) reaffirmed it as a synonym of *Cylindraspis indica*.

09:39. ***Kinixys belliana nogueyi***: This taxon was treated as a full species by McCord et al. (2005) with minimal argumentation for the change from traditional recognition as a subspecies of *K. belliana,* and we followed that usage in our previous checklist. However, we now agree with Branch (2008) and traditional usage, and therefore restore *nogueyi* to a subspecies of *belliana*.

09:40. ***Testudo* or *Chersine* or *Agrionemys***: The type species and synonymizations of the genera *Chersine* Merrem 1820 and *Medaestia* Wussow 1916 have recently come under discussion. Bour and Ohler (2008) argued that *Testudo graeca* Linnaeus 1758 is the type of *Medaestia* and that *Testudo hermanni* Gmelin 1789 is the type of *Chersine*, whereas Fritz and Kraus (2008)

concluded that *hermanni* is the type species for both. In either case, the oldest available generic name for *hermanni* or the clade (*hermanni* + *horsfieldii*) is *Chersine* Merrem, 1820, of which *Eurotestudo* and perhaps *Medaestia* are objective junior synonyms. *Agrionemys* is a subjective junior synonym if *horsfieldii* is considered congeneric with *hermanni* outside the genus *Testudo*, but remains available for a monotypic genus containing *horsfieldii*.

09:41. ***Testudo graeca graeca***: Fritz et al. (2009c) demonstrated that the mitochondrial haplotype of topotypic *T. g. whitei* is identical to samples of *T. g. graeca*, a taxon with overall low genetic variation. They therefore reconfirmed placement of *whitei* Bennett *in* White 1836 in the synonymy of *graeca* Linnaeus 1758.

09:42. ***Testudo graeca marokkensis***: Fritz et al. (2009c) demonstrated that *T. g. lamberti* and *T. g. marokkensis* share the same mitochondrial haplotype. They also questioned the morphometric analyses and proposed geographical separation of *lamberti* and *marokkensis* that were used to justify these taxa, and recommended combining them into a single subspecies. Since both *lamberti* and *marokkensis* were proposed in the same publication (Pieh and Perälä 2004), they invoked the principle of first reviser and chose *marokkensis* as the valid name.

09:43. ***Testudo* or *Agrionemys horsfieldii***: A recent study by Hitschfeld et al. (2008) showed that carpal osteological characters used previously to elevate the subspecies *kazachstanica* and *rustamovi* to species level are ontogenetically variable. In addition, Fritz et al. (2009a) have demonstrated the presence of three major mitochondrial haplotype clades that do not correspond well with the presently understood geographic distribution of the three currently recognized morphologically-defined subspecies. Whether or not to continue to recognize *kazachstanica* and *rustamovi* as distinct subspecies remains uncertain, but we retain them on the list pending further analysis and resolution.

09:44. ***Lissemys punctata***: Rohilla et al. (2009) demonstrated some geographic differentiation in allozymes in this wide-ranging taxon.

09:45. ***Wollumbinia* or *Myuchelys***: Thomson and Georges (2009) described the new genus *Myuchelys* for these taxa (but not including *dorsii* Wells 2009), choosing not to recognize the previous description of *Wollumbinia* Wells 2007c as nomenclaturally available. Whether Wells' work, distributed online without adequate hardcopy dissemination, is nomenclaturally available needs to be decided by the International Commission on Zoological Nomenclature, and we therefore list both names.

09:46. ***Wollumbinia* or *Myuchelys dorsii***: Wells (2009) described the new species *Wollumbinia dorsii*, but whether the name is nomenclaturally available is open to question, as the description was distributed online without adequate hardcopy dissemination. As Australian chelid taxonomy is in a state of flux and the validity of Wells' multiple papers in his Australian Biodiversity Record is under question, we list the name here. However, we make no determination as to its validity either nomenclaturally or taxonomically.

09:47. ***Wollumbinia* or *Myuchelys latisternum***: Wells (2009) resurrected the taxon *Wollumbinia spinosa* (originally *Euchelymys spinosa* Gray 1871a) as a separate valid species, based on the supposed distinctiveness of the single holotype without known locality data collected in 1866 (as noted by Cann 1998). Whether this resurrection will be accepted as valid is open to question, as no further specimens of the taxon have been identified and its distribution is unknown. We therefore retain *spinosa* as a junior synonym of *latisternum* pending further data.

09:48. **Podocnemididae**: Vargas-Ramirez et al. (2008) performed mitochondrial and nuclear genetic analysis of all eight extant species and demonstrated strong support for the Madagascan genus *Erymnochelys* being sister to a strongly monophyletic South American *Podocnemis*, and the South American *Peltocephalus* being sister to *Erymnochelys* + *Podocnemis*. This phylogenetic analysis renders the occasionally used subfamilial clade name Podocnemidinae Broin 1988 (for *Podocnemis* and *Peltocephalus*) paraphyletic.

09:49. ***Podocnemis unifilis***: As we noted in our previous two checklists (TTWG 2007b; Rhodin et al. 2008), most authors since Troschel 1848 have used the name *unifilis* for this species (the yellow-spotted river turtle), though some early authors erroneously used the epithet *dumeriliana* Schweigger 1812. Recently, the name *unifilis* was referred to the synonymy of *cayennensis* Schweigger 1812 by David (1994), but the latter name has historically been used for what is now recognized as *P. erythrocephala* (the red-headed Amazon River turtle) (Mittermeier and Wilson, 1974). Bour (2006a) then redescribed what he concluded to be one of the original three specimens used by Schweigger in his concept of *cayennensis* and designated it as lectotype, but noted that this specimen was actually a representative of the taxon currently known as *unifilis*, and he recommended that the name *cayennensis* therefore be used instead of *unifilis*. However, since the measurements of the lectotype provided by Bour do not correspond exactly with those originally provided by Schweigger, and since Schweigger evidently had examined three specimens for his description, it remains unclear whether the lectotype has been correctly identified. In view of the long history of stable usage of the epithet *unifilis* for the yellow-spotted river turtle, we recommend its continued usage; suppression of *cayennensis* by petition to the ICZN may be needed for nomenclatural stabilization.

2010 Checklist Annotations

TTWG 2010 (000.85-164.checklist.v.3) [10:4-49]

10:4. **Testudines**: In a paper published too close to our manuscript deadline to fully analyze its implications, Dubois and Bour (2010b) discuss the distinction between nomenclature at family-series and class-series rank, and its application to the widely used Order group name Testudines Batsch 1788. Arguing that group names established at a family-series level cannot be applied at a class-series level, and that the family-group name based on the genus *Testudo* is already validly applied at the Family level (as "Testudinidae Batsch 1788"), they conclude that the name Testudines Batsch 1788 cannot also be applied to the Order of turtles, but do not suggest an available name for the Order. However, the International Code of Zoological Nomenclature does not regulate use of names above the superfamily level, and there remain a variety of uncertainties and possible alternative interpretations on the validity, format, use, and authorship attribution of these names. Additionally, some modern authors continue to use and defend the use of the original name Testudines Linnaeus 1758 to designate all modern turtles, even though the name was used primarily in a vernacular fashion in the original publication. Therefore, we do not make any changes at this time, but continue to refer to all turtles as the Order Testudines Batsch 1788, and expect to revisit this issue in more detail in a future checklist.

Additionally, in recent years, the rank level of turtles has been recommended by some to be elevated from its traditional rank of Order within the Class Reptilia to full Class rank on its own (e.g., Collins et al. 2010). Under this scheme, Reptilia would be the Class containing only squamates and tuataras (traditionally known as the Lepidosauria), Class Eusuchia would contain the crocodiles, Mammalia the mammals, and Aves the birds. This possible class-level rank for turtles is to some extent supported by studies indicating the paraphyly of the traditional Class Reptilia with regard to birds. However, other studies indicate a sister-group relationship between turtles and diapsid reptiles, or placement of turtles within diapsids, and hence, uncertainty about the phylogenetic relationship of turtles to other groups abounds (e.g., Laurin and Reisz 1995, deBraga and Rieppel 1997, Kirsch and Mayer 1998, Modesto and Anderson 2004, Bhullar and Bever 2009). Considering that the monophyly of turtles has never been challenged, and that ranking of turtles at class-level provides no improved resolution of the group's phylogenetic position, but simply shifts its distinctiveness to a different rank, we continue to treat turtles as an Order, with no implied judgment of its placement among other living and fossil tetrapod groups.

10:5. ***Caretta caretta***: Dubois and Bour (2010a) noted that Garsault (1764) depicted and named a marine turtle as *Testudo marina*, which they considered a junior synonym of *Caretta caretta* (Linnaeus 1758) based on morphology and geography. *Testudo marina* Garsault 1764 is also a senior homonym of *Testudo marina* Wilhelm 1794, a junior synonym of *Dermochelys coriacea* (Vandelli 1761).

10:6. ***Chrysemys dorsalis* or *picta dorsalis***: Phylogeography of the entire *Chrysemys picta* complex was studied by Starkey et al. (2003), who demonstrated two distinct mtDNA genetic lineages: *dorsalis* and *picta*. They recommended elevating *dorsalis* to species status, but did not find genetic support for the other traditional subspecies (*bellii*, *marginata*), although they recommended that they not be abandoned. Ernst et al. (2006) documented morphologic intergradation between *dorsalis* and *marginata* in Missouri, but did not express an opinion as to the validity of the proposed elevation of *dorsalis* by Starkey et al., although they referred to their work. Fritz and Havas (2007) suggested that full specific status of *dorsalis* was not fully demonstrated by Starkey et al.'s data and retained it and the other two taxa as subspecies of *picta*. Iverson et al. (2008) agreed with Starkey et al.'s analysis and listed *dorsalis* as a full species, as have other recent authors and database managers (e.g., McAllister et al. 2007, NatureServe), while others retain *dorsalis* at subspecies rank (e.g., Ernst and Lovich 2009, ITIS). The sequencing of the entire *Chrysemys picta* genome is currently in draft form and should help resolve this problem. We

now choose to list this taxon provisionally at species rank, recognizing the validity of arguments on either side of the issue, which remains unresolved.

10:7. **Gray 1830e and Gray 1831d**: The date of publication of Gray 1830e (A Synopsis of the Species of the Class Reptilia) is cited by most sources as 1831, since the title page of Griffith and Pidgeon, Volume 9 (Reptilia), in which the Synopsis appears as a Supplement, is dated 1831. However, Gray's Synopsis is dated on its first page as having been written in October 1830, and Volume 9 of Griffith and Pidgeon was actually published in three separate sections from 1830 to 1831 (see Cowan 1969). The first section, Part 25 (pp. 1–192), which included Griffith and Pidgeon's own text on Chelonia (plus part of Sauria), appeared in September 1830 (this part also includes three new Bell and Gray names that we cite as Bell 1830a and Gray 1830c). The second section, Part 26 (part of Sauria plus Ophidia and probably including Gray's Supplement) was apparenty published in December 1830; this date was interpolated by Cowan (1969) as the planned three-month time interval between the publication dates of Parts 25 and 27. The last section, Part 27 (Batrachia plus 18 plates) was published in March 1831. Cowan (1969) did not indicate when Gray's Supplement was published, nor with which Part it appeared. It was certainly not published in Part 25 in September 1830, when only pp. 1–192 of the main text were published, and prior to the October date recorded by Gray on his Synopsis, nor was it published with Part 27 in March 1831 with the Batrachia and plates. The page header for the first few pages of Gray's supplement has "Order Ophidia" printed at the top, and was therefore printed at the same time as the Ophidia section published in Part 26.

In his later publication, Gray 1831d (Synopsis Reptilium; or Short Descriptions of the Species of Reptiles), dated on p. viii as having been written in January 1831, on p. 77 Gray referred to the exact pagination for the citation for *Hydraspis lata* in the earlier published Griffith version (p. 17 in Gray 1830e). Therefore, Gray 1830e was available for page-citation in January 1831, and was therefore published with Part 26, probably in December 1830. Also, in Gray's own listing of his publications (Gray 1873k) he recorded 1830 as the date for publication of his Synopsis in Griffith's Vol. 9. In addition, Cogger et al. (1983) recognized 1830 as the date of publication for this work, as do we.

The date of publication of Gray 1831d has always been considered to be 1831, but the exact date has not been recorded. As noted, it is dated on p. viii as having been written in January 1831. The back cover of the publication lists other books by Gray already available for sale at the same time. Listed as already published are Gray's Illustrations of Indian Zoology, Parts 1 through 6, with a statement that a total of 20 parts were to be completed, one published every three months. Sawyer (1953) recorded that Part 1 of Indian Zoology was published on 6 January 1830, Part 2 on 30 March 1830, Part 3 on 15 July 1830, Part 4 on 6 October 1830, Part 5 on 25 January 1831, Part 6 on 7 April 1831, and Part 7 on 27 July 1831. Gray 1831d was therefore published between Parts 6 and 7, i.e., between April and July 1831, and we have chosen May as the probable month of publication.

10:8. ***Graptemys gibbonsi* and *G. pearlensis***: Ennen et al. (2010) analyzed morphological and genetic variation in *Graptemys gibbonsi* throughout its range and concluded that the western population inhabiting the Pearl River system of eastern Louisiana and western Mississippi is sufficiently distinct to warrant description as a full species, *Graptemys pearlensis*, with *Graptemys gibbonsi* restricted to the Pascagoula River system of eastern Mississippi only.

10:9. ***Pseudemys concinna, floridana*, and *peninsularis***: These three taxa remain difficult to resolve morphologically and genetically, and their taxonomic relationships have vacillated among various views held by Seidel (1994, 1995), Jackson (1995, 2006), and Thomas and Jansen (2006). Our checklist has historically listed *floridana* as a subspecies of *concinna,* and *peninsularis* as a separate species, based primarily on Seidel's work, and we continue to do so. However, recent ongoing fieldwork (e.g., Jensen et al. 2008; M. Aresco and D. Jackson, in litt.) potentially supports recognition of *floridana* and *concinna* as separate species, based on marked differences in their habitat preferences across wide areas of sympatry, with *peninsularis* apparently a subspecies of *floridana*. In view of the long history of taxonomic uncertainty surrounding these taxa and the unresolved nature of the data, we now note these conflicting views by providing alternative listings of *floridana* as either a subspecies of *concinna* or a possible separate species, and *peninsularis* as either a species or possible subspecies of *floridana*. However, we make no actual change in the taxonomic status of these turtles at this time, but await further field data and genetic analyses of this difficult species complex, both of which are ongoing.

10:10. ***Trachemys venusta***: McCord et al. (2010) described three new subspecies of *Trachemys venusta* based on patterns of head and neck stripes, carapace and plastron patterns and coloration, plastral scute formulae, maximum sizes, and distribution. We provisionally list these subspecies pending genetic analysis.

10:11. **Duméril 1805**: This reference has historically been given as 1806, as that date is printed on its frontispiece, but recent work by Gregory (2010), brought to our attention by R. Bour, has shown that it was actually published in November 1805.

10:12. ***Emys*, *Actinemys*, and *Emydoidea***: Wiens et al (2010) analyzed multiple mitochondrial and nuclear loci for many emydid terminal taxa. They considered that their results did not provide phylogenetic support for the placement of *Actinemys* and *Emydoidea* in *Emys* (as recommended most recently by Spinks and Shaffer 2009); instead, Wiens et al. recommended recognizing *Actinemys* and *Emydoidea* as monotypic genera, with *Actinemys* apparently more closely related to *Clemmys*. We note the discordance among various published data sets regarding the relationships and analyses of the *Emys* + *Emydoidea* + *Actinemys* group, and hence, we retain our previous listings pending greater resolution.

10:13. ***Emys orbicularis orbicularis***: Dubois and Bour (2010a) noted that Garsault (1764) depicted and named a freshwater turtle as *Testudo terrestris*, which they identified as an *Emys orbicularis* (Linnaeus 1758), and which they considered a subjective junior synonym of *E. o. orbicularis* based on geography. *Testudo terrestris* Garsault 1764 is also a senior homonym of *Testudo terrestris* Forskål 1775; however, the latter name has extensive usage over the past half century, and is a *nomen conservandum* (ICZN 1963), thus safeguarding its continuing usage.

10:14. ***Emys orbicularis galloitalica***: Pedall et al. (2011) investigated genetic differentiation of populations of Italian, Corsican, Sardinian, and Sicilian *Emys orbicularis* populations, based on mtDNA and polymorphic microsatellite loci. They found no significant divergence of Corsican and Sardinian populations from populations of the southwestern Italian mainland, supporting the view that the subspecies *capolongoi* (Sardinia) and *lanzai* (Corsica) described from these islands are invalid. Their results also suggested that Sardinian and Corsican populations represented reintroduced populations following earlier extirpations of native taxa. While Pedall et al. (2011) did not explicitly synonymize *capolongoi* and *lanzai* into *galloitalica*, they indicated synonymization to be warranted and we consider their results adequate justification to do so. This leaves the status of the subspecies *ingauna*, restricted to a small isolated area in Liguria in the middle of the range of *galloitalica*, unresolved. Fritz and Havas (2007:184) noted that *ingauna* could be synonymous with *galloitalica*, but no data-supported analyses of the status of *ingauna* have apparently been published since its original description; in the absence of evidence to the contrary, we continue to recognize *ingauna* as a valid subspecies.

10:15. ***Emys* or *Actinemys marmorata***: An extensive mitochondrial and nuclear gene study by Spinks et al. (2010) indicated that southern and northern lineages, with a zone of contact somewhere in the central Coast Range of California, exist and may well be diagnosable. However, given the lack of concordance between the traditionally defined ranges of *pallida* in the south and *marmorata* in the north (as previously recognized subspecies), and with two nuclear and four mitochondrial lineages identified, we follow Spinks et al. in waiting for any formal recognition of this variation pending publication of a much larger, ongoing genetic analysis, and we do not re-elevate *pallida* from synonymy at this time.

10:16. ***Glyptemys muhlenbergii***: The name *Emys biguttata* Say was previously recorded as being published in 1824; however, though the paper was read in 1824, it was not published until 1825, in Volume 4, Part 2 of the *Journal of the Academy of Natural Sciences*.

10:17. ***Terrapene***: The genus name *Cistudo* was previously attributed to Say 1825 as a *nomen novum*, as also recorded by Fritz and Havas (2007); however, an Errata sheet published with Say's article in Volume 4, Part 2 of the *Journal of the Academy of Natural Sciences* noted that the name should have been *Cistuda* (as originally published by Fleming 1822). However, many subsequent authors used *Cistudo* as a valid generic name, often citing Say as the original author. The first authors to do so appear to have been Duméril and Bibron (1835), but many others, including Gray (1856b), Agassiz (1857a), and Boulenger (1889) followed suit.

10:18. ***Mauremys japonica***: Hoogmoed et al. (2010) indicated that this species name was actually published in 1834 rather than 1835 as previously recorded by most other authors.

10:19. ***Chelonoidis carbonaria* and *C. denticulata***: Vargas-Ramirez et al. (2010a) investigated phylogeographic differentiation in *carbonaria* and

denticulata, and found distinct mitochondrial clades in *carbonaria* but only weak differentiation in *denticulata*. They recommended further investigation, but proposed no taxonomic changes at this time.

10:20. ***Chelonoidis carbonaria***: Nowak-Kemp and Fritz (2010) examined the holotype of *Testudo hercules truncata* Gray 1830e in the Bell collection of the Oxford University Museum and determined that it is a *C. carbonaria*, rather than a *C. denticulata*, where it was previously synonymized as a *nomen dubium*.

10:21. ***Chelonoidis chilensis* and *C. petersi***: The validity of the taxa *petersi* and *donosobarrosi* remains subject to debate; the latest contribution to the case was made by Vinke et al. (2008), who considered *petersi* synonymous with *chilensis* based on syntopic occurrence and lack of consistent morphological differentiation of populations attributed to *petersi* vs. *chilensis*. We consider the situation unresolved and tentatively retain our recognition of distinct southern and northern taxa (*chilensis* and *petersi*) within the *chilensis* group, pending further analysis of range-wide patterns of morphological and molecular variation.

10:22. ***Gopherus agassizii***: Cooper's description appeared in print in a section of the *Proceedings of the California Academy of Sciences* that was printed and distributed in 1861, not 1863 when the completed volume (including wrappers dated 1863) was issued (R.B. Murphy, pers. comm.). The two bird species described by Cooper in the same paper (Whitney's Owl, *Athene whitneyi*, now *Micrathene whitneyi*, and Lucy's Warbler, *Helminthophaga luciæ*, now *Vermivora luciae*) are consistently attributed to Cooper 1861 in the ornithological literature.

10:23. ***Homopus***: The date of authorship of the genus *Homopus* has traditionally been given as 1835, referring to Tome 2 of Duméril and Bibron (1835:145). However, Roger Bour (pers. comm.) has drawn our attention to the fact that the name was actually created and diagnosed in Tome 1 of Duméril and Bibron (1834:357).

10:24. ***Homopus signatus***: Daniels et al. (2010) investigated systematics and phylogeography of *Homopus signatus* using mitochondrial and nuclear DNA, neither of which supported the recognition of the two traditional subspecies, *signatus* and *cafer*. As a result they recommended abandoning subspecies designations for *H. signatus*, and we concur.

10:25. ***Homopus signatus***: Our previous checklists and earlier checklists by other authors have consistently listed *Testudo juvencella* Gray 1831d:14 as a junior synonym of this taxon. However, Gray attributed the name to Daudin, and in fact, it was formally described by Daudin in 1802; hence we correct this oversight.

10:26. ***Stigmochelys***: Le et al. (2006) proposed placing *pardalis* in the genus *Psammobates*, while Fritz and Bininda-Emonds (2007) argued for placement in the monotypic genus *Stigmochelys*. Since then, at least three peer-reviewed publications have consciously (i.e. citing Le et al. 2006, among their references) chosen to use *Stigmochelys*, as did two ecological papers (which did not refer to Le et al. 2006) and the CITES Nomenclature Specialist (CITES 2010); in contrast, only a single peer-reviewed paper (Spinks et al. 2009) was published after 2006 using the combination *Psammobates pardalis*, and this was to name the species as an outgroup. Noting the emerging consensus, we no longer accept *Psammobates* as an alternative name for *Stigmochelys*.

10:27. ***Stigmochelys pardalis***: Fritz et al. (2010a) analyzed phylogeographic patterns in mitochondrial DNA and found that seven, largely parapatric, mtDNA lineages could be identified; these clades did not correspond to the traditional subspecies (*pardalis* vs. *babcocki*) nor to the pronounced geographic size variation. They concluded that there is no rationale for recognizing subspecies within *S. pardalis*.

10:28. ***Testudo graeca buxtoni***: The taxon *Testudo ecaudata* Pallas 1814 has historically been listed in the synonymy of *Testudo graeca*, and Fritz and Havas (2007) and our earlier checklists synonymized it under *T. g. buxtoni* as a *nomen dubium*. Wermuth and Mertens (1961) synonymized it under *T. g. ibera,* and in their later checklist (Wermuth and Mertens 1977) again under *T. g. ibera*, but with a question mark. However, in an overlooked reference, Darevsky and Mertens (1973) examined the unpublished plate from Pallas (1814) depicting the type specimen of *ecaudata,* and determined it to be a variety of the South African *Psammobates tentorius verroxii* (Smith 1839), despite the fact that the specimen was allegedly obtained in the forests of northern Persia along the Caspian Sea. Despite being a co-author, Mertens was evidently not completely convinced of the synonymization, and only added a question mark to the name in his 1977 checklist, while retaining it under the synonymy of *T. g. ibera*. Because of the uncertainty of the identification of *ecaudata* by Darevsky and Mertens, we solicited input from several specialists regarding the identity of the figured specimen. Examination by Roger Bour, Ernst Baard, Brian Henen, Oguz Türkozan, and Jim Buskirk confirmed that it was not a *Psammobates*, but a juvenile specimen of a *Testudo*, most likely referable to *T. graeca*.

10:29. **Forskål or Forsskål**: The spelling of the family name of Pehr Forsskål has varied through the years, with widespread usage of both single and double 's' spelling (as in our previous checklists). Dubois and Bour (2010a) declared the "Forsskål" spelling to be a mistake, but whether to spell his name with a single or double 's' depends on its usage. In the original paper describing *Testudo terrestris* and *T. triunguis* his name is given on the title page in Latin as Petrus Forskål with one 's', but in his own Swedish vernacular he always spelled his name as either Petter or Pehr Forsskål, with a double 's'. Current references to his name are reasonably evenly split between the two spellings (as determined by a search on Google), with the scientific literature preferring Forskål and the sociohistorical literature preferring Forsskål. We therefore now spell his name as rendered on the original publication, Forskål, just as we render the name Carolus Linnaeus in the original published Latin form rather than the name he was known by in his own Swedish vernacular, Carl von Linné.

10:30. ***Testudo* or *Agrionemys horsfieldii***: Three new taxa from this species complex have recently been described by Chkhikvadze and colleagues: *Agrionemys bogdanovi*, *A. kazachstanica kuznetzovi*, and *A. kazachstanica terbishi*. In addition, they have elevated two other taxa, *A. horsfieldii rustamovi* and *Testudo baluchiorum,* to species status. The taxonomy of Central Asian steppe tortoises remains in a state of flux; in contrast to the deeply-dissected arrangement of several species and subspecies in *Agrionemys* as proposed by Chkhikvadze and colleagues based on morphological characters, Fritz et al. (2009) found phylogeographic structure as evidenced by mtDNA to be in weak agreement with morphologically-defined taxa, suggested synonymy of *rustamovi* with *horsfieldii*, and recognized only a single species, placed in *Testudo*, with implicit recognition of subspecies *kazachstanica* and an unnamed ESU in the Fergana valley. To minimize nomenclatural changes in a highly dynamic situation, and to attempt a middle road between the views of Chkhikvadze et al. and Fritz et al., we retain the recent arrangement of a single species with several subspecies, with the newly-described taxa *bogdanovi*, *kuznetzovi*, and *terbishi* provisionally listed as subspecies of *horsfieldii*, keeping *rustamovi* as a subspecies, and not elevating *baluchiorum* from synonymy. We anticipate that further changes will occur in the near future. Additionally, we drop *Chersine* as an alternative generic name for the *horsfieldii* species complex, as all authors use either *Testudo* or *Agrionemys* for this group. This issue was previously discussed in TTWG 2009.

10:31. ***Cycloderma aubryi***: Duméril (1856) described this species under the name *Cryptopodus aubryi*, sp. nov., in his text, but labeled the plate *Cryptopus aubryi*. *Cryptopodus* is considered an *ex errore* name for *Cryptopus* Duméril and Bibron 1835.

10:32. ***Pelodiscus***: Fritz et al. (2010b) carried out preliminary genetic analyses of softshells of the *Pelodiscus sinensis* group, and demonstrated the taxonomic validity and species status of *P. maackii*; further taxonomic research was called for to elucidate the status and proper name of the lineages currently recognized by some as *P. axenaria* and *P. parviformis*, as we continue to do in this checklist.

10:33. ***Rafetus swinhoei***: Le et al. (2010) described a purported new species of giant softshell, *Rafetus vietnamensis*, with the type specimen a complete mounted skeleton located in the Hung Ky pagoda in Hanoi, but without locality data, while at the same time indicating that *R. leloii* Ha 2000 was probably not a taxonomically valid description. The study analyzed mostly the same materials as Le and Pritchard (2009), who reached the opposite conclusion, that Vietnamese records of *Rafetus* all pertain to *R. swinhoei*. A critical re-assessment of the description of *R. vietnamensis* is in progress (M. Le, B. Farkas, pers. comm.). Based on the conclusions of Le and Pritchard (2009), we provisionally list *R. vietnamensis* in the synonymy of *R. swinhoei*.

10:34. ***Chelodina* subgenera**: Georges and Thomson (2010) summarized the history and rationale of grouping species of Australasian snake-necked turtles and naming these groups, and concluded that the preferred nomenclatural arrangement would be to place all species in the genus *Chelodina*, while recognizing three subgenera within *Chelodina*: subgenus *Chelodina* for the narrow-headed species traditionally assigned to 'Group A' related to *C. longicollis*, subgenus *Macrodiremys* for the single species *C. colliei* (= *C. oblonga* of many authors), and subgenus *Macrochelodina* for the broad-headed species of 'Group B' related to *C. expansa*. However, as explained in annotation 39, the name *Macrodiremys* may be invalid.

10:35. ***Chelodina (Chelodina) gunaleni***: Georges and Thomson (2010) considered *gunaleni* McCord and Joseph-Ouni 2007a as synonymous with

novaeguineae Boulenger 1888b, but provided no data supporting their conclusion; we retain *gunaleni* as distinct pending further analysis.

10:36. ***Chelodina (Chelodina) mccordi***: Georges and Thomson (2010) synonymized *Chelodina timorensis* (McCord et al. 2007a) under *C. mccordi* (Rhodin 1994b), without recognizing any subspecies of *mccordi*, instead referring to the taxa *roteensis* and *timorensis* as Diagnosable Terminal Taxa or ESU's (Evolutionarily Significant Units). Kuchling et al. (2007) interpreted these taxa as subspecies of *mccordi*, and we provisionally agree until further work clarifies their taxonomic status. The CITES Nomenclature Specialist (CITES 2010) also synonymized *timorensis* under *mccordi*.

10:37. ***Chelodina (Macrochelodina) rugosa***: Georges and Thomson (2010) reiterated their earlier (Georges and Thomson 2006) synonymy of *C. kuchlingi* Cann 1997d into *C. rugosa* Ogilby 1890, and we now synonymize it as well.

10:38. ***Chelodina (Macrochelodina) walloyarrina***: Georges and Thomson (2010) treated *walloyarrina* McCord and Joseph-Ouni 2007b as synonymous under *burrungandjii* Thomson et al. 2000, referring to morphological and molecular information available in the literature, and their own research indicating hybridization and introgression of *burrungandjii* with *rugosa*. However, we provisionally retain *walloyarrina* as distinct until published molecular data resolves the issue.

10:39. ***Chelodina* (subgenus name undetermined) *oblonga* or *colliei***: Thomson (2006), Georges and Thomson (2010) and Kuchling (2010) summarized the convoluted nomenclatural history of the name *Chelodina oblonga* Gray 1841, and attributed it to the northern populations (currently named *C. rugosa* Ogilby 1890, a name provisionally retained by them) as a senior synonym, pending the outcome of ICZN Case 3351 (Thomson 2006). With the name *oblonga* thus potentially unavailable for the snake-necked turtle of southwestern Western Australia, they referred to this turtle either by its next available name, *Chelodina colliei* Gray 1856a [Georges and Thomson], or *C. oblonga* (= *C. colliei*) [Kuchling] to maintain prevailing usage. In an attempt to retain traditional usage of the name *oblonga* for the southwestern snakeneck, McCord and Joseph-Ouni (2007a) had designated a neotype for *oblonga* Gray 1841, being the lectotype of *C. colliei*. However, as a type specimen already exists for *oblonga*, their neotype designation is invalid (Kuchling 2010).

There is general agreement that the southwestern snakeneck represents a distinct lineage within the *Chelodina* group (Burbidge 1967, Goode 1967, Kuchling 1988, Georges and Adams 1992, Georges et al. 1998, 2002), warranting recognition at subgenus level alongside *Macrochelodina* and *Chelodina* sensu stricto. The genus name *Macrodiremys* was created by McCord and Joseph-Ouni (2007a) to recognize this lineage. They designated *oblonga* as its type species, in the mistaken belief that their neotype designation had fixed the name *oblonga* to the southwestern taxon. However, with *oblonga* being applicable to the northern taxon (*rugosa*) by virtue of its original valid holotype, *Macrodiremys* becomes a junior synonym of *Macrochelodina*, in contrast to the intent of McCord and Joseph-Ouni. Kuchling (2010), as first reviewer, listed possibilities under which articles of the Code the name *Macrodiremys* could potentially be fixed to the southwestern longneck, but stated his conviction that it was reasonable to await an opinion on case 3351 of the ICZN plenum to be published before such nomenclatural acts should be attempted, and expressed his hope that in their ruling on case 3351, the ICZN plenum would take suitable action to solve these problems. Independently, Georges and Thomson (2010) made an explicit attempt to correct the error and follow the intent of McCord and Joseph-Ouni 2007a under Article A 67.13.1 of the Code by correcting the type species of *Macrodiremys* to *Chelodina oblonga* McCord and Joseph-Ouni 2007a = *C. colliei* Gray 1856a, making it potentially available as a genus-group name for the southwestern snakeneck. However, Kuchling (2010) had already pointed out the possibility that a nomenclatural act such as the attempted correction by Georges and Thomson (2010) could be invalid under the ICZN Code.

Further nomenclatural acts in this group of animals must await the outcome of the anticipated ICZN plenary decision to avoid further complicating this issue. For that reason, we list *Macrodiremys* as a synonym of *Chelodina* sensu lato and we do not employ a subgenus designation for the southwestern species in this year's checklist, recognizing well that the southwestern snakeneck warrants its own subgenus and that a name is potentially available for it.

10:40. ***Elseya novaeguineae***: Georges and Thomson (2010) returned *E. schultzei* Vogt 1911 to the synonymy of *E. novaeguineae* Meyer 1874, and also tentatively placed *E. novaeguineae* in the genus *Myuchelys*. However, we retain the species in *Elseya* pending further genetic analysis.

10:41. ***Emydura m. macquarii***: Georges and Thomson (2010) reviewed the complicated history of the name *Hydraspis australis* Gray 1841, and supported the conclusion of Cogger et al. (1983) that the name is a junior synonym of *E. m. macquarii*. The name *australis* had previously been inconsistently used for a variety of *Emydura* populations in northern Australia (e.g., Cann 1998); Georges and Thomson (2010) instead used the name *victoriae* for some of these populations. We interpret the name *australis* as a *nomen dubium* and agree with its synonymization under *macquarii*.

10:42. ***Emydura m. macquarii***: Georges and Thomson (2010) synonymized the previously recognized subspecies *E. m. binjing*, *E. m. dharra*, *E. m. dharuk*, *E. m. gunabarra*, and *E. signata*, into typical *E. m. macquarii*, based on lack of distinction based on allozyme electrophoresis, and they attributed variation in shell shape and body size to phenotypic plasticity. They considered that the Bellinger River population of *Emydura macquarii* is genetically unremarkable and that it was almost certainly established by introduction of animals from adjacent drainages.

10:43. ***Myuchelys* and Wells taxa**: Thomson and Georges (2009) described the new genus *Myuchelys* and noted that the name *Wollumbinia* Wells 2007c, used for the same group of species, but proposed online in an unpublished web-based document without adequate hardcopy dissemination, is nomenclaturally unavailable. They also considered all web-based names proposed by Wells in his *Australian Biodiversity Record* (Wells 2002, 2007a,b,c, 2009), as unpublished and nomenclaturally unavailable. In previous editions of this checklist we included *Wollumbinia* as an alternative genus name and listed some of the species described in the other documents; however, based on arguments against availability of all these names proposed by Wells (Fritz and Havas 2007, Thomson and Georges 2009, Georges and Thomson 2010), we now concur in considering these names unavailable under the ICZN Code and treat each of them as an unavailable name (*nomen illegitimum*) placed in synonymy.

10:44. ***Phrynops geoffroanus* and *tuberosus***: The taxonomic status and distribution of these two taxa remains problematic, without clear consensus of taxon limits or range delimitations. Pritchard and Trebbau (1984) documented that *tuberosus* is isolated from the broad range of *geoffroanus* and restricted to a small upland area in eastern Venezuela, extreme western Guyana, and northern Roraima in Brazil. Métrailler and Le Gratiet (1996) documented that neither *tuberosus* nor *geoffroanus* occurs in French Guiana, and neither taxon has ever been recorded in Suriname or lowland Guyana. However, McCord et al. (2001), based on an examination of three specimens of what they identified as *tuberosus* from eastern Venezuela, the Brazil–Guyana border, and Piauí, northeastern Brazil, depicted large apparently well-defined allopatric ranges for both taxa, with *tuberosus* supposedly distributed throughout the Guyanan lowlands, the lower Brazilian Amazon, and northeastern Brazil. Rueda-Almonacid et al. (2007), while acknowledging that the systematics of the *Phrynops geoffroanus* complex (Rhodin and Mittermeier 1983) remained controversial and unresolved, nevertheless reproduced the vastly different ranges of *tuberosus* and *geoffroanus* depicted by McCord et al. We choose at this time to instead recognize the earlier documented restricted view of the distribution of *tuberosus*, since it is based on more extensive fieldwork, while also noting that the *P. geoffroanus* complex remains in need of a thorough range-wide phylogeographic study.

10:45. ***Pelomedusa subrufa***: Phylogeographic patterns of mitochondrial and nuclear DNA variation in *Pelomedusa subrufa* were analyzed by Vargas-Ramírez et al. (2010b) and Wong et al. (2010). Both studies reached the same conclusion that the species is structured into three major clades: northwestern, eastern, and southern lineages, with evidence that Madagascan populations may have been introduced there in prehistoric times. Vargas-Ramírez et al. (2010b) suggested that valid taxonomic units may currently be included in the synonymy of *Pelomedusa subrufa*, and recommended further study to clarify the taxonomy.

10:46. ***Podocnemis erythrocephala***: We previously listed the name *Podocnemis agassizi* Coutinho 1868 as a synonym, as did other earlier checklists. However, although Coutinho described a new species of turtle in 1868 that he proposed to name in honor of "M. Agassiz", no formal name was created at that time. Later, Göldi (1886) translated and reprinted Coutinho's earlier writings and created the binomen *Podocnemis agassizii*, attributing it to Coutinho, but recommending that it be changed to *Podocnemis coutinhii* since the name *agassizii* had already been used for another turtle, *Chelonia agassizii*.

10:47. ***Podocnemis sextuberculata***: Coutinho (1868) provided an excellent description of this species that he named *Podocnemis pitiu*, a name overlooked in our previous checklists as well as other earlier checklists.

10:48. ***Podocnemis unifilis***: We continue to use this name for the Yellow-spotted River Turtle, as it has a long and continuous usage, although the name *Emys cayennensis* Schweigger 1812 has recently been shown to have priority based on the available type material (Bour 2006). However, the name *cayennensis* was for a long time erroneously applied to *Podocnemis erythrocephala* and it would introduce unacceptable confusion to use that name for what has nearly always been referred to as *unifilis*. We therefore maintain prevailing usage of *unifilis* and retain the name *cayennensis* in synonymy as a provisional *nomen rejectum* pending petition to the ICZN (R.C. Vogt et al., in prep.).

10:49. ***Podocnemis unifilis***: Coutinho (1868) provided an excellent description of this species that he named *Podocnemis tracaya*, a name overlooked in our previous checklists as well as other earlier checklists.

2011 Checklist Annotations

TTWG 2011 (000.165-242.checklist.v.4) [(11:5-20)]

11:5. ***Malaclemys terrapin***: Parham et al. (2008) demonstrated, based on radiometric dating of a fossil found in a cave on Bermuda, that the small population of diamondback terrapins present there was the result of a natural dispersal event dating from before human presence on the island. As a result, we now consider the Bermuda population as native rather than introduced. Genetic comparison of Bermuda samples with U.S. populations also demonstrated closest similarity to samples from the Carolinas, so we provisionally list the Bermuda population under the subspecies *M. t. centrata* pending further studies.

11:6. **Genus *Trachemys***: Fritz et al. (2011c) assessed the phylogeny and taxon boundaries of *Trachemys* from Central and South America based on mitochondrial and nuclear DNA. Their nuclear data were largely uninformative, but based on their mitochondrial and combined analyses, they concluded that the Pacific Coast taxa *grayi*, *emolli,* and *panamensis* form a distinct clade that warrants recognition at the species level, as *Trachemys grayi*, with three subspecies. Fritz and co-authors also recommended combining the taxa *cataspila, ornata, venusta, callirostris,* and *chichiriviche* as subspecies under a single species, *Trachemys ornata*. They further proposed placing *adiutrix* at subspecies level in *dorbigni*, and considered the taxon *uhrigi* to be synonymous with typical *venusta*. Their analysis did not include samples of the taxon *iversoni*, whose range on the Yucatan Peninsula is embedded in the range of the redefined *ornata* group, nor did they sample most *Trachemys* taxa from the arid western region of Mexico.

While Fritz et al. (2011c) provide a useful set of hypotheses for future testing, we recognize that taxonomy of *Trachemys* will remain dynamic and expect further changes when additional nuclear data, and deeper geographic sampling of field-verified specimens, are brought to bear on the problem. We therefore provide the alternative taxonomies of Seidel (2002) and Fritz et al. (2011) in this year's checklist.

11:7. ***Emys*/*Emydoidea*/*Actinemys***: Fritz et al. (2011b) reviewed competing generic concepts for Blanding's, Western Pond, and European Pond turtles, and reiterated their support for recognition of *Emydoidea* and *Actinemys* as separate genera distinct from *Emys*.

The TTWG members continue to be deeply divided in their perspectives on whether to recognize three genera, or a single genus, for the four species concerned (*blandingii, marmorata, orbicularis*, and *trinacris*). The challenge is that available primary research findings result in different relationship trees among the four, based on mitochondrial and nuclear DNA and on morphology (Spinks and Shaffer 2009; Wiens et al. 2010; Fritz et al. 2011b). Overall, the majority of data indicate that *blandingii, marmorata, orbicularis*, and *trinacris* collectively are each others' closest relatives. Whether to recognize this by combining the four species in an expanded genus *Emys*, or to emphasize the morphological distinctiveness of *blandingii* and *marmorata* from (*orbicularis* + *trinacris*) by recognizing *Actinemys* and *Emydoidea* as monotypic genera, is largely a subjective matter. Correspondingly, the herpetological taxonomic community and recent scientific literature have not come to a clear consensus or prevailing usage. With further research in progress, we agree that the situation remains undecided, and continue to present alternative taxonomies in this year's checklist, with no implication that this represents the preferred or supported arrangement of individual TTWG members.

11:8. ***Terrapene carolina***: Butler et al. (2011) conducted morphological and molecular analyses to address the status of lineages within *Terrapene carolina*. They found that box turtles phenotypically corresponding to *T. c. carolina, T. c. bauri,* and *T. c. triunguis* all occur within the range of *T. c. major*, and that the latter does not demonstrate a diagnosable morphology. They also found that *carolina, bauri*, and *triunguis* possess divergent mtDNA haplotypes, which are present alongside a fourth, distinct, haplotype in the range of *T. c. major*. Butler et al. interpreted these findings as the introgressed genetic signal of the extinct Pleistocene *T. c. putnami* perpetuating in a morphologically mixed population, and advocated equating the taxon *major* with *putnami*; they argued that *major*, which has precedence over *putnami*, should only be used to refer to the large extinct form.

Their genetic analysis also placed *bauri* as sister to *ornata*, and *triunguis* as sister taxon to the [*ornata* + *bauri*] clade. Butler et al. thus suggested that *bauri* should be elevated to species status, although this would leave the remaining taxa in *T. carolina* paraphyletic by continued inclusion of *triunguis*. Butler et al. did not address the status of *mexicana* and *yucatana*, which have variously been considered subspecies of *carolina* or full species each. Furthermore, their analysis did not support the previously recognized species groups (e.g., Milstead 1969; Spinks et al. 2009).

We are reluctant to change the widely-recognized taxonomic arrangement for a species complex of notable conservation and legislative significance based on a single study that relied heavily on a short mtDNA segment. Until the alternative taxonomy presented by Butler et al. is independently corroborated by further research, and potentially finds widespread acceptance in the herpetological and taxonomic communities, we prefer to retain the traditional arrangement and defer possible adoption of their hypothesis until a later version of this checklist.

11:9. ***Cuora flavomarginata evelynae***: In previous checklists we had overlooked that Ota et al. (2009) had transferred *evelynae* back to subspecies status under *Cuora flavomarginata*, but we now follow them here.

11:10. ***Aldabrachelys gigantea*** or ***Dipsochelys dussumieri***: Gerlach (2011a) studied morphological development of juveniles of the three forms of Indian ocean giant tortoises reared under identical captive conditions, and concluded that animals consistently develop into the morphotypes characterized by their parents. Gerlach thus concluded that the morphotypes cannot be explained by environment alone, and may have a genetic basis, supporting the recognition of *arnoldi* and *hololissa* as taxonomically distinct from *gigantea*/*dussumieri*.

11:11. ***Gopherus agassizii*** **and** ***G. morafkai***: Murphy et al. (2011) investigated taxonomic problems affecting the Desert Tortoise. They designated the sole remaining of three syntypes of *Gopherus agassizii* as lectotype and genetically confirmed that it originated from California. They also determined that the holotype of *G. lepidocephalus* originated from the Mojave desert population, at least based on mitochondrial DNA, reconfirming *lepidocephalus* as a junior synonym of *agassizii*. A suite of morphological, molecular and ecological differences between the Mojave and Sonoran Desert populations led Murphy and co-authors to describe the Sonoran form, long recognized as an Evolutionarily Significant Unit, as a new and distinct species, *Gopherus morafkai*. Further research will be necessary to determine if the southernmost populations of *G. morafkai* in the Sinaloan thornscrub ecosystem also deserve taxonomic recognition (Lamb et al. 1989; Murphy et al. 2011).

11:12. ***Testudo graeca*** **and** ***T. marginata***: Chkhikvadze et al. (2011) described *Testudo dagestanica* from Lake Papas, Dagestan, and considered the taxa *anamurensis, pallasi, terrestris, weissingeri,* and *zarudnyi* (variously considered subspecies or synonyms of *T. graeca* or *T. marginata* in earlier versions of this checklist) as valid subspecies of *T. marginata*. However, Parham et al. (2006) and Fritz et al. (2007) placed the Dagestan population of *Testudo* firmly in *T. graeca* based on a combination of morphological and genetic characters, although those studies differed in their assignment of this population to *T. g. ibera* and *T. g. armeniaca*, respectively. Until further data become available supporting the radical changes proposed by Chkhikvadze et al., we take a conservative approach and make no changes to the taxonomy of *T. graeca* or *T. marginata*.

11:13. ***Testudo marginata***: Perez et al. (2012) studied the effects of landscape features and demographic history on the genetic structure of *Testudo marginata* using microsatellites. They found that their samples from Sardinia clustered with samples from northern Greece, suggesting that the Sardinian population may have originated from a small founder population approximately 200 generations ago, while the source population from which those founders originated was estimated to be very large. In contrast, the samples from the 'dwarfed' *marginata* population of the southwestern Peloponnesus demonstrated a low but significant differentiation from all other *marginata* populations. While Perez et al. did not recommend taxonomic recognition of the dwarf population, they did emphasize the conservation significance of what in effect is an Evolutionarily Significant Unit (ESU).

11:14. **Genus *Lissemys***: Praschag et al. (2011) analyzed variability across the range of the genus *Lissemys*, based on 2286 bp of mitochondrial DNA sequences, with additional morphological and biogeographical considerations. They concluded that *scutata* is a distinct divergent lineage and reaffirmed Webb's (1982) conclusion to recognize *scutata* as a full species. They found that the Sri Lankan population shows similar divergence, and recognized this population as a full species, *Lissemys ceylonensis* (Gray 1856a). The remaining populations of *Lissemys* fell into three lineages, one broadly corresponding to the spotted northern taxon *andersoni* (though with some intergradation with unspotted animals in Orissa) inhabiting the Indus-Ganges-Brahmaputra systems, and the other two lineages comprised of unspotted populations in peninsular India. Praschag et al. recommended recognition of the two peninsular lineages by the names *punctata* for the southernmost Indian lineage, and *vittata* for the central Indian lineage. Because the three mainland Indian lineages are more closely related to each other than to either *scutata* or *ceylonensis*, and intergradation between at least *andersoni* and *vittata* is known, Praschag et al. proposed recognition of *vittata* and *andersoni* at subspecies rank under *punctata*. They also concluded that *Emyda granosa intermedia* Annandale 1912, traditionally placed in synonymy of the southern, unspotted form *punctata* (see Webb 1980a:554), is based on intergrades between *vittata* and *andersoni* and cannot be used as the valid name for any *Lissemys* taxon. As *intermedia* is clearly not a valid synonym of *andersoni*, and its type locality (Purulia, western West Bengal) is far outside the redefined range of *L. p. punctata*, we take this opportunity to place *intermedia* into the synonymy of the central unspotted taxon *L. p. vittata*.

11:15. **Genus *Nilssonia***: In earlier versions of this checklist, we used the provisional designation '*Nilssonia* or *Aspideretes*' as a transitional phase between the widespread usage of *Aspideretes* since Meylan's (1987) morphological analysis, and the more recent findings that *Aspideretes* is paraphyletic with regard to *Nilssonia* and consequent recommendation to synonymize *Aspideretes* into *Nilssonia* (Engstrom et al. 2004; Praschag et al. 2007; Fritz and Havas 2007). We note that the species *gangetica, hurum, leithii,* and *nigricans* are now widely accepted as belonging in the genus *Nilssonia*, making *Aspideretes* a synonym.

11:16. **Genus *Pelodiscus***: Yang et al. (2011) evaluated the validity of *P. parviformis* and inferred it to be a distinct species based on the results of their morphological and molecular analyses. Stuckas and Fritz (2011) sequenced DNA from the lectotype of *P. sinensis* and analyzed its placement in relation to other *Pelodiscus*. They found it distinct from the lineages identified as *P. axenaria* and *P. parviformis*, and concluded that *P. sinensis* is not a senior synonym of either of these two names. Consequently, Stuckas and Fritz proposed recognition of *axenaria, maackii, parviformis,* and *sinensis* as valid species; they recognized that older names may be available for some of these, but recommended use of these four names for the time being. The respective distribution ranges of the different forms, and possible areas of co-occurrence, remain unclear; the reported occurrence of both *axenaria* and *parviformis* in Guangxi and Hunan warrants further research.

11:17. ***Rafetus swinhoei***: Farkas et al. (2011) reviewed the description of *Rafetus vietnamensis* Le et al. 2010. They declared *vietnamensis* an objective synonym of *R. leloii*, and reasserted their view that *R. leloii* (and thus *R. vietnamensis*) is a subjective synonym of *R. swinhoei*.

11:18. ***Trionyx triunguis***: Gidis et al. (2011) sequenced up to seven genes of 20 known-locality samples and reported shallow divergence among Mediterranean Coast, Nile, and Cameroon samples, in contrast to the results of Guçlu et al. (2009), who found four different haplotypes for the four unknown-locality Sub-Saharan specimens that they compared to their Mediterranean samples.

11:19. **Pelomedusidae**: Fritz et al. (2011a) examined the phylogeny of *Pelusios* and *Pelomedusa* species based on three mitochondrial and three nuclear DNA fragments. They reported divergent lineages within *Pelusios rhodesianus* and *P. sinuatus*, found no clear differentiation of *P. chapini* from *P. castaneus*, and attributed the nesting of the sole *P. williamsi* sequence within *P. castaneus* to misidentification of the *williamsi* sample in GenBank. They also demonstrated very shallow divergences within *P. castanoides*, suggesting that populations in Madagascar and the Seychelles were only recently colonized; these findings agreed with those of Silva et al. (2010), who found limited mtDNA differentiation of Seychelles from Madagascar specimens of *P. castanoides*, but cautioned that their sampling of Madagascar material was limited. Fritz et al. (2011a) did not propose explicit changes to taxonomy, but indicated that *chapini* could be re-instated to subspecies rank under *P. castaneus*, and that the recognition of subspecies of *P. castanoides* could be unwarranted; they also suggested the existence of cryptic taxa within *P. rhodesianus* and *P. sinuatus*, and reaffirmed the view of Vargas-Ramirez et al. (2010) that *Pelomedusa subrufa* represents a species complex.

11:20. **Podocnemididae**: Gaffney et al. (2011) analyzed the phylogeny of fossil and living species of Podocnemididae in the context of their earlier analysis of extinct related groups (Gaffney et al. 2006). They reconfirmed the monophyly of the family Podocnemididae, and largely agreed with França and Langer (2006) in not recognizing Erymnochelyinae as a subfamily.

2012 Checklist Annotations

TTWG 2012 (000.243-328.checklist.v.5) (12:6-44)

12:6. **Testudines**: Crawford et al. (2012) and Lourenço et al. (2012) analyzed the placement of turtles in a wider context based on molecular phylogeny, and each team concluded that their data provided strong support for turtles being the sister group to Archosauria (i.e., Crocodilians + Birds, and extinct related groups), rejecting hypothesized relationships of turtles as sister group to Lepidosauria (lizards, snakes, and tuataras), or as the most basal branch of the reptilian (including birds) lineage. Lourenço et al. (2012) estimated the divergence of turtles and archosaurs as dating back to the late Permian around 255 million years ago (MYA), and dated the divergence between Cryptodira and Pleurodira at about 157 MYA in the late Jurassic. Guillon et al. (2012) analyzed mitochondrial and nuclear DNA sequences available in GenBank, including whole genomes for a few species, and constructed a phylogeny for the group involving 230 turtle species representing all families and nearly all genera. Their results reconfirmed the monophyly of Testudines and of Pleurodira and Cryptodira, added support for the placement of *Platysternon* among Testudinoids, placed *Dermatemys* in the Kinosternoids, placed Trionychoids (Trionychidae + Carettochelyidae) as sister to all other Cryptodires (a finding shared with Lourenço et al. [2012] and Wang et al. [2012]), and indicated the need for additional research to better resolve various groups of chelids and testudinids at the genus level.

12:7. **Cheloniidae**: The recognition of higher taxa within the Family Cheloniidae has been inconsistent, at least since Gray's (1825) recognition of an imprecisely defined Carettidae. The inconsistency has been due primarily to the uncertainty regarding the phylogenetic relationships of *Natator* and *Eretmochelys*, and the relationships of fossil to living cheloniids. However, in the midst of the uncertainty of most of the relationships within this family, the close (sister) relationship of *Caretta* and *Lepidochelys* has not been disputed at least since Deraniyagala (1934), who initially argued for the recognition of the latter as the Carettidae, with the remaining taxa in the Cheloniidae. By 1952, Deraniyagala had changed his position to subfamilial recognition of these two groups. Some authors have followed this latter arrangement of recognizing these groups at subfamily rank (e.g., Mlynarski 1976; Pritchard and Trebbau 1984; Smith and Smith 1979), but most have followed Zangerl and Turnbull (1955) and Zangerl (1958) in recognizing these groups as two tribes within the Cheloniidae: Carettini (including *Caretta* and *Lepidochelys*) and Chelonini (including the remaining taxa: *Chelonia*, *Natator*, and *Eretmochelys*).

Impetus for continuing to recognize the Carettini as a tribe (rather than a subfamily) emerges from 1) the strong support for *Caretta* as sister to *Lepidochelys* (virtually every study since Deraniyagala); 2) the controversy about the phylogenetic positions of *Natator* and *Eretmochelys* (i.e., the possible paraphyly of the living Cheloniinae or Chelonini; review in Bowen et al., 1993); and 3) the uncertain phylogenetic relationships of numerous fossil cheloniid taxa, rendering any hierarchy likely to introduce paraphyly (e.g., see Parham and Fastovsky 1997).

Fortunately, four recent publications, by Naro-Mariel et al. (2008; based on two mitochondrial and five nuclear genes), Parham and Pyenson (2010; based on osteology), Duchene et al. (2012; based on the entire mitogenome), and Guillon et al. (2012; based on all available GenBank sequences), seem to reveal the relationships among the living genera quite definitively. These studies clearly resolved *Natator* as sister to *Chelonia*, and *Eretmochelys* as sister to (*Caretta* + *Lepidochelys*), with each of these two clades being reciprocally monophyletic. However, Duchene et al. (2012) explicitly recognized these clades as subfamilies, whereas Naro-Maciel et al. (2008) explicity referred to them as tribes; Parham and Pyenson (2010) defined the tribe Carettini for (*Caretta* + *Lepidochelys*) only, but did not use or define group names for other groups below family level, while Guillon et al. (2012) took no position. In an effort to recognize recent research consensus, to promote stability, and until the relationships among fossil cheloniid taxa are better resolved, we here recognize the two living clades as subfamilies (Carettinae and Cheloniinae), and hope that this will stimulate further research

and discussion of the phylogeny of living and extinct cheloniid sea turtles.

12:8. **Cheloniidae**: Vilaça et al. (2012) reviewed the occurrence of natural interspecific hybrids among marine turtle species, and using nuclear markers demonstrated that hybridization among marine turtle species is very common along the Brazilian coast. Most of the hybridization involves male *Eretmochelys* and female *Caretta*, but problematic introgression is occurring among all four genera *Caretta, Eretmochelys, Lepidochelys*, and *Chelonia*. Vilaça et al. hypothesized that the incidence of this hybridization may have escalated only about 40 years ago, and may be the result of overhunting and local warming of the beaches due to coastal deforestation.

12:9. **Cheloniidae and Dermochelyidae**: Duchene et al. (2012) studied variation across the entire mitochondrial genome of all seven living marine turtle species, and demonstrated divergent intraspecific haplotype clades in the Pacific versus Atlantic and Indian Ocean basins for *Eretmochelys imbricata*, *Chelonia mydas*, and *Dermochelys coriacea*. However, they made no recommendations regarding intraspecific taxonomy.

12:10. ***Chelonia mydas***: Shamblin et al. (2012) demonstrated distinctive mitogenomic haplotype frequencies among the nesting populations of Green Turtles at Buck Island (US Virgin Islands), Aves Island (Venezuela), Suriname, and Tortuguero (Costa Rica), and recommended that these populations receive separate management unit status. However, although these populations are genetically distinct, the authors made no recommendations for taxonomic changes.

12:11. ***Kinosternon subrubrum steindachneri***: Bourque (2012a, 2012b) analyzed the phylogenetic placement of two new fossil *Kinosternon* taxa, and in the course of his morphological analysis found that *Kinosternon subrubrum steindachneri* was placed as sister taxon to the (*K. subrubrum* + *K. baurii*) group; consequently he suggested (2012a) and then elevated (2012b) *steindachneri* to full species rank. Regrettably, he did not specify whether his data for *K. subrubrum* were based on characters of *K. s. subrubrum*, *K. s. hippocrepis*, or a combination of these. The extreme morphological similarity of *baurii* to *hippocrepis* was already noted by Iverson (1992), and we provisionally retain *steindachneri* at subspecies rank under *subrubrum* pending further analysis.

12:12. ***Chrysemys***: Gemel and Grillitsch (2008) reported that Wagler (1821) had nomenclatorally occupied the genus name *Hydrochelys* for the species *Testudo picta* (now *Chrysemys picta*), and explicitly qualified *Hydrochelys* Wagler 1821 as a nomen oblitum and invalid, and qualified *Chrysemys* Gray 1844 as nomen protectum and valid.

12:13. ***Chrysemys picta***: The description of *Testudo picta* has generally been attributed to Schneider (1783). However, careful reading of his work indicates that the description of *picta* was based on descriptive information contained in letters from Johann Hermann of Strasbourg, and shows no indication that Schneider had access to the actual specimen, instead adding information from Hermann's letters for the sake of completeness of his (Schneider's) monograph of turtles.

Article 50.1.1 of the Code (ICZN 1999) states "However, if it is clear from the contents that some person other than an author of the work is alone responsible both for the name or act and for satisfying the criteria of availability other than actual publication, then that other person is the author of the name or act." In the case of *picta*, it is not evident how much Schneider was directly quoting from Hermann's writings, so we continue to attribute authorship of the name to Schneider, rather than 'Hermann *in* Schneider 1783'.

As an aside, we note that Hermann used different spellings for his surname over time, involving single or double 'r' and single or double 'n', as well as using French (Jean) and German (Johann or Johannes) versions of his given name. We elect to use the spelling 'Hermann' as that matches the spelling on his death certificate (indicating his preferred spelling later in life), and the spelling employed by Gmelin six years later for the tortoise named for him, *Testudo hermanni*.

12:14. ***Graptemys***: Freedman and Myers (2012) identified and sequenced a species-specific mitochondrial control region marker and two nuclear markers in a population of *Graptemys pseudogeographica* that had hybridized historically with *G. geographica*, after which geological events prevented further inbreeding for several generations. Both mitochondrial and nuclear introgression was documented. They provided additional evidence for hybridization events among *G. pseudogeographica*, *G. ouachitensis*, and *G. geographica* in other parts of the range, and combined with literature records of *Graptemys* hybridization events in captivity, concluded that reproductive isolation in *Graptemys* has evolved incompletely. In the context of conflicting evidence for monophyly vs. paraphyly of *G. pseudogeographica* and *G. ouachitensis*, they suggested that the two groups may maintain reproductive isolation in parts of their range while interbreeding in other areas.

12:15. ***Graptemys ouachitensis***: Brown et al. (2012) examined mitochondrial DNA control region sequence variation throughout the range of the subspecies *ouachitensis*, and found 18 haplotypes forming two minimally divergent groups. They also found modest divergence between *o. ouachitensis* and *o. sabinensis*, and slightly greater divergence between *ouachitensis* and *pseudogeographica*. They acknowledged earlier studies suggesting that *sabinensis* might warrant species status, and noted the need for additional studies to clarify the relationship among these taxa.

12:16. ***Pseudemys***: Using mitochondrial DNA, Jackson et al. (2012) inferred phylogenetic relationships of the taxa within *Pseudemys*. While recovering the genus as a strongly supported monophyletic group, they found no support for monophyly of the traditionally recognized redbelly (*rubiventris*) and cooter (*concinna*) species groups. They also did not find great support for monophyly of individual taxa other than *gorzugi* and *texana*, suggesting mitochondrial introgression since the glacial retreat in the Pleistocene, or recent speciation, as possible explanations. They made no specific recommendations for taxonomic changes based on their results, and indeed cautioned against making taxonomic changes within this highly complex group without comprehensive data.

12:17. ***Trachemys taylori***: McGaugh (2012) analyzed population genetic structure of *Trachemys taylori*, including a detailed genetic assessment of potential hybridization, and found significant genetic differentiation among populations, consistent with population bottlenecks, but detected no genetic evidence for hybridization of *T. taylori* with invasive *T. scripta elegans*.

12:18. ***Trachemys venusta***: Perry (1810) published a description of *Testudo panama*, a name overlooked and/or ignored ever since, until Bauer and Petit (2004) discussed it. They attributed it to the genus *Trachemys* based on the illustration and text description, and based on provenance and color pattern, regarded *Testudo panama* as referring to *Trachemys venusta* (Gray 1856b). Invoking ICZN Article 23.9, Bauer and Petit (2004) asserted that *Testudo panama* Perry 1810 was to be regarded as a nomen oblitum and invalid, and *Emys venusta* Gray 1856b as a nomen protectum whenever the two are considered as synonyms.

12:19. ***Emys orbicularis hellenica***: Schreiber 1875, in his section on *Cistudo lutaria*, listed and defined eight varieties, including var. h), to which he attributed "*Emys Hoffmanni* Fitzinger Mus. Vindob." Our previous inclusion in earlier checklists of *Emys orbicularis hoffmani* [sic] Schreiber 1875 as a synonym of *E. o. hellenica* referred in fact to a subsequent use of Fitzinger's (1835) name *Emys (Emys) hofmanni* (with a minor spelling difference) rather than to a new taxon description, and as such we now delete it from our listing of synonymized primary taxa.

12:20. ***Terrapene ornata***: Joyce et al. (2012) described a new fossil box turtle and carried out a phylogenetic analysis of extant and fossil box turtle species based on morphological and osteological characters. The fossil taxon *T. longinsulae* Hay 1908, from an undefined location in the general region of Long Island, Kansas (possible age ranging from Miocene to Pleistocene; see Joyce et al. 2012:185), scored identical for all available characters to the character states shown by both living *T. ornata ornata* and *T. o. luteola*, including two unique shared characters. They therefore placed *T. longinsulae* in the synonymy of *T. ornata*.

12:21. **Geoemydidae**: The deep divergence of living New World from Old World geoemydids has been well-established based on mitochondrial and nuclear DNA data (Spinks et al. 2004; Le and McCord 2008; Guillon et al. 2012), and has recently been dated at 57 mya (Lourenço et al. 2012). Le and McCord (2008) first proposed the recognition of living New World taxa (genus *Rhinoclemmys*) as the subfamily Rhinoclemminae. Given that the divergence of the latter is as old as, or older than, that of the widely accepted emydid subfamilies (dated at 37 mya by Dornburg et al. 2011; 57 mya by Lourenço et al. 2012), we support the subfamilial status of the genus *Rhinoclemmys*. However, we amend Le and McCord's name to Rhinoclemmydinae to correspond to the proper case for its ending *-emys* (genitive *emydis*), and we note that the group may also include North American fossil species of the genera *Echmatemys* (Hervet 2004) and *Bridgeremys* (Hutchison 2006). Correspondingly, we apply the subfamily name Geoemydinae to all Eurasian geoemydid taxa.

12:22. ***Cuora***: Phylogeny and species boundaries were studied for the genus *Cuora* by Spinks et al. (2012a) using a combination of mitochondrial and nuclear genes. While noting discrepancies between the results of the mitochondrial and nuclear data sets, concordance with traditional, morphology-based phylogenies for *Cuora* was greatest with the nuclear dataset, which they considered to represent the most reliable estimates of phylogeny and species

boundaries. The species *amboinensis*, *flavomarginata*, *mouhotii*, and *yunnanensis* emerged clearly resolved, whereas the *trifasciata* and *galbinifrons* taxon clusters were less well resolved. *Cuora aurocapitata* and *C. pani* showed signs of introgression of *trifasciata* mtDNA, but were reciprocally monophyletic based on nuclear markers. The position of animals attributed to '*cyclornata*' was highly variable depending on what markers were analyzed, a result that was interpreted as being most consistent with introgression, and leading to the recommendation to consider animals with '*cyclornata*' phenotype as part of *C. trifasciata* rather than a distinct separate taxon. *Cuora zhoui* emerged as a strongly divergent species based on nuclear DNA, but its mtDNA association with *trifasciata* may indicate mitochondrial introgression. The monophyly of *C. mccordi* was well supported, though its phylogenetic position was different when nuclear and mtDNA datasets were analyzed. While some doubts were expressed about the species status of *mccordi*, the authors recommended continued treatment as a valid species for the time being. The members of the *galbinifrons* group (*bourreti*, *galbinifrons*, and *picturata*) were strongly supported as a clade of three genetically and morphologically diagnosable taxa, and while some potential gene flow was detected between these taxa, the authors recommended that they continue to be recognized as valid separate species.

12:23. ***Cuora amboinensis***: Ernst et al. (2011) evaluated the potential to use shell morphology and postorbital stripe to separate the subspecies *amboinensis* and *kamaroma* in the Philippines, as alternative approaches to the usual plastron pattern character used to differentiate these subspecies. They found that shell shape and postorbital stripe data do not necessarily correspond to plastron pattern, suggesting that animals previously identified as *kamaroma*, and as such representing a potential co-occurrence of two different subspecies in some areas of the Philippines (i.e., Palawan and Sulu), may in effect be *amboinensis* animals with a plastral pattern resembling that of *kamaroma* through introgression or phenotypic plasticity.

12:24. ***Cuora galbinifrons***: Bourret described this species in a work dated 1939 on the title page, but it was not actually published until 1940 (R. Bour, pers. comm.). We have therefore changed the date of publication from 1939 to 1940.

12:25. ***Heosemys spinosa***: Spinks et al. (2012b) examined variation in mitochondrial (cyt b) and nuclear (11 loci) DNA in a large sample of *Heosemys spinosa* that lacked locality data. Two clades were clearly identified by the mtDNA analysis, and were supported by preliminary morphological analysis, but not recovered in the nuDNA analysis. Future identification of the geographic provenance of these two clades is critical for conservation management as well as establishing the taxonomic implications of this work.

12:26. ***Mauremys caspica***: Vamberger et al. (2013) investigated population structure and history of *Mauremys caspica* based on an analysis of 14 microsatellite loci and cytochrome *b* mtDNA sequences from nearly range-wide samples (but lacking Iraq). Their results found two clusters of mitochondrial haplotypes, and four microsatellite clusters, with each mtDNA haplotype cluster comprising two of the microsatellite clusters. Specimens from Bahrain and Saudi Arabia were found to constitute a distinct microsatellite cluster, and were thus viewed as representing native (and endangered) populations. The authors proposed that each of the four identified phylogenetic clusters (i.e., Central Anatolia; eastern Turkey and Syria; Dagestan, Azerbaijan, and Iran; and Bahrain and Saudi Arabia) be treated as distinct management units. Their results did not support the validity of any of the three previously morphologically-defined subspecies, and they therefore proposed that the subspecies no longer be recognized, a recommendation that we follow here.

12:27. ***Orlitia borneensis***: Palupcikova et al. (2012) analyzed mitochondrial (cyt *b*) and nuclear (R35) sequences, and shell and scute morphometrics among *Orlitia borneensis* specimens in European collections. Most specimens lacked precise locality data because they originated from a single confiscation in 2001, but three known-locality specimens from Borneo and Sumatra were added to the sample series (no reference specimens from West Malaysia were available). Haplotype diversity in cyt *b* was found to be relatively high, with three main haplotype groups identified; nucleotide diversity was low, and phylogenetic structure was poorly supported. The three known-origin animals clustered within one of the main haplotype groups, suggesting that the confiscated animals covered much of the species' genetic diversity. Only minimal variation was found in R35 sequences. Geometric morphometrics demonstrated morphological similarity of all examined specimens. These results led the authors to conclude that all examined animals represented a single conservation unit.

12:28. ***Aldabrachelys gigantea* or *Dipsochelys dussumieri***: The latest contribution to the ongoing debate in the ICZN (case #3463) on the scientific name for the Aldabra Tortoise came from Ceríaco and Bour (2012), who traced the history of the specimen claimed to be the type of *Testudo gigantea* Schweigger from the MNHN Paris via the defunct Royal Cabinet of Natural History of Ajuda in Lisbon to the collections made in Brazil and other parts of South America by Alexandre Rodrigues Ferreira during his travels there during 1783–1792. The authors thus provided further evidence that Schweigger's type specimen of *Testudo gigantea* originated in Brazil and represents a *Chelonoidis denticulata*, providing support for possibly precluding the use of the name *gigantea* for the Aldabra Tortoise. At the time of writing of this annotation, the ICZN is voting regarding the use of either *gigantea* or *dussumieri*, and a result is expected to be published in the next issue of the Bulletin of Zoological Nomenclature.

12:29. ***Geochelone* or *Centrochelys sulcata***: Bour and Henkel (2012) described a captive colony of tortoises of different species maintained in extensive enclosures in southern France and documented a female *Centrochelys sulcata* producing viable, morphologically aberrant, hatchlings that were interpreted as hybrids between this sulcata female and a male *Dipsochelys dussumieri* [or *Aldabrachelys gigantea*], with which copulation had been observed. From each of three clutches of 20 eggs each, normal *sulcata* hatched from 15 eggs after 75–90 days, one hatchling emerged after 140–170 days and was a suspected *sulcata-dussumieri* hybrid, and 4 eggs failed to develop. The authors also reported the repeated production of hybrid hatchlings between *C. sulcata* and *Astrochelys radiata* at the A Cupulatta facility in Corsica; these either died just before emergence from the egg, or within days after hatching. These records add to the growing catalog of documented intergeneric turtle hybrids (see also annotation number 8 above).

12:30. ***Chelonoidis chilensis***: The number of species in the *Chelonoidis chilensis* complex recognized by various authors has ranged from one to three (see TTWG 2010, annotation 21). However, based on an examination of a mitochondrial gene (cyt *b*) and 10 microsatellite loci, Fritz et al. (2012a) found negligible genetic variation among populations and concluded that this complex represents only a single species, *C. chilensis*. Previously described morphological variation among populations is apparently explained by Bergmann's Rule, with body size increasing with latitude. Hence, *C. petersi* and *C. donosobarrosi* were placed in the synonymy of *C. chilensis*.

12:31. ***Chelonoidis nigra* species complex**: Only two papers published in the past year bear on the taxonomy of the Galapagos tortoises, and both continue to recognize the various taxa at the species level (see TTWG 2009, annotation 32). Garrick et al. (2012) reported the discovery of hybrid tortoises on Volcan Wolf that were F1 hybrids between a purebred Floreana tortoise (*C. nigra*; erroneously referred to in their paper as *C. elephantopus*) and the local Volcan Wolf tortoise (*C. becki*). This led the authors to speculate that translocated Floreana tortoises might still exist on northern Isabela. Actual rediscovery of genetically pure individuals of Floreana tortoises would reverse their current IUCN status as Extinct, and be cause for great celebration.

Based on DNA sequences from three mitochondrial genes from extant and museum specimens of Galapagos tortoises, Poulakakis et al. (2012) attempted to resolve the phylogenetic relationships and reconstruct the biogeographic history of the living and extinct taxa. Prior to their study, they recognized eleven extant and four extinct species of Galapagos tortoises, though one of the latter has not yet been described. It should be noted that the taxa they recognized a priori did not completely agree with those recognized by the TTWG. In any case, the results of Poulakakis et al. (2012) suggested that the following populations represent "independent evolutionary units" and they applied the term "species" to them: *abingdonii* (extinct in 2012, Pinta), *becki* (Volcan Wolf, northern Isabela), *chathamensis* (San Cristobal), *darwini* (Santiago), *elephantopus* (extinct, Floreana; recognized as *nigra* by the TTWG), *ephippium* (Pinzón; recognized as *duncanensis* by the TTWG), *hoodensis* (Española), *porteri* (La Reserva, Santa Cruz), and *vicina* (central and southern Isabela, and including the names *microphyes*, *guentheri*, and *vandenburghi*; matching previous TTWG checklists), an unnamed extant species (Cerro Fatal, Santa Cruz), and an unnamed extinct species (Santa Fe). They explicitly noted that two taxa were not likely to be independent evolutionary units: *wallacei* (Rabida) being subsumed under *vicina* (as already reflected in previous TTWG checklists), and *phantastica* (extinct, Fernandina; possibly introduced by humans) under *porteri*. However, in the face of pronounced morphological differences between the extreme saddleback *phantastica* and the greatly domed *porteri*, the TTWG believes that additional support must be presented before synonymization of *phantastica* is warranted. Finally, while Poulakakis et al. (2012) laudably extracted DNA from bones of museum specimens from extinct lineages, it is critical that the genotyping of actual type specimens of all possible named Galapagos tortoise taxa (including

those of synonyms) be completed before final allocations of names to existing populations can be done with full confidence.

12:32. ***Gopherus flavomarginatus***: Ureña-Aranda and Espinosa de los Monteros (2012) examined variation in a mitochondrial gene in the Bolson Tortoise and not only found no geographic structure in that variation, but also noted that the existing variation was the lowest ever reported for a tortoise. They attributed this low variability to the post-Pliocene collapse of this once more widely distributed (New Mexico to central Mexico) species.

12:33. ***Gopherus polyphemus***: Based on a single mitochondrial gene fragment (ND4), Ennen et al. (2012) examined geographic variation in Gopher Tortoises and found two major haplotype assemblages that overlapped in distribution in the Appalachicola-Chattahoochee River basin. They also found some (albeit weak) support for the distinction of the Federally Threatened portion of the western assemblage to the west of the Mobile River Basin (USFWS 1987). In a more comprehensive study of both mitochondrial (cyt *b*) and nuclear microsatellite markers, Clostio et al. (2012) confirmed the Appalachicola basin as the transition region between the distinctive western and eastern lineages. In addition, based on both mtDNA and nuDNA, they noted the distinction of the populations west of the Mobile River and those in western Georgia. They concluded that the tortoises in each of these four regions should be managed independently, but they made no specific taxonomic recommendations.

12:34. ***Gopherus* species indeterminate** *Testudo australis* Girard 1858 was described based on a specimen reputedly originating from New Zealand. Clearly this specimen must have been transported by humans, as no testudinids or other non-marine turtles are known from New Zealand, living or fossil. The name has generally been overlooked or ignored, except by Boulenger (1889) who attributed it with doubt to *Gopherus polyphemus*. Based on communication with Robert Murphy and Steve Gotte, the specimen cannot be found in the USNM collection, if indeed it ever was there. Girard's description of a uniform near-black tortoise agrees nearly perfectly with *Gopherus*, except for the small nuchal (cervical) scute, which is usually wide in *Gopherus*. The scutellation on the top of the head and on the forearms, the absence of thigh spurs, as well as the shape of the caudal (supracaudal) scute are all characters that eliminate *Manouria*. *Chelonoidis* species are eliminated from consideration by the presence of a nuchal in *australis*. Therefore, we tentatively attribute *Testudo australis* Girard 1858 to the genus *Gopherus*. Attribution to any particular species is challenging: based on size and coloration, *G. berlandieri* and *G. flavomarginatus* are easily excluded, and while the Pacific location of New Zealand suggests possible seafaring or trade links with California and therefore *G. agassizii* and/or *G. morafkai*, morphological details such as the large head with rounded snout, and upward curving of the gulars, are more reminiscent of *G. polyphemus*. We therefore include *Testudo australis* Girard 1858 as a *nomen dubium* and *nomen oblitum* under *Gopherus* species indeterminate.

12:35. ***Kinixys***: Kindler et al. (2012) examined the phylogeography, phylogeny, and taxonomy of all currently recognized *Kinixys* taxa, based on examination of sequence data for three mtDNA fragments (12S, ND4, cyt *b*) and three nuclear loci (C-mos, ODC, R35). Their findings indicated that the savannah taxa, traditionally recognized as subspecies or affiliated species of *K. belliana*, represent three deeply divergent clades, which are paraphyletic with respect to the rainforest species *K. erosa* and *K. homeana*.

To reflect this phylogeny, the authors recognized their East African cluster as a valid species, for which they followed the first reviser (Bour 1979) to apply the name *zombensis* in preference over *zuluensis*. They also elevated *nogueyi* to full species status, and reconfirmed *lobatsiana*, *natalensis*, and *spekii* as evolutionarily distinct and ranked as full species.

They did not, however, present a clear arrangement of recognized taxa; their new delineation of species is presented in their Fig. 2, implying that no subspecies are recognized. They noted that their samples of *domerguei* from Madagascar clustered with *zombensis*, and it appears that they intended to transfer *domerguei* from the synonymy of *K. b. belliana* (following Broadley 1992, 1993; Fritz and Havas 2007; Branch 2008) to that of *K. zombensis*. In their text (Kindler et al. 2012:198), the five-clawed tortoises of the Central African Republic are specifically combined with the four-clawed West African animals to form the distinct species *K. nogueyi*; however, these Central African Republic records are mapped (Fig. S1) and listed (Table S1) as '*belliana belliana*' in the online supporting material.

While the TTWG generally believes that the results presented by Kindler et al. (2012) represent major advances in our understanding of *Kinixys* phylogeny, we prefer to retain a slightly more traditional arrangement for *domerguei*, pending further data. While *domerguei* may not be genetically recognizable based on the examined genes, it is morphologically well established (e.g., Bour 2006), and we continue to recognize it as a valid taxon at subspecies rank under *zombensis* (to which it appears most closely related). Hence, we recognize the new combinations *Kinixys zombensis zombensis* and *K. z. domerguei*.

12:36. ***Testudo graeca***: Parham et al. (2012) extracted mtDNA sequence data from Iranian tortoises of the *T. graeca* complex, specifically the holotype of *T. g. zarudnyi* and topotypes of *T. g. buxtoni* and *T. g. perses*. Their results confirmed the previous work of Fritz et al. (2007, 2009) regarding the existence of two distinctive mitochondrial haplotypes in Iran, one in the northwest, and one in eastern and central regions.

Using AFLPs (amplified fragment length polymorphisms) from samples across the range of the *T. graeca* species complex, Mikulíček et al. (2013) identified four geographically defined genetic groups: 1) western Mediterranean (Morocco and Spain to Libya); 2) Balkans-Middle East (Bulgaria and Romania to southwestern Russia, Azerbaijan, eastern Turkey, and southern Israel); 3) Caucasian (extreme eastern Turkey, Russia, and southeastern Azerbaijan to northwestern Iran); and 4) central and eastern Iran. These groups generally correspond to the mtDNA haplotype lineages identified by Fritz et al. (2007, 2009), but with one to four mitochondrial lineages per AFLP group.

Considered together, these two data sets suggest that the western Mediterranean and central-eastern Iran groups are both divergent and allopatric, and thus could be considered as distinct species. The oldest available names for these groups are *T. graeca* (including *cyrenaica*, *lamberti*, *marokkensis*, *nabuelensis*, *soussensis*, and *whitei*) and *T. zarudnyi*, respectively. The remaining two groups come into contact in the eastern Caucasus, with some mtDNA evidence of gene flow between them. Hence, there remains uncertainty as to whether they represent distinct evolutionary units worthy of species status. The oldest available names for those two groups are *T. terrestris* (Balkans-Middle East) and *T. buxtoni* (Caucasus; including *armeniaca*, *perses*, and *pallasi*). Unfortunately, variation in neither set of markers corresponds well with described morphological variation in this complex, on which the traditional taxonomy has been based.

Pending future studies of variation in nuclear markers and a re-examination of morphological variation to determine minimally plastic characters that correspond to the currently defined genetic groups (i.e., dismissing color and general body size and shape), we prefer to retain *T. graeca* as a single species, with no changes in the subspecies recognized from our previous checklist.

12:37. ***Apalone spinifera***: McGaugh (2012) examined variation at ten microsatellite loci for populations of *Apalone spinifera* within and outside of the Cuatro Ciénegas basin in Mexico. She found considerable divergence among all sampled populations (particularly eastern versus western basin localities), but found no genetic variation associated with carapacial color variation within the basin (the basis for the original description of *A. s. atra*). She reported negligible differentiation between softshells sampled inside the basin compared to those outside, but provided no indication whether additional *A. s. emoryi* were sampled since the range-wide analysis of *A. spinifera* reported by McGaugh et al. (2008) and did not provide a detailed comparison between *Apalone* within the Cuatro Cienegas basin versus outside the basin. As McGaugh did not make an explicit taxonomic recommendation to synonymize *atra* with *emoryi*, we conservatively continue to recognize *atra* as before, at subspecies level.

12:38. ***Nilssonia gangetica***: An analysis of mitochondrial and nuclear DNA sequence data by Liebing et al. (2012) confirmed the monophyly of the genus, resolved the placement of *N. formosa* as sister to other *Nilssonia*, and identified significant intraspecific genetic variation within *N. gangetica* corresponding to river basin of origin. Populations from the Brahmaputra, Mahanadi, and combined Indus and Ganges basins were each genetically distinct, and worthy of separate management. The authors did not support species recognition of the three identified units, but noted that if these units were given subspecies status, the name *mahanaddica* (Annandale 1912b) is available for the Mahanadi basin population, and the nominate trinomial would apply to the Indus-Ganges population. No name has been applied to the Brahmaputra population. Until the three intra-specific populations are adequately characterized and named, we continue to recognize *N. gangetica* as monotypic.

12:39. **Chelidae**: It was assumed by Gaffney (1977) that the three long-necked taxa in the Chelidae (*Chelodina*, *Hydromedusa* and *Chelus*) formed a monophyletic lineage. However, Pritchard (1984) proposed that these three taxa were not necessarily closely related, based on the major structural differences in how they arrived at their long-necked condition, a position generally consistent

with the phylogenetic arrangement previously proposed by Baur (1893a). Sequencing of 12S mtDNA was used to demonstrate that the Australian radiation of the Chelidae formed a monophyletic group (Seddon et al. 1997; Georges et al. 1998) and that the shorter-necked South American taxa (including *Chelus*) were also a monophyletic group, with *Hydromedusa* a third lineage (Georges et al. 1998). At that time Georges et al. (1998) proposed names for the three lineages; Chelinae [as Chelidinae] for *Chelus* and its South American relatives; Chelodininae for the Australasian species; and Hydromedusinae for the genus *Hydromedusa*, a clade that also includes the fossil genus *Yaminuechelys* (de la Fuente et al. 2001) and hence is not monotypic. Further morphological work agreed with Pritchard (1984) and supported the molecular results with differences in skull, shell, and cervical structures among the three monophyletic lineages (Thomson 2000), indicating that what gross similarity there is between the long-necked forms was a result of convergence and not of shared ancestry. In the ten or so years since these publications, numerous studies have added further support to this phylogenetic arrangement, which was summarized and further supported by Guillon et al. (2012). Therefore we now include these three subfamily assignments in this edition of the checklist.

We are aware of the family-group name Hydraspidina Bonaparte 1836, based on the genus *Hydraspis* Bell 1828, whose type species is *Testudo* [now *Chelodina*] *longicollis*, as a potential source for the subfamily name for chelids of the Australia-New Guinea region. However, as Bonaparte's concept of *Hydraspis* differed fundamentally from that of Bell, to the point of excluding *longicollis* from *Hydraspis* by properly placing it in *Chelodina* Fitzinger 1826, revival of the family-group name Hydraspidina (as Hydraspidinae for this subfamily) would lead to unnecessary confusion. In the absence of strict ICZN priority requirements for family-group names, we therefore use the name Chelodininae Baur 1893b for the chelids of the Australia-New Guinea region.

12:40. ***Mesoclemmys dahli* and *M. zuliae***: Based on both mitochondrial and nuclear gene sequence variation, Vargas-Ramírez et al. (2012a) confirmed the species distinction of *Mesoclemmys dahli* and *M. zuliae*, and identified two geographically isolated, weakly divergent populations within *M. dahli* (Córdoba and Cesar Departments, Colombia). Further sampling will be necessary to determine if this divergence has taxonomic implications.

12:41. ***Mesoclemmys heliostemma* and *M. raniceps***: Because some authors (e.g., Rueda-Almonacid et al. 2007) have questioned whether *M. heliostemma* is distinct from *M. raniceps*, Molina et al. (2012) undertook a multivariate morphometric study of those two taxa (and *M. gibba*). Their results supported the validity of *M. heliostemma*, and identified eight new localities that significantly expand the known range of the species across the Amazon basin.

12:42. ***Pelusios castanoides***: Analysis by Fritz et al. (2012b) of mitochondrial genes of *P. castanoides* revealed that samples from Madagascar and the Seychelles were weakly differentiated from each other, and significantly different from the sampled mainland populations. However, sparse sampling from the mainland precluded any final conclusions about the origins of the Malagasy and Seychelles populations, and therefore the validity of the currently named, endemic subspecies of the Seychelles. As the population of Madagascar is related more closely to that of the Seychelles than to the continental African populations, a subspecies designation for these combined populations might be warranted. The oldest available name is *kapika* Bour 1979; however, we defer any changes to our checklist at this time.

12:43. ***Pelusios subniger***: Parallel analysis by Fritz et al. (2012b) of mtDNA samples of *Pelusios subniger* from mainland Africa, Madagascar, and the Seychelles demonstrated the existence of a cryptic, unnamed taxon from the Democratic Republic of the Congo, but no significant variation among all other sampled populations. Based on these results, the authors suggested that *subniger* was introduced by humans to both Madagascar and the Seychelles, and recommended that the supposed endemic Seychelles subspecies *P. s. parietalis* be placed into the synonymy of a monotypic *P. subniger*. However, reanalysis of the morphological differentiation that originally distinguished these taxa has not been carried out, and we are reluctant to make a definitive change at this time, particularly for a taxon with such significant regional conservation concerns. We await further analysis before amending this taxonomy.

12:44. ***Podocnemis lewyana***: Based on 10 microsatellite loci and a mitochondrial DNA fragment, Vargas-Ramírez et al. (2012b) found low genetic variability across the range of *Podocnemis lewyana*, consistent with a significant historic population bottleneck. They did identify three weakly differentiated genetic management units: 1) the Upper Magdalena River Basin; 2) the Lower Magdalena, Lower Cauca, and San Jorge Basins; and 3) the Sinú River Basin, but made no taxonomic recommendations.

2014 Checklist Annotations

TTWG 2014 (000.329-479.checklist.v.7) (14:1-50)

14:1. ***Macrochelys temminckii***: Two new names for Alligator Snapping Turtles were coined by Hoser (2013). There are significant nomenclatural, technical, and biological problems inherent in these descriptions, and at this time it seems appropriate to treat his names, *Macrochelys temminckii muscati* and *Macrochelys maxhoseri*, as unavailable synonyms of *Macrochelys temminckii*.

14:2. ***Caretta caretta***: Considerable confusion has surrounded the names and authors and dates of publication of the turtle descriptions published in various outputs of the *Expédition Scientifique de Morée*, currently cited in our checklist as Valenciennes (1833), Bibron and Bory de Saint-Vincent (1833), and Bory de Saint-Vincent (1835). See the detailed clarification below in annotation 25 for *Emys orbicularis hellenica*. The name *Chelonia pelasgorum* was first published on plate 6 by Valenciennes (1833), but rendered as *C. pelasgica* in the subsequent text by Bibron and Bory de Saint-Vincent (1833), where they synonymized it with *Chelonia caouanna* (= *Caretta caretta*).

14:3. ***Eretmochelys***: In last year's checklist, in annotation 7, we outlined our reasoning for recognizing the subfamilies Cheloniinae and Carettinae. Unfortunately, we made an editorial error in listing *Eretmochelys* under the Cheloniinae when, in fact, studies have shown that it is more closely related to *Caretta* and *Lepidochelys*, and belongs in the Carettinae, as we pointed out in our annotation. We correct the error in this year's checklist.

14:4. ***Eretmochelys imbricata***: The junior synonym *Chelonia grisea* Eschscholtz 1829b has for many years been incorrectly cited as *Chelonia griseam* in our previous checklists and in Fritz and Havaš (2007) and extensively on the web. Having finally successfully accessed the obscure original publication, we now note this long-standing error and correct it.

14:5. ***Chelonia mydas***: We note also that in the same obscure publication cited above, Eschscholtz (1829b) also described *Chelonia castanea* from Surinam as a new species. The name has been overlooked since its description and is a *nomen oblitum* and junior synonym of *C. mydas*.

14:6. ***Dermochelys coriacea***: The original citation for the junior synonym *Dermatochelys porcata* is actually Wagler (1830b), not Wagler (1833) as listed in our previous checklists, but which contained no new turtle descriptions.

14:7. ***Dermochelys coriacea***: In our previous checklists we had included the name *Testudo marina* Wilhelm 1794 in the synonymy of *D. coriacea*, based on its inclusion in older checklists (e.g., Fritz and Havaš 2007). However, examination of Wilhelm's (1794) work indicates that his use of the name *Testudo marina* was as an incorrect collective group name for "marine" species (sea turtles and softshells), as he also grouped most "terrestrial" turtles (testudinids and kinosternids) under the incorrect group name *Testudo terrestris*, and all other freshwater turtles under the group name *Testudo fluviatilis*. In discussing separate species under these group names, he used names previously described by other authors (including a description of the Leatherback, using the name *Testudo coriacea*), but not in a consistently binomial manner. His work therefore has no standing nomenclaturally, and we have removed the name *Testudo marina* Wilhelm 1794 from the synonymy of *D. coriacea*.

On the other hand, Ranzani (1832) published a description in Latin of the Leatherback Turtle in which he described it as *Testudine coriacea marina*. This description is valid (as the trinomen *Testudo coriacea marina*), as per ICZN Code Article 11(h)(ii) allowing for the use of adjectival Latin descriptions, as previously noted by Smith and Rhodin (1986) in regard to the validity of the original authorship of *Testudo coriacea* Vandelli 1761.

14:8. ***Dermatemys mawii***: González-Porter et al. (2013) presented microsatellite data that supported their previous mitochondrial DNA studies (González-Porter et al. 2011) in recognizing populations of *Dermatemys mawii* in the Papaloapan River drainage as genetically distinctive. However, they made no taxonomic recommendations based on their results. In addition, they also identified a small sample of genetically divergent individuals in the Sarstun and Salinas River basins along the southeastern distribution of the species that they speculated might represent a cryptic taxon.

14:9. **Kinosternidae**: Iverson et al. (2013) sequenced three mtDNA and three nuclear markers for every recognized species and most subspecies of kinosternids. Their analyses revealed three well-resolved clades within the Kinosterninae, corresponding to *Sternotherus*, a previously unnamed clade that they described as the new genus *Cryptochelys*, and *Kinosternon* sensu stricto. Their molecular data support for *Cryptochelys* was strong, but data support for non-monophyly of *Kinosternon* with respect to *Sternotherus* was weak. The identified groups are broadly consistent with morphological and biogeographical

features. Their new genus *Cryptochelys* was diagnosed based on an extensive set of morphological and molecular characters, and contains the designated type species *leucostoma,* as well as *acuta*, *angustipons*, *creaseri*, *dunni*, and *herrerai*.

As we are aware of a parallel study of kinosternid phylogenetics, currently in review, that reaches different taxonomic conclusions, we present the recommended taxonomy of Iverson et al. (2013) as an additional alternative to the traditional arrangement, in the knowledge that we will revisit kinosternid taxonomy again in our next edition, and hopefully come to a consensus position then.

14:10. ***Kinosternon abaxillare***: A multivariate analysis of morphometric data by Berry (1978) demonstrated the distinctiveness of the endemic, allopatric taxon *K. scorpioides abaxillare* from the parapatric *K. s. cruentatum*. In addition, preliminary molecular sampling of the *K. scorpioides* complex by Iverson et al. (2013) suggested that *K. s. abaxillare* was more closely related to *K. oaxacae* than to *K. s. cruentatum* (or any other *K. scorpioides*). Given both the morphometric and molecular evidence, the latter authors followed Alvarez del Toro (1972, among many others) and suggested that *K. abaxillare* be recognized as a full species. Until more thorough geographic and molecular sampling is completed, we acknowledge both options in this checklist, but treat the taxon as more likely a species.

14:11. ***Kinosternon chimalhuaca***: In 1996, while the original, full description by Berry et al. (1997) of *K. chimalhuaca* was in press, it was shared with Manfred Rogner for inclusion in his forthcoming book. However, though unintended, Rogner's abbreviated version, clearly attributed to Berry et al., was published first (in 1996). Hence, although many authors have cited Berry et al. (1997) as the original description for this taxon, the proper attribution should be Berry, Seidel, and Iverson *in* Rogner (1996). The ICZN has now been petitioned (Rogner et al. 2013) to officially confirm this proper authorship and date, which has already been used in all previous TTWG checklists.

14:12. ***Kinosternon subrubrum steindachneri***: Based on osteology, Bourque (2012) recommended that *K. s. steindachneri* be elevated to full species status, as it was originally described. Preliminary molecular data provided by Iverson et al. (2013) supported this conclusion. However, until a more complete, range-wide study of molecular and morphological variation of the *K. subrubrum-baurii* complex is available, we here retain *steindachneri* as a subspecies of *K. subrubrum*.

14:13. **Staurotypinae or Staurotypidae**: Highlighting the extensive divergence of the staurotypines from the kinosternines based on morphology (Hutchison 1991), genetics (Iverson et al. 2103), karyotype (Bickham and Carr 1983), and sex determination mechanisms (Ewert et al. 2004), Iverson et al. (2013) followed Bickham and Carr (1983) in recognizing the Staurotypidae as a separate family. Within the TTWG we have differing opinions on the appropriate ranking of this taxonomic node, and recognize that the views and actions of the wider turtle taxonomic community will determine its eventual accepted ranking; until consensus emerges, we provide alternative rankings in the checklist.

14:14. ***Graptemys***: In a historical review of the taxonomic history of the genus *Graptemys*, Lindeman (2013:20) mentioned two genus names from an unpublished manuscript by Georg Baur: *Neoclemmys* (intended to include *pseudogeographica* and *oculifera*) and *Megaloclemmys* (for *pulchra*), while *Graptemys* would have been retained for *geographica* and *kohnii*. However, Lindeman only used these names in a conditional manner, without formal status as valid taxa, and hence the names *Neoclemmys* and *Megaloclemmys* were not made available according to Article 15.1 of the International Code of Zoological Nomenclature (see also annotation 19 for *Graptemys intermedia*).

14:15. ***Graptemys flavimaculata***: Using microsatellite loci, Selman et al. (2013) demonstrated a significant degree of genetic structure across the range of the species in the Pascagoula River basin, with the greatest divergence between the main Pascagoula basin and the lowland Escatawpa River tributary, historically separate drainages. Although they urged that at least these two units be managed separately, they made no taxonomic recommendations.

14:16. ***Graptemys ouachitensis* or *G. o. ouachitensis***: See annotation number 19 below regarding the taxon *sabinensis*, previously listed as a subspecies of *ouachitensis*, but now conditionally elevated to full species status, therefore also necessitating listing the Ouachita Map Turtle as a full species, rather than the nominate subspecies.

14:17. ***Graptemys pulchra***: In his historical review of the taxonomic history of *Graptemys*, Lindeman (2013:20) also made reference to Baur's manuscript names for the species he eventually described as *Graptemys pulchra*; we hereby designate these names, *G. alabamensis* and *G. grandis*, as *nomina nuda*, and associate them with the synonymy of *G. pulchra*, as they were considered for application to that taxon.

14:18. ***Graptemys sabinensis* or *G. o. sabinensis***: Originally described as a subspecies of *Graptemys pseudogeographica* by Cagle (1953a), the Sabine Map Turtle (*G. sabinensis*) was later classified by Vogt (1980) as a subspecies of *G. ouachitensis*, and most subsequent authors have followed that arrangement. However, based on a small sample of skulls, Ward (1980) believed that *sabinensis* was so distinctive that it warranted species status. Recent analyses of morphology, mitochondrial DNA, and nuclear DNA have generally failed to resolve the relationships of *sabinensis* with confidence, and the interrelationships of the "narrow-headed *Graptemys*" remain largely unresolved (Stephens 1998; Stephens and Wiens 2003; Myers 2008; Wiens et al. 2010; Brown et al. 2012). Based on these previous studies and his own extensive examinations of Gulf Coast *Graptemys* specimens, Lindeman (2013) noted that *sabinensis* is allopatric, non-intergrading, and diagnosable morphologically, and concluded that it should be recognized as a full species. While subspecific as well as specific recognition can each be supported, we conclude that enough uncertainty remains regarding this lineage to list it as either a species or subspecies. Further sampling of the nuclear genome and more strongly supported phylogenetic trees will be necessary to settle this issue as well as the relationships across the entire genus *Graptemys*.

14:19. ***Graptemys sabinensis* or *G. o. sabinensis*:** In a checklist of turtles of Louisiana, Beyer (1900) listed "*Malacoclemmys intermedia* Baur" from the "southern and southwestern parts", referring to a manuscript name by Georg Baur for the taxon subsequently described as *Graptemys pseudogeographica sabinensis* by Cagle (1953a). The name was based on specimens from the Mermentau River basin, now in the Tulane University Museum collection, sent to Baur by Joseph Gustave Kohn (Lindeman 2013). The original publication of the name *Malacoclemmys intermedia* is therefore attributable to Beyer and pre-dates the name *sabinensis* Cagle by 53 years, but is clearly a *nomen nudum*. Furthermore, it has not been used in over 113 years and would have the status of *nomen oblitum*. In his discussion of the history of the name *Graptemys intermedia* used by Baur in his unpublished manuscript, Lindeman (2013) published Baur's original manuscript drawings (Fig. 2.4) and a photograph of the Kohn specimens on which Baur had intended his diagnosis to rest (Fig. 8.18). Lindeman also clearly identified *intermedia* as a synonym of the taxon he recognized by the name of *G. sabinensis*. However, Lindeman only, and consistently, used the name *G. intermedia* in a conditional manner, without formal status of valid taxon, and the name *intermedia* as used by Lindeman, published after 1960, has not been made available according to Article 15.1 of the International Code of Zoological Nomenclature.

14:20. ***Pseudemys***: Based on three mitochondrial and ten nuclear gene loci, Spinks et al. (2013) examined variation across all recognized taxa of the genus *Pseudemys*. Their analyses revealed essentially no support for currently recognized species groups, species, or subspecies. Only *P. gorzugi* was consistently recovered as monophyletic across all their analyses, while their molecular evidence identified three geographically cohesive groups that do not correspond to current species boundaries. They concluded that the genus *Pseudemys* has probably been oversplit taxonomically. However, they made no explicit recommendations for change until a much larger and more definitive, multi-character data set is brought to bear on this complex. Thus we retain *Pseudemys* essentially unchanged from the previous checklist.

14:21. ***Trachemys***: In their book on Mexican turtles, Legler and Vogt (2013) continued to follow the taxonomy for *Trachemys* as used by Legler (1990) (i.e., all Mexican taxa as subspecies of *T. scripta*), and did not provide data or rationale to refute the phylogenetic data and taxonomic opinions published since 1990. Because implementing that taxonomy here would reverse 23 years of increased understanding and progress toward a stable classification of this complex genus, we have not incorporated the *Trachemys* taxonomy presented by Legler and Vogt (2013) in our current checklist.

14:22. ***Trachemys* (Caribbean)**: Parham et al. (2013) examined variation in mitochondrial and nuclear DNA markers for *Trachemys* populations across the Greater Antilles. They identified the morphologically distinct population reported by Tuberville et al. (2005) in northwestern Jamaica as *T. d. decussata*, representing a significant range extension from eastern Cuba. Parham et al. (2013) demonstrated the monophyly of West Indian taxa, as well as evidence of hybridization between *T. decorata* and *T. stejnegeri* in the southern Dominican Republic, and between *T. terrapen* and *T. d. decussata* in northwestern Jamaica. The authors were unable to determine whether the presence of *decussata* on

Jamaica and localized hybridization with *terrapen* was the result of natural or human-mediated dispersal.

Their data also supported the continued recognition of the subspecies *T. s. stejnegeri* (Puerto Rico) and *T. s. vicina* (Hispaniola), with occasional gene flow (natural or human-mediated) between them. They also acknowledged that morphological and genetic data suggest the recognition of *T. d. decussata* (eastern Cuba) and *T. d. angusta* (western Cuba) as full species, but declined to make that recommendation pending further sampling in Cuba.

Finally, they speculated that the occurrence of *T. d. angusta* on the Cayman Islands was "non-native". Given that Grand Cayman was periodically inundated even in the latest Pleistocene (20–25 thousand years ago; Iturralde-Vinent 2006), and that the prevailing winds and currents would make a natural colonization from the northwest difficult, we concur that the Grand Cayman populations of *T. d. angusta* are likely the result of human introduction. This is further supported by Echternacht et al. (2011) who, in their review of the herpetofauna of the Cayman Islands, explicitly stated that since no *Trachemys* fossils have been found in peat deposits on the island (which contained many other vertebrates), they presumed *T. decussata* to be introduced.

In addition, Parham et al. (2013) analyzed a small sample of *Trachemys* from Central America that yielded results indicating genetic similarity of *T. venusta* and *T. emolli*, demonstrating the need for further sampling and analysis to evaluate the sweeping taxonomic changes proposed by Fritz et al. (2012) and the subspecies described by McCord et al. (2010). Until such additional information becomes available, Parham et al. (2013) recommended taxonomic conservatism and cautious interpretation of preliminary results, and proposed no taxonomic changes.

14:23. ***Trachemys* (Central America)**: Using mitochondrial DNA sequence data for *Trachemys* downloaded from the European Nucleotide Archive and new data from two Honduran specimens, McCranie et al. (2013) confirmed that the range of the taxon *emolli* extends from northwestern Costa Rica to southeastern El Salvador (see Ibarra Portillo et al. 2009). Because of the extensive overlap in their analysis with the data used by Fritz et al. (2012), McCranie et al. (2013) supported their earlier taxonomic recommendations. McCranie et al. (2013) also commented on the status of the taxon *T. v. uhrigi*, originally described from Honduras, but subsequently reported from Colombia, Costa Rica, Nicaragua, and Panama, and argued that the diagnostic coloration of *uhrigi* is not exhibited consistently by Caribbean Honduran specimens (and presumably occurs in individuals of *T. venusta* as far away as Colombia), and suggested that *T. v. uhrigi* has no taxonomic validity. In contrast, Páez et al. (2012) listed *T. v. uhrigi* as being the subspecies occurring in the Colombian Departments of Antioquia and Chocó. However, until additional molecular data are forthcoming from the Caribbean versant of Central America, particularly from the Yucatan peninsula, Honduras, Nicaragua, Costa Rica, Panama, and Colombia, we adhere mainly to the alternative taxonomies of Seidel (2002) and Fritz et al. (2012).

14:24. ***Emys* (sensu lato)**: In a molecular analysis of emydine turtles, Angielczyk and Feldman (2013) found strong support for a monophyletic *Emys* (including *orbicularis*, *blandingii*, and *marmorata*) using mtDNA sequence data, but strong support for a paraphyletic *Emys* using 14 nuclear genes. The combined data set resolved a monophyletic *Emys*, but the results were apparently driven by the much more variable mitochondrial genome. Despite some uncertainty about the monophyly of *Emys* sensu lato (see also Wiens et al. 2010), we retain both options of a narrow and a broad definition of the genus *Emys*, pending even more genetic data.

14:25. ***Emys orbicularis hellenica* and *Mauremys rivulata***: Considerable confusion has surrounded the names and authors and dates of publication of the turtle descriptions published in various outputs of the *Expédition Scientifique de Morée*, currently cited in our checklist as Valenciennes (1833), Bibron and Bory de Saint-Vincent (1833), and Bory de Saint-Vincent (1835). Sherborn and Woodward (1901) documented that the zoology sections dealing with vertebrates, in which turtle descriptions (*Chelonia pelasgorum, Emys hellenica, Emys iberica*, and *Emys rivulata*) appear, were all first published sequentially in 1833 in looseleaf "*livraisons*" with sets of plates ("*planches*") and text, and later all the plates were re-published as a bound volume in 1835. Confusion about the sequence of publication of the turtle plates and the text has arisen due to the imprint of "1832" on the frontispiece of the text, but it actually appeared in 1833, after the plates. That the unbound turtle plates by Valenciennes (1833:pls.6–9) were published first was clearly documented in the subsequent text by Bibron and Bory de Saint-Vincent (1833:61, lines 5–9, 21–23, footnote 2), who referred to the specifically numbered plates as coming from the "troisième séries".

The name *Emys hellenica* was first published in the third series of *planches* (plate 8, figures 2–2a), where it was attributed to Valenciennes in the legend, and then subsequently described (as *Cistuda hellenica*) on pages 61–62 of the text, where it was attributed to Bibron and Bory de Saint-Vincent. Proper original attribution of the name is therefore *Emys hellenica* Valenciennes *in* Bory de Saint-Vincent 1833:pl.8. That name was subsequently synonymized, as "Cistude hellénique", with *Cistudo europaea*, another synonym of *Emys orbicularis*, by Duméril and Bibron (1835:227), but is today recognized as a valid subspecies of that taxon (Fritz et al. 2005; Fritz and Havaš 2007).

According to Bibron and Bory de Saint-Vincent (1833), in their text on page 61, lines 5–9, under the synonymy of *Cistuda europaea* (= *Emys orbicularis*), they noted that Valenciennes (1833) had "for unknown reasons" ("*on ne sait pourquoi*") named the juvenile specimen of *Emys* on plate 9 as *iberica* [not *Emys iberica* Eichwald 1831]. The original typeface in the legend of plate 9 reads "*Emyde ibérienne. Emys iberica. Val.*"; however, in at least some contemporary copies of the subsequently bound atlas (Bory de Saint-Vincent 1835), a small printed label in similar text reading "*des anciens*" has been pasted over "*ibérienne*", and a second label reading "*antiquorum*" pasted over "*iberica*" and the first part of "*Val.*" We do not know if these labels were originally added as an "erratum" to all looseleaf copies at the time of their original publication in 1833, or more likely only to some of them when bound into the atlas in 1835, because some copies today lack the labels (e.g., that in the Paris Museum, but apparently not those in the British Museum [Gray 1844:31] or the Museum of Comparative Zoology at Harvard [Loveridge and Williams 1957:213]). It must also be noted that Bibron and Bory de Saint-Vincent (1833) commented on the name *iberica* printed on the original plate, but made no mention of the name *antiquorum*. This uncertainty greatly complicates these names and their authorship. If the "*antiquorum*" labels were added to all copies of this work by the publisher, then *Emys iberica* Valenciennes was technically never described, and *Emys antiquorum* would presumably be attributable to Bory de Saint-Vincent, the editor of the 1835 atlas, although the remaining partial exposure of the name "*Val.*" led Gray (1844:31) to attribute the name *antiquorum* to Valenciennes when he (Gray) synonymized that name with *Cistudo europaea* [= *Emys orbicularis*]. If the labels were inconsistently added to only some copies of the original work, then the name *antiquorum* would have no nomenclatural status. Pending the availability of additional historic information about the consistency of this labeling and the reasons behind it, we here attribute the name *Emys iberica* to Valenciennes *in* Bory de Saint-Vincent (1833), and declare *Emys antiquorum* Bory de Saint-Vincent (1835) a *nomen novum* and *nomen nudum*; and interpret both names as junior synonyms of *Emys orbicularis hellenica* (Valenciennes *in* Bory de Saint-Vincent 1833).

14:26. ***Emys orbicularis*, ssp. indet.**: Rook et al. (2013) synonymized the two Upper Pliocene fossil taxa, *E. major* and *E. latens*, described by Portis (1890), with *Emys orbicularis*, citing an unpublished thesis by Chesi (2009). The fossils were from Valdarno (d'Arno valley) along the northwest Italian Ligurian coast, within the range of the present-day subspecies *E. o. galloitalica*. However, given the subsequent Pleistocene and Holocene climate-associated range shifts of *E. orbicularis*, we do not associate these fossil names with any current subspecies at this time.

14:27. ***Terrapene***: Martin et al. (2103) examined variation in two mitochondrial genes and one nuclear gene across all previously recognized taxa of *Terrapene* (except *T. nelsoni klauberi*). Both mtDNA and a single nuclear gene supported the monophyly of *T. ornata*, *T. carolina* (including *T. coahuila*), and *T. nelsoni*. All analyses confirmed the distinctiveness of *T. nelsoni* and *T. ornata*, but found no support for distinction between *T. o. ornata* and *T. o. luteola*, and hence, they recommended the synonymy of the latter. For mtDNA only, they found significant divergence within the previously recognized *T. carolina* group taxa (including *T. coahuila*), and identified a western clade (including *triunguis, mexicana*, and *yucatana*) and an eastern clade (all others, including *coahuila*); the western clade was strongly supported based on mtDNA, but the eastern clade had only very weak support. The authors recommended the recognition of the western clade as a full species, *T. mexicana*, with three subspecies (*mexicana, triunguis*, and *yucatana*). They were not able to resolve the relationships among *bauri, major,* and *carolina*, and retained them as subspecies of *T. carolina*. Similarly, the relationship of *T. coahuila* to Gulf Coast *T. carolina* was suggested but not resolved, and they recommended continued recognition of *T. coahuila* at the species level. Meanwhile, Legler and Vogt (2013) treated *T. mexicana* and *T. yucatana* as full, monotypic species, and continued to recognize *T. o. luteola* as the subspecies of *T. ornata* inhabiting

Mexico.

As the suggested taxonomic rearrangements of Martin et al. (2013) and Legler and Vogt (2013) are not based on a comprehensive analysis of morphology, mitochondrial DNA, and nuclear genes, and show disagreement with both the traditional taxonomy of *Terrapene* and the molecular phylogeny presented by Butler et al. (2011), we consider that the phylogenetic relationships within this genus remain insufficiently resolved for us to adopt such significant taxonomic changes, especially in light of the desire for minimal fluctuations in taxonomy of this genus, given its extensive inclusion in State, Federal, and CITES legislation.

14:28. ***Terrapene putnami***: This species was described by Hay (1906) based on a single fossil hypoplastron from the Alafia River basin in Florida with imprecise stratigraphic data, but presumably Late Pleistocene. The taxon has been widely assumed to represent virtually all eastern North American fossil *Terrapene* material from the Miocene to the late Pleistocene, which is clearly an exaggerated concept of the taxon (Ehret et al. 2011). This has become increasingly problematic because of recent molecular analyses of extant taxa that suggested that *T. putnami* should be synonymized with *T. carolina major* (Butler et al. 2011; followed in TTWG 2012) or that argued that *putnami* be retained as an extinct subspecies of *T. carolina* (Martin et al. 2013). To facilitate future attempts to resolve the relationships among living and fossil turtles of the *T. carolina* complex, Ehret et al. (2013) proposed to the ICZN the designation of a neotype for *T. putnami* with precise locality and stratigraphic data, and consisting of a nearly complete carapace and plastron with numerous associated postcranial elements.

We here maintain *T. putnami* as a synonym of *T. carolina major* as recommended by Butler et al. (2011), until the ICZN makes a ruling and additional research clarifies the relationships of extant and fossil members of the *T. carolina* group.

14:29. ***Mauremys annamensis***: *Clemmys guangxiensis* was described by Qin (1992) based on two market specimens supposedly originating from Guangxi, China. Iverson and McCord (1994) speculated that the type series might be a composite of *Mauremys mutica* and *M. iversoni* (the latter now known to be of hybrid origin between *Cuora trifasciata* and *M. mutica*; Parham et al. 2001). As a result, we have previously included *C. guangxiensis* in the synonymies of both *C. trifasciata* and *M. mutica*. However, Hu et al. (2013) provided sequence data from a single mitochondrial gene for four specimens of *Mauremys* from Guangxi purported to be *M. guangxiensis*, along with two *M. mutica* from the same province. When included in a phylogenetic analysis with sequences of *Mauremys* downloaded from GenBank, they determined that their four specimens of *M. guangxiensis* were nearly identical to *M. annamensis* (which is endemic to Vietnam) and not *M. mutica*. Assuming their four specimens represented the same taxon as described by Qin (1992), Hu et al. (2013) interpreted their results as indicating that *M. guangxiensis* was either synonymous with *M. annamensis* or a subspecies of the latter. However, their analysis did not address the possibility of a hybrid origin for *guangxiensis*. Pending further study of specimens being referred to *M. guangxiensis*, we add *guangxiensis* to the synonymy of *annamensis* (as partim, hybrid), while retaining its inclusion in the synonymy of *M. mutica* and *C. trifasciata*.

14:30. ***Mauremys japonica* and *Pelodiscus sinensis***: Temminck and Schlegel's publications in Fauna Japonica are usually recorded as having been published in 1835. However, their chapter on "Les Cheloniens" (pp. 1–80, plates 1–9) was actually published in 1834 (see Hoogmoed et al. 2010) and only contained invalid vernacular names. Their valid names *Trionyx japonica = Pelodiscus sinensis* and *Emys vulgaris japonica = Mauremys japonica* were not published until 1838 when Schlegel wrote and published (on p. 139) his dated explanation of the previously published plates and for the first time provided Latin names for the two new species described earlier in French (*Trionyx stellatus* Var. Japon [pls. 5 and 7] = *Trionyx japonica* and *Emys palustris* Var. Japon [pls. 8 and 9] = *Emys vulgaris japonica*). Although the species name "*palustris*" was used on the plate, in the text it was corrected to "*vulgaris*", but never with a specific "var. Japon" modifier attached to it.

14:31. ***Rhinoclemmys***: Based on both mitochondrial and nuclear DNA data, Vargas-Ramírez et al. (2103) identified significant phylogeographic structuring within *R. melanosterna*, but found conflicting phylogenetic relationships among the allopatric/parapatric members of the *R. punctularia* group (including *R. funerea, R. diademata*, and *R. melanosterna*). They recommended no taxonomic changes without further geographic and genome sampling.

14:32. ***Aldabrachelys gigantea***: After several years of vigorous debate, the ICZN (2013b) published their decision (Opinion 2316) regarding the appropriate scientific name for the Aldabra Tortoise (Case 3463; Frazier 2008, 2009). The Commission ruled to conserve the long-term use of the specific name *Testudo gigantea* Schweigger (1812) for this tortoise, to affirm the neotype designation of Frazier (2006), and to suppress the more recently used name *Testudo dussumieri* Gray (1831d). One effect of this action was also to validate the genus name *Aldabrachelys* Loveridge and Williams (1957) over *Dipsochelys* Bour (1982a). Comments were published in BZN 66:80–87, 169–186, 274–290, 352–357; 67: 71–90, 170–178, 246–254, 319–331; 68: 72–77, 140–143, 294–300. With 83 published comments, this represented the most extensive correspondence received by the Commission on a Case to date.

14:33. ***Chelonoidis carbonaria***: The original citation for the junior synonym *Testudo boiei* is actually Wagler (1830a), not Wagler (1833) as listed in our previous checklists; the latter contained no new turtle descriptions.

14:34. ***Gopherus berlandieri***: In 1850, Berlandier described two terrestrial turtles from the "llanos" of Tamaulipas, Mexico: *Testudo bicolor* (not to be confused with *Testudo bicolor* Schweigger 1812 or *Terrapene bicolor* Bell 1826, both synonyms for *Testudo* [= *Cuora*] *amboinensis* Daudin 1801) and *Testudo tuberculatu* [sic] (not to be confused with *Testudo tuberculata* Schoepff 1801 [= *Dermochelys coriacea*]). His ample description leaves little doubt that the names referred to a juvenile and adult male, respectively, of *Xerobates* [= *Gopherus*] *berlandieri* Agassiz 1857a, and hence should be considered senior subjective synonyms of the latter. However, since 1850, *T. tuberculatu* has only been mentioned by True (1882), as *T. tuberculata*. In 1980 Berlandier's manuscript was translated and republished, with both species recorded again, as *T. bicolor* and *T. tuberculata*, with distinct diagnostic characters, "and they are common on both banks of the Rio Bravo." No other publications seem to include these names, both considered here as being *nomina oblita*.

14:35. ***Testudo graeca***: Based strictly on morphology Chkhikvadze et al. (2013) continued to argue for the recognition of six taxa of tortoises in the Caucasus (*Testudo graeca ibera, T. g. nikolskii, T. g. armeniaca, T. marginata pallasi, T. m. buxtoni,* and *T. dagestanica*). However, genetic sampling by Fritz et al. (2007), Mashkaryan et al. (2013), and Mikulíček et al. (2013), including specimens from within the ranges of each of those six purported taxa, supports only the recognition of three taxa in the area (*T. g. ibera, T. g. buxtoni,* and *T. g. armeniaca*). Because the unreliability of morphology in establishing species boundaries within the genus *Testudo* has been well documented (Parham et al. 2006; Fritz et al. 2007, 2009; Mikulíček et al. 2013; Danilov et al. 2013; among others), we have not followed Chkhikvadze et al. (2013), pending further genetic sampling.

14:36. ***Testudo or Chersine hermanni***: Perez et al. (2014) examined variation in mitochondrial DNA and nuclear microsatellites across the range of *T. hermanni*, and found substantial geographic differentiation based on distance between sites. They documented the greatest divergence between the recognized subspecies, with the eastern subspecies (*T. h. boettgeri*) ranging westward to and including the Po River valley in northeastern Italy, Their data also demonstrated the effects of thousands of years of human-mediated dispersal of these tortoises. Although they noted that the isolated population in France could have been established via natural or human dispersal, their data supported the hypothesis that the Spanish, Corsican, and Sardinian populations were likely the result of prehistoric human introductions of animals with Sicilian genotypes.

14:37. ***Testudo* or *Chersine h. hermanni***: Lapparent de Broin et al. (2006b) analyzed all known fossil specimens of *T. globosa*, *T. oriens*, and *T. seminota*, and concluded that *oriens* and *seminota* were synonymous with *globosa* and that *globosa* was apparently synonymous with western *T. h. hermanni*.

14:38. ***Testudo* or *Agrionemys h. kazachstanica***: *Agrionemys kazachstanica terbishi* was described by Chkhikvadze (2009) based on a mummified specimen, supposedly from Mongolia, in the Kohovd University collection (Kohovd City, Mongolia). Ansorge et al. (2012) reported that the type specimen has been lost, that the herpetologist who collected the specimen believed that it was a pet brought from Kazachstan, and that there is no confirmed record of an extant tortoise indigenous to Mongolia. They recommended that *Testudo horsfieldii terbishi* (Chkhikvadze 2009) should be regarded as a *nomen dubium* and allocated to the synonymy of *Testudo horsfieldii*; they also recommended that Mongolia should be excluded from its distribution range. We adopt these recommendations and associate the taxon with *T.* or *A. h. kazachstanica* by virtue of it having originally been described as a subspecies of that taxon.

14:39. ***Acanthochelys* and *Platemys***: Sequence data from two

mitochondrial genes analyzed by Huebinger et al. (2013) supported the sister group relationship between *Platemys* and *Acanthochelys*, the monophyly of the latter, and the possibility that *A. radiolata* as currently defined morphologically may be polyphyletic. We continue to affirm the recognition of both genera, even though *Platemys* is monotypic.

14:40. ***Phrynops geoffroanus***: The name *Emys tritentaculata* was listed by Cuvier (1829) as attributed to Auguste de Saint-Hilaire, a botanist who traveled in Brazil and subsequently deposited several chelid turtles in the Paris Museum (Bour, unpubl. data). Based on the name, suggestive of several barbels, we assign it tentatively to the synonymy of *P. geoffroanus* pending further study of Saint-Hilaire's original specimens. The name *E. tritentaculata* does not refer to the American Box Turtle, *Terrapene carolina*, as originally synonymized by Wermuth and Mertens (1961) and followed by several others since then.

14:41. ***Platemys platycephala***: The name *Emys carunculata* Cuvier 1829 was listed by Wermuth and Mertens (1961, 1977) and Fritz and Havaš (2007) as an *ex errore* name for *E. canaliculata* Spix 1824, itself a synonym of *P. platycephala*. However, the name *E. carunculata* was attributed by Cuvier (1829) to Auguste de Saint-Hilaire, while in the same paragraph also listing *E. canaliculata* as attributed to Spix. The two names clearly represent different *nomina nuda*. Pending further studies of the chelid turtles that Saint-Hilaire collected in Brazil (Bour, unpubl. data), we leave *E. carunculata* in the synonymy of *P. platycephala* for the present.

14:42. ***Chelodina (Macrochelodina) kuchlingi***: This species, originally described by Cann (1997d), was synonymized under "*Chelodina rugosa*" (now *Chelodina oblonga*) by Georges and Thomson (2010). Their original basis for the synonymization was "that names that are available under the Code, but that apply to supposed taxa, unsupported by scientific evidence either in the original account or subsequently, are placed in synonymy." They also indicated that *C. kuchlingi* was described from a single specimen of uncertain origin with a long history of captivity and so was treated as a junior synonym of "*C. rugosa*" (now *C. oblonga*), citing Georges and Thomson (2006) who had questioned the distinction between *C. kuchlingi* and *C. rugosa*, but did not synonymize them. The synonymization by Georges and Thomson (2010) was subsequently followed by us (TTWG 2010) and Kennett et al. (2014) in their recent CBFTT species account for *C. oblonga* (see link under that species). However, the synonymization has recently been challenged by Kuchling (CCB, in review, and in litt.), who has provided data that *C. kuchlingi* is an apparently demonstrably valid and distinct range-restricted species, with a more extensive distribution in northeastern Western Australia (including the Ord River basin) than noted in the original description. Kuchling also raised serious concerns about the conservation status and potential regional development threats to *C. kuchlingi*. Georges (in litt.) has acknowledged the difference in opinion, but stands by his opinion that the original description was deficient, and that there has been insufficient evidence presented to date that *C. kuchlingi* is a valid taxon.

We take note of this on-going controversy here and, based on our own principles of making only data-driven taxonomic changes in the checklist, acknowledge that our original decision to follow the hypotheses of Georges and Thomson (2006, 2010) to synonymize *C. kuchlingi* was likely premature, and also inconsistent with our continued recognition at that time of other species also synonymized by Georges and Thomson at the same time (e.g., *C. gunaleni* and *C. walloyarrina*). Given the potential conservation threats to this range-restricted species and the lack of data supporting the prior synonymization, we therefore now reverse our earlier decision and resurrect *C. kuchlingi* from its synonymy with "*C. rugosa*" (now *C. oblonga*) and await further data-driven analyses from Kuchling, Georges, and others.

14:43. ***Chelodina oblonga*** **(formerly *C. rugosa*)**: Thomson (2000) demonstrated that the holotype of *Chelodina oblonga* Gray 1841 is actually a specimen of what had over the last ca. 40 years been referred to as *Chelodina rugosa* Ogilby 1890 from northern Australia. The ICZN was petitioned (Thomson 2006, 2007) to conserve current usage of the name *C. rugosa* for the Northern Snake-necked Turtle and to apply the next available name, *Chelodina colliei* Gray 1856a, to the Southwestern Snake-necked Turtle, instead of the commonly and erroneously used name *C. oblonga*. We previously discussed this ICZN case in our second checklist (Rhodin et al. 2008). Recently, in their Opinion 2315, the ICZN (2013a) declined to support the petition to give precedence to the younger, recently used name *C. rugosa* over the older name *C. oblonga* for the Northern Snake-necked Turtle. Although the latter species has been known as *C. rugosa* since 1974 and was listed as such in previous editions of this checklist, we now follow the ruling of the ICZN and use the name *Chelodina (Macrochelodina) oblonga* Gray 1841 for the Northern Snake-necked Turtle, although the name *Chelodina (Macrochelodina) rugosa* Ogilby 1890 remains an available name in the synonymy of *C. oblonga*. The decision by the ICZN has also been followed by Kennett et al. (2014) in their recently published account on the Northern Snake-necked Turtle in this CBFTT monograph series.

14:44. ***Macrodiremys***: In an attempt to conserve usage of the name *Chelodina oblonga* for the Southwestern Snake-necked Turtle, McCord and Joseph-Ouni (2007b) designated the lectotype of *Chelodina colliei* (set by Thomson 2000) as the neotype of *Chelodina oblonga*. At the time this was done, there was already an open case before the ICZN (Thomson 2006) concerning whether to use the name *C. oblonga* or *C. rugosa* for the Northern Snake-necked Turtle (see annotation 43). It should also be noted that the setting of a neotype where an extant holotype (or lectotype) already exists can only be done by the ICZN. In their subsequent Opinion (ICZN 2013a), it was ruled that, considering the confusion over these names and the potential for further confusion, that the Principle of Priority should be followed, and that *C. oblonga* should maintain priority over *C. rugosa* for the northern taxon. By associating the new name *Macrodiremys oblonga* to the lectotype of *C. colliei,* McCord and Joseph-Ouni (2007b) had effectively erected a new nominal species as a junior objective synonym of *C. colliei*. Thus, since *M. oblonga* was the type species for the new genus *Macrodiremys*, then in effect so was also its senior objective synonym, *C. colliei*. Fortunately, the latter was not already a type species for another genus. Georges and Thomson (2010) reduced the various genera of snake-necked turtles to subgeneric status, all under the oldest genus name *Chelodina*; this has been recognized in previous editions of the checklist (TTWG 2012), however, the subgenus name for *C. colliei* was left undetermined because of the uncertainty surrounding the case. In this checklist edition, now that the ICZN Opinion has been published, this matter can be rectified by restoring the subgeneric name *Macrodiremys*, which follows the intent of McCord and Joseph-Ouni (2007b).

14:45. ***Elseya*** **and *E. schultzei***: Based primarily on mtDNA data, Georges et al. (2014) identified three reciprocally monophyletic, deeply divergent clades within the taxon formerly recognized as *Elseya novaeguineae*: 1) the Birds Head (Kepala Burung, Vogelkop, or Doberai Peninsula) population of western Indonesian New Guinea, 2) the population on the New Guinea mainland north of the Central Range, and 3) the mainland population south of the Central Range. They also demonstrated some phylogeographic structure within each of those three clades, and confirmed the genetic distinction of *E. branderhorsti* of the southern lowlands / Fly River floodplain as separate from the *E. novaeguineae* clades. They suggested that these three clades each deserved species rank, and they followed Rhodin and Genorupa (2000) in noting that the southern form is distinct and undescribed and that the name *E. schultzei* (Vogt 1911) is available for the northern population. They also implied that the name *E. novaeguineae* should be applied to the Birds Head population (the source of the type). We follow these recommendations and now recognize *E. schultzei* as a full species (again), and await additional work in progress to determine the appropriate name for the southern form, whose populations we retain under *E. novaeguineae* pending further work.

14:46. ***Flaviemys*** **and *F. purvisi***: Using molecular data only, Le et al. (2013) concluded that the species known as *Myuchelys purvisi* is the sister taxon to all other taxa that were included in *Emydura, Elseya* and/or *Myuchelys*. To correct this paraphyly, they erected a new monotypic genus, *Flaviemys,* with type species *Elseya purvisi* Wells and Wellington 1985, by original designation and monotypy. There is also support for this in previous studies, where *Flaviemys purvisi* and *Myuchelys georgesi* were perceived as a cryptic species pair, very similar by appearance, but on analysis were found not to be sister taxa (Georges and Adams 1992; Georges et al. 1998; Thomson and Georges 2009; Georges and Thomson 2010; Fielder et al. 2012; Fielder 2013). We follow this new taxonomy here.

14:47. ***Pelusios castaneus seychellensis***: Based on mitochondrial gene sequence data from all known lineages of *Pelusios*, Stuckas et al. (2013) found that the lectotype of *P. seychellensis* was nested among specimens of the West African *P. castaneus*. They concluded that *P. seychellensis* was most likely based on specimens of *P. castaneus* not native to the Seychelles Islands, and recommended the synonymy of *P. seychellensis* with *P. castaneus*. However, Bour (1983) identified significant morphological differences between these two taxa, and recently (Bour 2013) argued that *seychellensis* might represent an ancient prehistoric introduction of *castaneus* to the islands

by humans that has subsequently diverged morphologically from the ancestral population. He recommended the use of the subspecific designation *P. castaneus seychellensis* until additional comparisons (especially morphological) can be made between *castaneus* and *seychellensis*, a recommendation we have adopted. See also the pertinent discussion of the geographic occurrence of this species [*P. castaneus*] in the distributional data appendix below.

14:48. ***Podocnemis erythrocephala***: The forgotten names *Emys bitentaculata* and *Hydraspis bitentaculata* were not listed or synonymized by Wermuth and Mertens (1961, 1977) or Fritz and Havaš (2007). Gray (1830e) first placed the Cuvier manuscript name *Emys bitentaculata* under his concept of *Chelys* (*Hydraspis*) and subsequently (Gray 1831d) described it himself as *Hydraspis bitentaculata*: "*Testa rufa, subtus pallide lutea nigro maculate, scutello nuchal nullo*." Fitzinger (1835) synonymized both names under his concept of *Hydraspis (Podocnemis) tracaxa* (which also included *Podocnemis expansa* in part and some chelid turtles). Gray's description did not identify the species very well, but the combination of a red shell (*testa rufa*), two barbels (*bitentaculata*), and lack of a nuchal scute (*scutello nuchal nullo*) suggests that it is indeed a *Podocnemis*, and we tentatively place it as most likely synonymous with *P. erythrocephala,* which shares those features, including a red shell margin in juveniles.

14:49. **Humboldt *Podocnemis* names**: Alexandre de Humboldt first published the names *Testudo arrau* (= *P. expansa*) and *Testudo terekay* (= *P. unifilis*) in the French version of his original work (Humboldt 1819a:243). This work was subsequently translated into English (Humboldt 1819b:482), and later (Humboldt 1820:415) into German. These various translations have caused some confusion in the literature, and some authors (including our previous TTWG checklists) have even attributed the names to Humboldt *in* Gray (1831d:77). However, the French version remains the original source for these names. Both names are considered *nomina oblita* (see also annotation for *P. unifilis*).

14:50. ***Podocnemis unifilis***: *Emys cayennensis* was described from French Guiana by Schweigger (1812), but was incorrectly applied to *Podocnemis erythrocephala* for most of its history (reviewed in Pritchard and Trebbau 1984; but see David 1994 and Bour 2006). In 1819 Humboldt (see annotation 14:49) described *Testudo terekay* from Venezuela; however, this obscure work was ignored by most subsequent authors (but see Schinz 1833). In 1830 Bell (*in* Gray 1830e) described *Chelys (Hydraspis) lata* from Guyana and this name was also ignored by most subsequent authors until Rhodin et al. (2008) declared it a *nomen oblitum* (see also Schneider et al. 2012). All three of these names apply to the taxon *Podocnemis unifilis* that was finally described from Guyana by Troschel (1848), and the latter name has been applied to the Yellow-spotted Amazon Turtle by most (but not all) authors over the last 165 years. In light of this complicated nomenclatural history, and in an effort to ensure the stability of Troschel's name, Vogt et al. (2013) petitioned the ICZN to conserve the name *Podocnemis unifilis* Troschel 1848 for the Yellow-spotted Amazon Turtle, giving it precedence over *Emys cayennensis* whenever the two are considered synonymous. Furthermore, they declared the names *Testudo terekay* Humboldt 1819a and *Chelys (Hydraspis) lata* Bell *in* Gray 1830e as *nomina oblita*. Our checklist reflects this arrangement, pending an ICZN ruling.

Appendix – Distributional Data

Specific distributional updates were only recorded in 2011, 2012, and 2014, and have not been continued in the current checklist except as reflected in the distributional information under each taxonomic entry.

Distribution Updates 2011

Dermatemys mawii: Honduras (?) deleted from the range as per CBFTT account (Vogt et al. 2011).

Kinosternon scorpioides albogulare: Population in San Andrés, Colombia, indicated as possible prehistoric or modern introduction, as per CBFTT accounts (Berry and Iverson 2011, Forero-Medina and Castaño-Mora 2011).

Chrysemys dorsalis: Apparently established in Florida (Krysko et al. 2011).

Graptemys pseudogeographica: Apparently established in Florida (Krysko et al. 2011).

Malaclemys terrapin and *M. t. centrata*: Bermuda added to native range (Parham et al. 2008).

Pseudemys nelsoni: Introduced to Tortola, British Virgin Islands (Owen et al. 2005).

Trachemys scripta scripta: Apparently established in Florida (Krysko et al. 2011).

Emys orbicularis orbicularis: Spain deleted from range; Spanish populations are attributable to subspecies *E. o. fritzjurgenobsti* and *E. o. galloitalica,* but not to the nominate subspecies.

Terrapene nelsoni: Chihuahua, Mexico (*T. n. klauberi*) and Jalisco, Mexico (*T. n. nelsoni*) added to the range, as per CBFTT account (Buskirk and Ponce-Campos 2011).

Batagur kachuga: Occurrence in Nepal confirmed.

Cuora bourreti: Occurrence in Laos indicated as uncertain.

Cuora picturata: Occurrence in central Vietnam confirmed (Ly et al. 2011).

Cuora zhoui: Vietnam added as uncertain occurrence.

Geoemyda spengleri: Laos added to the range (Stuart et al. 2011).

Mauremys caspica caspica: Israel, Jordan and Lebanon deleted from the range; populations there attributable to *M. rivulata*. Turkmenistan added to the range.

Mauremys caspica siebenrocki: Turkmenistan deleted from the range; population there attributable to *M. c. caspica*.

Sacalia bealei: Occurrence in Guangxi, China, indicated as uncertain.

Aldabrachelys/Dipsochelys gigantea/dussumieri hololissa: Cousine Island added to extirpated range, Round and Cousine islands added to introduced range, as per CBFTT account (Gerlach 2011b).

Stigmochelys pardalis: Sudan deleted from the range, and the new nation of South Sudan added to the range.

Pelodiscus parviformis: Vietnam added to the range.

Acanthochelys pallidipectoris: Mendoza, Argentina, corrected from native range to introduced, as per CBFTT account (Vinke et al. 2011).

South Sudan: This newly independent nation has seven taxa of freshwater turtles and tortoises: *Kinixys belliana belliana, Stigmochelys pardalis, Cyclanorbis elegans, Cyclanorbis senegalensis, Trionyx triunguis, Pelomedusa subrufa,* and *Pelusios adansonii*.

Distribution Updates 2012

Cuora bourreti: Occurrence in Laos was confirmed (Stuart et al. 2011), and possible occurrence in Cambodia was deleted from the checklist following consultation with range-state biologists.

Mauremys reevesii: Based on analysis of mitochondrial DNA, Suzuki et al. (2011) indicated that Japanese populations of *M. reevesii* were possibly derived from multiple historical introductions from nearby countries, and thus questioned its traditional status as a presumed native species. They noted the ability of *M. reevesii* to hybridize with native *M. japonica* as a threat, but also recognized these populations to be valuable in the context of depleted populations elsewhere in its range.

Kinixys: Ranges adjusted according to species ranges outlined by Kindler et al. (2012).

Nilssonia formosa: Liebing et al. (2012) referred to a record of *N. formosa* from Shuangbai (Yunnan, China), and photographs of a specimen from the Lancang River [=Mekong] in the Xishuanbanna region of Yunnan, as suggesting that the species has crossed the watershed divide into the Mekong River basin of Yunnan, China. However, given the substantial documented trade volumes of live turtles from Myanmar into Yunnan and onwards, and the propensity of turtles to escape or be intentionally released by humans, combined with the great biogeographical barriers (despite their very close proximity) between the Salween, Mekong, and Yangtze, we consider it doubtful that these records represent natural occurrences.

Mesoclemmys heliostemma: Additional occurrences across the Amazon basin of Brazil were reported by Molina et al. (2012).

Italy (Sardinia): Vamberger et al. (2011) compared mitochondrial and nuclear DNA of *Testudo graeca* from Sardinia with that of *T. graeca* from North Africa, and concluded that the near-absence of differentiation from other *graeca* populations, and reduced variation within the Sardinian population, indicated prehistoric introduction into Sardinia by humans. They also reviewed recent studies of the other non-marine turtle species occurring in Sardinia and concluded that Sardinia's populations of *Testudo hermanni hermanni*, *T. marginata*, and *Emys orbicularis galloitalica* likely each represented prehistoric or early historic human introductions.

Latvia: Pupins and Pupina (2011) recorded introduced populations or individuals of *Trachemys scripta elegans*, *T. s. troostii*, *Mauremys caspica*, *M.*

rivulata, *Testudo horsfieldii*, and *Pelodiscus sinensis* in Latvia. However, they did not document successful reproduction in the wild, and it remains uncertain whether these records represent established populations or isolated individuals.

South Korea: Chang et al. (2012) noted that the native softshells in South Korea are attributable to *Pelodiscus maackii*, and reported *P. sinensis*, *Trachemys scripta elegans*, *T. s. scripta*, *Pseudemys rubriventris*, and *Mauremys* [*Ocadia*] *sinensis* as introduced into the wild.

Distribution Updates 2014

Chelydra acutirostris: Páez et al. (2012) listed the occurrence of this species in the Colombian Departments of Caldas and Quindio, but did not list records from Atlántico, Bolivar, Magdalena, or Sucre.

Trachemys c. or *o. callirostris*: Páez et al. (2012) reported the occurrence of this taxon in the Colombian Department of Cundinamarca.

Trachemys d. decussata: Parham et al. (2013) documented the occurrence of this taxon in northwestern Jamaica, including hybridization with *T. terrapen*; whether the occurrence is native or introduced remains unknown.

Trachemys emolli or *grayi emolli*: McCranie et al. (2013) documented the occurrence of this taxon in Honduras, while Ibarra Portillo et al. (2009) documented its occurrence in eastern El Salvador.

Cuora amboinensis: Wangyal et al. (2012) reported this and four other species from southern Bhutan, the first turtles reported from that country.

Cuora mouhotii: Rahman (2012) reported the occurrence of this species in the southern Chittagong Hill Tracts of Bangladesh, Wangyal et al. (2012) reported it from southern Bhutan, and Ly et al. (2013) extended its range in southern Vietnam.

Cyclemys gemeli: Wangyal et al. (2012) reported this species from southern Bhutan.

Melanochelys tricarinata: Wangyal et al. (2012) reported this species from southern Bhutan.

Aldabrachelys gigantea: The historic and present distribution of native and introduced populations of the various morphotypes or subspecies (*gigantea, arnoldi*, and *hololissa*) of giant tortoises in the Seychelles (including all granitic and coralline islands) has been analyzed in detail and updated by Gerlach et al. (2013).

Centrochelys sulcata: Participants at the IUCN/TFTSG Sub-Saharan African Red List workshop in 2013 noted that *C. sulcata* occurs in Benin, Cameroon, and Togo, and may possibly occur in Djibouti, Somalia, Saudi Arabia, and Yemen. Its presence in Yemen and Saudi Arabia was also previously noted by Gasperetti et al. (1993).

Indotestudo elongata: Wangyal et al. (2012) reported this species from southern Bhutan.

Kinixys erosa: Participants at the Sub-Saharan African Red List workshop considered that *Kinixys erosa* certainly occurs in Benin and Togo, but is absent from Burkina Faso.

Kinixys homeana: In their CBFTT species account, Luiselli and Diagne (2013) noted that *K. homeana* occurs in the Central African Republic. They questioned its occurrence in Gabon and noted that it does not occur in Congo (ROC) and that old historical records from the eastern Congo (DRC) were likely based on misidentified *K. erosa*. These historical records need further evaluation.

Kinixys nogueyi: Participants at the Sub-Saharan African Red List workshop considered the distribution of *Kinixys nogueyi* to include the Central African Republic, but that the species does not range as far south as Equatorial Guinea or Gabon, and that records from Mauritania are likely historic, but that the species no longer occurs there.

Cyclanorbis senegalensis: Participants at the Sub-Saharan African Red List workshop considered that the occurrence of *C. senegalensis* is uncertain in Cameroon, Central African Republic, and Liberia, and that the species is likely extirpated from Mauritania.

Rafetus swinhoei: Wang et al. (2013) extended and defined the known recent historic range of this Critically Endangered species in the upper Red River of southern Yunnan, China.

Mesoclemmys dahli: Páez et al. (2012) and Forero-Medina et al. (2013, CBFTT account) documented the occurrence of *M. dahli* in the Colombian Department of Magdalena.

Mesoclemmys gibba: Páez et al. (2012) recorded the occurrence of *M. gibba* in the Colombian Departments of Arauca and Guaviare.

Mesoclemmys perplexa: Campos et al. (2011) recorded the occurrence of *M. perplexa* in the Brazilian State of Goiás.

Mesoclemmys vanderhaegei: Vinke et al. (2013) reviewed the distribution of *M. vanderhaegei* and concluded that there are no confirmed records for Bolivia.

Platemys platycephala: Páez et al. (2012) recorded the occurrence of *P. platycephala* in the Colombian Departments of Guainía, Guaviare, Meta, and Vichada.

Peltocephalus dumerilianus: Páez et al. (2012) reported *P. dumerilianus* to inhabit the Colombian Department of Guaviare.

Pelusios bechuanicus: In earlier versions of this checklist, we included Congo (DRC) as part of the range of *P. bechuanicus*. However, we have been unable to verify this occurrence, and consider that this was based on old literature records of *P. upembae*, which was originally described as a subspecies of *P. bechuanicus*.

Pelusios castaneus: Stuckas et al. (2013) questioned earlier records of occurrence of *P. castaneus* on Cape Verde and suggested that our recording of that presence on our previous checklists was outdated. We have investigated this further and agree with them. Although Boulenger (1906b) documented the collection of a specimen of "*Sternothaerus derbianus*" (= *P. castaneus*) from a "small island in Praja Bay, S. Jago" (= Santiago), Chevalier (1935) noted that the specimen was most likely introduced from West Africa and that no Caboverdians were aware of any freshwater turtles in the islands. However, Boulenger's record (mapped among others by Iverson 1992) led to the assumption for a long time that the species occurred in the islands; but surveys of the local herpetofauna have failed to record its presence (Schleich 1982, 1987, 1996b; Vasconcelos et al. 2013), even as an introduced population. The small island where it was originally collected housed a prison where turtles had evidently been released into a small pond at some point in the past. We therefore remove Cape Verde from the distribution of *P. castaneus*.

For this same species, we also question whether it occurs natively on São Tomé. Although it has been recorded from there, and specimens have been collected and genetically analyzed (Stuckas et al. 2013), the species does not occur on either nearby Príncipe or the other volcanic oceanic islands in the same archipelago (Manaças 1956; Jones 1994), nor is there any record of the species occurring on the nearby continental island of Bioko (Equatorial Guinea) off the coast of Cameroon. São Tomé was first settled by the Portuguese, who brought African slaves to the island, so it appears most likely that West African *P. castaneus* were introduced to São Tomé in conjunction with the slave trade. In fact, the genetic analysis by Stuckas et al. (2013) demonstrated that their São Tomé specimen was essentially indistinguishable from an Ivory Coast specimen, lending further strength to this theory.

Podocnemis erythrocephala: Páez et al. (2012) reported that *P. erythrocephala* occurs in the Colombian Department of Guaviare, and perhaps in Vichada.

Podocnemis lewyana: Páez et al. (2012) reported that the range of *P. lewyana* extends into the Colombian Department of Tolima.

Podocnemis sextuberculata: Páez et al. (2012) reported that *P. sextuberculata* occurs in the Colombian Departments of Caquetá and Putomayo.

Podocnemis vogli: Páez et al. (2012) reported that *P. vogli* occurs in the Colombian Department of Guaviare, but did not indicate occurrence in Boyacá.

LITERATURE CITED

This bibliography is divided into two sections: 1) all primary taxonomic citations noted in this checklist, plus all secondary literature cited in the introduction and annotations of *any* of the checklists, and 2) all CBFTT species accounts published in this monograph project and referred to in the checklist. Many of the citations listed here are available online as downloadable pdf's at **www.iucn-tftsg.org/taxonomic-literature-database/**.

Adler, K.K. 1962. A new name for a Chinese turtle, genus *Clemmys*. Natural History Bulletin of the Siam Society 20(2):135.

Adler, K. 2007. The development of systematic reviews of the turtles of the world. Vertebrate Zoology 57(2):139–148.

Adler, K. 2016. Theodore Cantor (1809–1860): pioneer scientific herpetologist in China. In: Cantor, T. Zoology of Chusan. Society for the Study of Amphibians and Reptiles, Facsimile Reprint, pp. v–xi.

Agassiz, L. 1846. Nomenclatoris Zoologici Index Universalis. Solothurn: Jent and Gassmann, 393 pp.

Agassiz, L. 1857a. Contributions to the Natural History of the United States of America. First Monograph. Vol. I. Part I. Essay on Classification. Part II. North American Testudinata. Boston: Little, Brown and Co., Vol. I, pp. 1–452.

Agassiz, L. 1857b. Contributions to the Natural History of the United States of America. First Monograph. Vol. II. Part III. Embryology of the Turtle. Boston: Little, Brown and Co., Vol. II, pp. 453–643.

Ahl, E. 1932. Beschreibung einer neuen Schildkröte aus Australien. Sitzungsberichte der Gesellschaft Naturforschender Freunde zu Berlin 1932(1/3):127–129.

Alvarez del Toro, M. 1972. Los Reptiles de Chiapas, 2nd. Ed. Tuxtla Gutierrez, Mexico: Gobierno del Estado de Chiapas, 178 pp.

Ameghino, F. 1882. Catálogo explicativo de las colecciones de Antroplogía, prehistoria y de paleontología de Florentino Ameghino. Buenos Aires: Catálogo de la Sección de la Provincia de Buenos Aires en la Exposición Continental Sud Americana, Anexo A:35–42.

Anderson, J. 1875. Description of some new Asiatic mammals and Chelonia. Annals and Magazine of Natural History (4)16:282–285.

Anderson, J. 1876. Note on the plastron of the Gangetic mud-turtle (*Emyda dura* of Buchanan-Hamilton). Journal of the Proceedings of the Linnean Society of Zoology 12:514–516.

Anderson, J. 1879 ["1878"]. Anatomical and Zoological Researches, Comprising an Account of the Zoological Results of the Two Expeditions to Western Yunnan in 1868 and 1875. London: Bernard Quaritch, Vol. I, 985 pp., Vol. II, 29 pp. + pls.

Angielczyk, K.D. and Feldman, C.R. 2013. Are diminutive turtles miniaturized? The ontogeny of plastron shape in emydine turtles. Biological Journal of the Linnean Society 108:727–755.

Annandale, N. 1906. *Testudo baluchiorum*, a new species. Journal and Proceedings of the Asiatic Society of Bengal n.s. 2(3):75–76.

Annandale, N. 1912a. The Indian mud–turtles (Trionychidae). Records of the Indian Museum 7(2):151–180.

Annandale, N. 1912b. The aquatic chelonia of the Mahanaddi and its tributaries. Records of the Indian Museum 7(3):261–266.

Annandale, N. 1913. The tortoises of Chota Nagpur. Records of the Indian Museum 9(5):63–78.

Annandale, N. 1915a. Notes on some Indian Chelonia. Records of the Indian Museum 11(11):189–195.

Annandale, N. 1915b. Herpetological notes and descriptions. Records of the Indian Museum 11(19):341–347.

Annandale, N. 1918. Chelonia and Batrachia of the Inlé Lake. Records of the Indian Museum 14:67–69.

Ansorge, H., Fritz, U., Terbish, K., and Shar, S. 2012. "*Agrionemys kazachstanica terbishi*" or the two-faced Mongolian steppe tortoise. Exploration into the Biological Resources of Mongolia 12:213–218.

Antenbrink-Vetter, S. and Vetter, H. 1998. Neuer Name für altbekannte Schildkröten. Schildkröten II/98:3–5.

Arambourg, C. 1947. Contribution à l'étude géologique et paléontologique du bassin du lac Rodolphe et de la basse vallée de l'Omo. In: Arambourg, C. (Ed.). Mission scientifique de l'Omo. Vol. 1: Géologie et Anthropologie. Paris: Editions du Muséum, pp. 231–562.

Artner, H. 2003. Nomenklatur aktuell. Die rezenten Schildkrötenarten der Erde. Emys 10(6):iv–xxxviii.

Attum, O., Baha el Din, S., Carranza, S., Earley, R., Arnold, E.N., and Kingsbury, B. 2007. An evaluation of the taxonomic validity of *Testudo werneri*. Amphibia-Reptilia 28(3):393–401.

Auffenberg, W. 1963. *Testudo hypselonota* Bourret referred to *Geochelone radiata* (Shaw). Journal of the Bombay Natural History Society 60:462–465.

Auffenberg, W. 1974. Checklist of fossil land tortoises (Testudinidae). Bulletin of the Florida State Museum, Biological Sciences 18:121–251.

Austin, J.J. and Arnold, E.N. 2001. Ancient mitochondrial DNA and morphology elucidate an extinct island radiation of Indian Ocean giant tortoises (*Cylindraspis*). Proceedings of the Royal Society of London 268B:2515–2523.

Austin, J.J., Arnold, E.N., and Bour, R. 2003. Was there a second adaptive radiation of giant tortoises in the Indian Ocean? Using mitochondrial DNA to investigate speciation and biogeography of *Aldabrachelys* (Reptilia, Testudinidae). Molecular Ecology 12:1415–1424.

Babcock, H.L. 1937. A new subspecies of the red-bellied terrapin *Pseudemys rubriventris* (Le Conte). Occasional Papers of the Boston Society for Natural History 8:293.

Bachmayer, F., Brinkerink, J.P., and Symeonidis, N. 1975. Pleistozäne Schildkröten aus Höhlen der Insel Kreta. Annales Géologiques des Pays Helléniques 27:100–121.

Baha El Din, S. 2006. A guide to the amphibians and reptiles of Egypt. Cairo: The American University in Cairo Press, pp. 359.

Baird, S.F. and Girard, C. 1852. Descriptions of new species of reptiles, collected by the U.S. Exploring Expedition under the command of Capt. Charles Wilkes, U.S.N. First Part.—Including the species from the western coast of America. Proceedings of the Acadademy of Natural Sciences of Philadelphia 1852:174–177.

Ballasina, D. 1995. Salviamo le Tartarughe! Carapax Centre: Edagricole, 288 pp.

Ballasina, D., Vandepitte, V., Mochi, E., and Fenwick, H. 2006. La nécessité de réintroduction de *Geochelone sulcata* nées en captivité: stratégies pour la gestion de groupes d'élevage en captivité. Chelonii 4:111.

Barbour, T. 1935. A new *Pseudemys* from Cat Island, Bahamas. Occasional Papers Boston Society of Natural History 8:205–206.

Barbour, T. and Carr, A.F., Jr. 1938. Another Bahamian fresh-water tortoise. Proceedings of the New England Zoology Club 17:75–76.

Barbour, T. and Carr, A.F., Jr. 1940. Antillean terrapins. Memoirs of the Museum of Comparative Zoology 54(5):381–415.

Barbour, T. and Carr, A.F., Jr. 1941. Terrapin from Grand Cayman. Proceedings of the New England Zoology Club 18:57–60.

Barley, A.J., Spinks, P.Q., Thomson, R.C., and Shaffer, H.B. 2010. Fourteen nuclear genes provide phylogenetic resolution for difficult nodes in the turtle tree of life. Molecular Phylogenetics and Evolution: 55(3):1189–1194.

Barrio-Amorós, C.L. and Narbaiza, I. 2008. Die Schildkröten des Bundesstaates Amazonas (Venezuela). Radiata 17(1):2–20.

Barth, D., Bernhard, D., Guicking, D., Stöck, M., and Fritz, U. 2003. Is *Chinemys megalocephala* Fang, 1934 a valid species? New insights based on mitochondrial DNA sequence data. Salamandra 38(2002)[2003]:233–244.

Barth, D., Bernhard, D., Fritzsch, G., and Fritz, U. 2004. The freshwater turtle genus *Mauremys* (Testudines, Geoemydidae) – a textbook example of an east-west disjunction or a taxonomic misconcept? Zoologica Scripta 33:213–221.

Bartlett, E. 1895a. Notes on tortoises, No. 2. Sarawak Gazette 25:29–30.

Bartlett, E. 1895b. Notes on tortoises, No. 3. Sarawak Gazette 25:83–84.

Bartlett, E. 1896. Notes on tortoises, No. 4. Sarawak Gazette 26:113.

Bartram, W. 1791. Travels through North and South Carolina, Georgia, east and west Florida, the Cherokee county, the executive territories of the Muscogulges, or Creek Confederacy, and the county of the Chactaws; containing an account of the soil and natural productions of those regions, together with obeservations on the manners of the Indians. Philadelphia: James and Johnson, 522 pp.

Batsch, A.J.G.C. 1788. Versuch einer Anleitung zur Kenntniss und Geschichte der Thiere und Mineralien. Erster Theil. Allgemeine Geschichte der Natur; besondre der Säugthiere, Vögel, Amphibien und Fische. Jena: Akademische Buchhandlung, 528 pp.

Batsch, A.J.G.C. 1796. Umriss der gesammten Naturgeschichte. Jena: Christian Ernst Gabler, Vol. 1, 287 pp.

Bauer, A.M. and Adler, K. 2001. The dating and correct citation of A.F.A. Wiegmann's "Amphibien" section of Meyen's Reise um die Erde, with a bibliography of Wiegmann's herpetological publications. Archives of Natural History 28(3):313–326.

Bauer, A.M. and Petit, R.E. 2004. On the herpetology of Perry's Arcana and two forgotten reptile names. Newsletter and Bulletin of the International Society for the History and Bibliography of Herpetology 5(1):9–17.

Baur, G. 1888a. Osteologische Notizen über Reptilien. Fortsetzung III. Zoologischer Anzeiger 11(285):417–424.

Baur, G. 1888b. Osteologische Notizen über Reptilien. Fortsetzung IV. Zoologischer Anzeiger 11(291):592–597.

Baur, G. 1888c. Notes on the American Trionychidae. American Naturalist 22:1121–1122.

Baur, G. 1889. The gigantic land tortoises of the Galapagos Islands. American Naturalist 23:1039–1057.

Baur, G. 1890a. Two new species of tortoises from the south. Science 16(405):262–263.

Baur, G. 1890b. An apparently new species of *Chelys*. American Naturalist 24:967–968.

Baur, G. 1891a. The very peculiar tortoise, *Carettochelys* Ramsay, from New Guinea. Science 17(426):190.

Baur, G. 1891c. On the relations of *Carettochelys*, Ramsay. American Naturalist 25:631–639.

Baur, G. 1893a. Notes on the classification and taxonomy of the Testudinata. Proceedings of the American Philosophical Society 31:210–225.

Baur, G. 1893b. Notes on the classification of the Cryptodira. American Naturalist 27:672–674.

Baur, G. 1893c. Two new species of North American Testudinata. American

Naturalist 27:675–677.

Baur, G. 1896. Der Schädel einer neuen grossen Schildkröte (*Adelochelys*) aus dem zoologischen Museum in München. Anatomischer Anzeiger 12:314–319.

Baur, G. 1925. [*Kinosternon abaxillare*]. In: Stejneger, L. New species and subspecies of American turtles. Journal of the Washington Academy of Science 15:462–463. [p. 462]

Bechstein, J.M. 1800. Herrn De la Cepede's Naturgeschichte der Amphibien oder der eyerlegenden vierfüszigen Thiere und der Schlangen. Erster Band. Weimar: Industrie-Comptoir, 524 pp.

Bedriaga, J. von. 1881. Die Amphibien und Reptilien Griechenlands. (Fortsetzung). Bulletin de la Société Impériale des Naturalistes de Moscou 56(3-4):278–344.

Beheregaray, L.B., Ciofi, C., Caccone, A., Gibbs, J.P., and Powell, J.R. 2003. Genetic divergence, phylogeography and conservation units of giant tortoises from Santa Cruz and Pinzón, Galápagos Islands. Conservation Genetics 4:31–46.

Bell, T. 1825a. A monograph of the tortoises having a moveable sternum, with remarks on their arrangement and affinities. Zoological Journal 2:299–310.

Bell, T. 1825b. [*Sternotherus*]. In: Gray, J.E. A synopsis of the genera of reptiles and amphibia, with a description of some new species. Annals of Philosophy (2)10:211.

Bell, T. 1826. Description of a new species of *Terrapene*; with further observations on *T. carolina* and *T. maculata*. Zoological Journal 2:484–486.

Bell, T. 1827. On two new genera of land tortoises. Transactions of the Linnean Society of London 15:392–401.

Bell, T. 1828a. Descriptions of three new species of land tortoises. Zoological Journal 3(11):419–421.

Bell, T. 1828b. On *Hydraspis*, a new genus of freshwater tortoises, of the family Emydidae. Zoological Journal 3(12):511–513.

Bell, T. 1828c. Characters of the order, families, and genera of the Testudinata. Zoological Journal 3(12):513–516.

Bell, T. 1834. A freshwater tortoise described as the type of a new genus, *Cyclemys*. Proceedings of the Zoological Society of London 1834:17.

Bell, T. 1835. A Monograph of the Testudinata. Part IV. London: Samuel Highley, unnumbered pages and plates. [published prior to May 1835]

Bennett, E.T. 1836. [Footnote 2: *Testudo whitei*]. In: White, G. The Natural History and Antiquities of Selborne. London: J. and A. Arch, 640 pp. [pp. 360–361].

Bergounioux, F.M. 1936. Monographie des chéloniens fossiles conservées au Laboratoire de Géologie de la Faculté des Sciences de Lyon. Travaux du Laboratoire de Géologie du Faculté des Sciences de Lyon 31(26):7–40.

Berlandier, L. 1850. Reptiles. In: Berlandier, L. and Chovel, R. Diario de Viage de la Comision de Limites que puso el Gobierno de la Republica. Mexico: Juan R. Navarro, pp. 287–291.

Berlandier, J.L. 1980. Journey to Mexico during the years 1826 to 1834. Translated by S.M. Ohlendorff, J.M. Bigelow, and M.M. Standifer. Botanical notes by C. H. Muller and K. K. Muller. Denton, TX: The Texas State Historical Association. Two Volumes, 672 pp.

Berry, J.F. 1978. Variation and systematics in the *Kinosternon scorpioides* and *K. leucostomum* complexes (Reptilia: Testudines: Kinosternidae) of Mexico and Central America. Ph.D. Thesis, University of Utah.

Berry, J.F. and Iverson, J.B. 1980. A new species of mud turtle, genus *Kinosternon*, from Oaxaca, Mexico. Journal of Herpetology 14(4):313–320.

Berry, J.F. and Legler, J.M. 1980. A new turtle (genus *Kinosternon*) from northwestern Mexico. Contributions in Science, Natural History Museum of Los Angeles County 325:1–12.

Berry, J.F., Seidel, M.E., and Iverson, J.B. 1996. [*Kinosternon chimalhuaca*]. In: Rogner, M. Schildkröten 2. Hürtgenwald: Heidi-Rogner-Verlag, 265 pp. [pp. 23–24].

Berry, J.F., Seidel, M.E., and Iverson, J.B. 1997. A new species of mud turtle (genus *Kinosternon*) from Jalisco and Colima, Mexico, with notes on its natural history. Chelonian Conservation and Biology 2(3):329–337.

Besnard, G., Thèves, C., Mata, X., Holota, H., Rakotozafy, L.M.A., and Pedrono, M. 2016. Shotgun sequencing of the mitochondrial genome of the Aldabra giant tortoise (*Aldabrachelys gigantea*). Mitochondrial DNA Part A: DNA Mapping, Sequencing, and Analysis; doi: 10.3109/19401736.2015.1101554; pp. 1–2.

Beyer, G.S. 1900. Louisiana herpetology. Proceedings of the Louisiana Society of Naturalists 1897–1899:24–46.

Bhullar, B.S. and Bever, G.S. 2009. An archosaur-like laterosphenoid in early turtles (Reptilia: Pantestudines). Breviora 518:1–11.

Bibron, G. and Bory de Saint-Vincent, J.B. 1833 ["1832"]. Vertébrés à sang froid. Reptiles et poissons. In: Bory de Saint-Vincent, J.B. (Ed.). Expédition Scientifique de Morée. Travaux de la Section des Sciences Physiques. Tome III, Première Partie. Zoologie - Première Section. Animaux vertébrés, Mollusques et Polypiers. Paris: F.G. Levrault, pp. 57–80.

Bickham, J.W. and Carr, J.L. 1983. Taxonomy and phylogeny of the higher categories of cryptodiran turtles based on a cladistic analysis of chromosomal data. Copeia 1983(4):918–932.

Bickham, J.W., Lamb, T., Minx, P., and Patton, J.C. 1996. Molecular systematics of the genus *Clemmys* and the intergeneric relationships of emydid turtles. Herpetologica 52:89–97.

Blainville, H. de 1816. Prodrome d'une nouvelle distribution systématique du règne animal. Bulletin des Sciences par la Société Philomatique de Paris 1816:113–124 ["105–112, 121–124" in error].

Blanck, T., McCord, W.P., and Le, M. 2006a. On the variability of *Cuora trifasciata* (Bell, 1825); the rediscovery of the type specimen, with descriptions of a new *Cuora* species and subspecies, and remarks on the distribution, habitat and vulnerability of these species (Reptilia: Testudines: Geoemydidae). Frankfurt: Edition Chimaira, 153 pp.

Blanck, T., Zhou, T., and McCord, W.P. 2006b. The Yunnan box turtle, *Cuora yunnanensis* (Boulenger 1906); historical background and an update on the morphology, distribution and vulnerabilities of the only known living specimens. Sacalia 13(4):14–35.

Blanck, T., Protiva, T., Zhou, T., Li, Y., Crow, P., and Tiedemann, R. 2017. New subspecies of *Cuora cyclornata* (Blanck, McCord & Le, 2006), *Cuora trifasciata* (Bell, 1825) and *Cuora aurocapitata* (Luo & Zong, 1988). Sichuan Journal of Zoology 36(4):368–385.

Blanford, W.T. 1870. Notes on some Reptilia and Amphibia from central India. Journal of the Asiatic Society of Bengal 39:335–376.

Bleeker, P. 1857a. Berigt omtrent eenige Reptilien van Sumatra, Borneo, Batjan en Boero. Natuurkundig Tijdschrift voor Nederlandsch-Indië 13:470–475.

Bleeker, P. 1857b. Opsomming der soorten van Reptilien, tot dus verre van het eiland Java bekend geworden. Natuurkundig Tijdschrift voor Nederlandsch-Indië 14:235–244.

Blumenbach, J.F. 1779. Handbuch der Naturgeschichte. Ed. 1. Part 1. Göttingen: J.C. Dieterich, 448 pp.

Blyth, E. 1854 ["1853"]. Notices and descriptions of various reptiles, new or little known. Journal of the Asiatic Society of Bengal 22(7):639–655.

Blyth, E. 1856. Report for October Meeting, 1855. Donations received during the last three months. Journal of the Asiatic Society of Bengal 24:711–723.

Blyth, E. 1859. Report of Curator, Zoological Department, for May, 1858. [4. A small collection from Major Berdmore, sent by him from the Sitang Valley, Pegu]. Journal of the Asiatic Society of Bengal 27:267–281.

Blyth, E. 1863. Report of the Curator, Zoological Department. [III. W.T. Blanford, Esq., of the Indian Geological Survey. A collection of sundries from different parts of Burma]. Journal of the Asiatic Society of Bengal 32:73–90.

Bocourt, M.-F. 1868. Description de quelques chéloniens nouveaux appartenant à la faune Mexicaine. Annales des Sciences Naturelles, Zoologie et Paléontologie, Paris (5)10:121–122.

Bocourt, M.-F. 1876a. Note sur quelques reptiles de l'Isthme de Tehuantepec (Mexique) donnés par M. Sumichrast au Muséum. Journal de Zoologie (Paris) 5:386–411.

Bocourt, M.-F. 1876b. Addition. [*Emys grayi*, Duméril et Bocourt, devra prendre un nouveau nom, *Emys umbra*, Nob.]. In: Bocourt, M.F. Sur quelques reptiles de l'Isthme de Tehuantepec (Mexique) donnés par M. Sumichrast au Muséum. Extrait du Journal de Zoologie publié par M. Paul Gervais, t. V, 1876. Paris: Imprimerie Bouchard-Huzard, pp. 1–26. [p. 26].

Boddaert, P. 1770. Brief van de kraakbeenige schildpad. Epistola de testudine cartilaginea. Amsterdam: Kornelis van Tongerlo, 39 pp.

Bodenheimer, F.S. 1935. Animal Life in Palestine. Jerusalem: L. Mayer, 235 pp.

Boettger, O. 1893. Katalog der Reptilien-Sammlung im Museum der Senckenbergischen Naturforschenden Gesellschaft in Frankfurt am Main. I. Teil (Rhynchocephalen, Schildkröten, Krokodile, Eidechsen, Chamäleons). Frankfurt: Knauer, 140 pp.

Boettger, O. 1894. Materialien zur herpetologischen Fauna von China III. Bericht über die Senckenbergische Naturforschende Gesellschaft, Frankfurt 25:129–152.

Bogert, C.M. 1943. A new box turtle from southeastern Sonora, Mexico. American Museum Novitates 1226:1–7.

Bohls, J. 1895. Bemerkung zur Eintheilung der Chelydidae. Zoologischer Anzeiger 18:51–53.

Bonaparte, C.L. 1830. Sulla Seconda Edizione del Regno Animale del Barone Cuvier. Osservazioni. Annali Storia Naturale di Bologna 4:1–172.

Bonaparte, C.L. 1831. Saggio di una Distribuzione Metodica degli Animali Vertebrati. Rome: Presso Antonio Boulzaler, 144 pp.

Bonaparte, C.L. 1836. Cheloniorum Tabula Analytica. Rome: 9 pp.

Bonnaterre, P.-J. 1789. Tableau Encyclopédique et Méthodique des Trois Règnes de la Nature. Erpétologie. Paris: Panckoucke, Hôtel de Thou, 70 pp.

Bory de Saint-Vincent, J.B. 1804. Voyage dans les Quatre Principales Îles des Mers d'Afrique. Paris: F. Buisson, Tome 2, 430 pp., Planches, 56 pls.

Bory de Saint-Vincent, J.B. (Ed.). 1833. Expédition Scientifique de Morée. Travaux de la Section des Sciences Physiques. Zoologie. Paris: F.G. Levrault, planches, troisième série, pls. 6–17.

Bory de Saint-Vincent, J.B. (Ed.). 1835. Expédition Scientifique de Morée. Travaux de la Section des Sciences Physiques. Zoologie. Paris: F.G. Levrault, Atlas, pls. 6–17 [corrigenda].

Boulenger, G.A. 1886a. On the South-African tortoises allied to *Testudo geometrica*. Proceedings of the Zoological Society of London 1886:540–542.

Boulenger, G.A. 1886b. A synopsis of the reptiles and batrachians of the Province Rio Grande do Sul, Brazil. Annals and Magazine of Natural History (5)18:423–445.

Boulenger, G.A. 1887a. On a new family of pleurodiran turtles. Annals and Magazine of Natural History (5)19:170–172.

Boulenger, G.A. 1888a. Description of a new land-tortoise from South Africa, from a specimen living in the Society's Gardens. Proceedings of the Zoological Society of London 1888:251.

Boulenger, G.A. 1888b. On the chelydoid chelonians of New Guinea. Annali del Museo Civico di Storia Naturale di Genova (2)6:449–452.

Boulenger, G.A. 1889. Catalogue of the Chelonians, Rhynchocephalians, and Crocodiles in the British Museum (Natural History). London: Trustees of the Museum, 311 pp.

Boulenger, G.A. 1891. On some chelonian remains preserved in the Museum of the Royal College of Surgeons. Proceedings of the Zoological Society of London 1891:4–8.

Boulenger, G.A. 1895a. Esplorazione del Giuba e dei suoi affluenti compiuta dal Cap. V. Bottego durante gli anni 1892–93 sotto gli auspicii della Società Geografica Italiana. Risultati Zoologici. Rettili e Batraci. Annali del Museo Civico di Storia Naturale di Genova (2)15:7–18.

Boulenger, G.A. 1895b. On the American box turtles. Annals and Magazine of Natural History (6)15:330–331.

Boulenger, G.A. 1897a. Description of a new genus and species of tortoises from Borneo. Annals and Magazine of Natural History (6)19:468–469.

Boulenger, G.A. 1897b. Description of a new tortoise of the genus *Sternothaerus*. Proceedings of the Zoological Society of London 1897:919.

Boulenger, G.A. 1902a. Descriptions of new batrachians and reptiles from north-western Ecuador. Annals and Magazine of Natural History (7)9:51–57.

Boulenger, G.A. 1902b. A list of the fishes, batrachians, and reptiles collected by Mr. J. ffolliott Darling in Mashonaland, with descriptions of new species. Proceedings of the Zoological Society of London 1902(2):13–18.

Boulenger, G.A. 1903a. Report on the batrachians and reptiles. In: Annandale, N. and Robinson, H.C. (Eds.). Fasciculi Malayenses: Anthropological and Zoological Results of an Expedition to Perak and the Siamese Malay States, 1901–1902. Zoology. Liverpool: University Press, pp. 131–170.

Boulenger, G.A. 1903b. On a collection of batrachians and reptiles from the interior of Cape Colony. Annals and Magazine of Natural History (7)12:215–217.

Boulenger, G.A. 1906a. Descriptions of new reptiles from Yunnan. Annals and Magazine of Natural History (7)17:567–568.

Boulenger, G.A. 1906b. Report on the reptiles collected by the late L. Fea in West Africa. Annali del Museo Civico di Storia Naturale di Genova (3)2(42):196–216.

Boulenger, G.A. 1907. A new tortoise from Travancore. Journal of the Bombay Natural History Society 17:560–561.

Boulenger, G.A. 1913. On a collection of batrachians and reptiles made by Dr. H.G.F. Spurrell, F.Z.S., in the Choco, Colombia. Proceedings of the Zoological Society of London 1913(4):1019–1038.

Boulenger, G.A. 1920. Une tortue extraordinaire: *Testudo loveridgii*, sp.n. Comptes Rendus de l'Académie des Sciences, Paris 170:263–266.

Boulenger, G.A. 1921. Description of a new land-tortoise from northern Persia. Journal of the Bombay Natural History Society 27:251–252.

Bour, R. 1973. Contribution à la connaissance de *Phrynops nasutus* (Schweigger: 1812) et *Phrynops tuberculatus* (Luederwaldt: 1926). Description d'une nouvelle sous-espèce originaire du Paraguay, *Phrynops tuberculatus vanderhaegei* (Testudinata – Pleurodira – Chelidae). Bulletin de la Société Zoologique de France 98(1):175–190.

Bour, R. 1978. Les tortues des Mascareignes; description d'une espèce nouvelle d'après un document (Mémoires de l'Académie) de 1737 dans lequel le crâne est figuré. Comptes Rendus de l'Académie des Sciences 287D:491–493.

Bour, R. 1979. Les tortues actuelles de Madagascar (République malgache): liste systématique et description de deux sous–espèces nouvelles (Reptilia–Testudines). Bulletin de la Société d'Etudes Scientifiques de l'Anjou n.s. 10(1978)[1979]:141–154.

Bour, R. 1980. Essai sur la taxinomie des Testudinidae actuels (Reptilia, Chelonii). Bulletin du Muséum National d'Histoire Naturelle, Paris (4)2A:541–546.

Bour, R. 1982a. Contribution à la connaisance des tortues terrestres des Seychelles: définition du genre endémique et description d'une espèce nouvelle probablement originaire des îles granitiques et au bord de l'extinction. Comptes Rendus de l'Académie des Sciences 295:117–122.

Bour, R. 1982b. Etude systematique du genre endemigue malgache *Pyxis* Bell, 1827 (Reptilia, Chelonii) (Note complémentaire). Bulletin Mensuel de la Société Linnéenne de Lyon 51:28–31.

Bour, R. 1982c. *Pelomedusa subrufa* (Lacepède, 1788), *Pelusios subniger* (Lacepède, 1788) (Reptilia, Chelonii) et le séjour de Philibert Commerson à Madagascar. Bulletin du Muséum National d'Histoire Naturelle, Paris (4)4A:531–539.

Bour, R. 1983. Trois populations endémiques du genre *Pelusios* (Reptilia, Chelonii, Pelomedusidae) aux îles Seychelles; relations avec les espèces africaines et malgaches. Bulletin du Muséum National d'Histoire Naturelle, Paris (4)5A:343–382.

Bour, R. 1984a. Note sur *Pelusios williamsi* Laurent, 1965 (Chelonii, Pelomedusinae). Revue Français Aquariologie 11:27–32.

Bour, R. 1984b. Taxonomy, history and geography of Seychelles land tortoises and fresh-water turtles. In: Stoddart, D.R. (Ed.). Biogeography and Ecology of the Seychelles Islands. The Hague: W. Junk, pp. 281–307.

Bour, R. 1985 ["1984"]. Les tortues terrestres géantes des îles de l'Océan Indien occidental: données géographiques, taxinomiques et phylogénétiques. In: Broin, F. de. and Jiménez–Fuentes, E. (Eds.). Studia Geologica Salmanticensia Vol. Esp. 1. Studia Palaeochelonioloqica 1:17–76.

Bour, R. 1986. Note sur *Pelusios adansonii* (Schweigger, 1812) et sur une nouvelle espèce affine du Kenya (Chelonii, Pelomedusidae). Studia Palaeochelonioloqica 2:23–54.

Bour, R. 1987a. L'identité des tortues terrestres européennes: spécimens-types et localitiés-types. Revue Française d'Aquariologie 13(4):111–122.

Bour, R. 1987b. Type-specimen of the alligator snapper, *Macroclemys temminckii* (Harlan, 1835). Journal of Herpetology 21(4):340–343.

Bour, R. 1988. Taxonomic and nomenclatural status of *Homopus signatus* (Gmelin, 1789): Reptilia - Chelonii. Journal of the Herpetology Association of Africa 35:1–6.

Bour, R. 1989. Caractères diagnostiques offerts par le crâne des tortues terrestres du genre *Testudo*. Mésogée 48:13–19.

Bour, R. 1996. Une nouvelle espèce de tortue terrestre dans le Péloponnèse (Grèce). Dumerilia 2(1995)[1996]:23–54.

Bour, R. 2000. Une nouvelle espèce de *Pelusios* du Gabon (Reptilia, Chelonii, Pelomedusidae). Manouria 3(8):1–32.

Bour, R. 2003. Previously unrecognized original type specimens of American turtles collected by John Le Conte in 1828. Chelonian Conservation and Biology 4(3):537–547.

Bour, R. 2005. Type specimens of *Testudo rotunda* Latreille, 1801. Emys 12(6):23–27.

Bour, R. 2006a. Types of Podocnemidae in the Muséum National d'Histoire Naturelle. Emys 13(1):27–40.

Bour, R. 2006b. Identity of *Testudo gigantea* Schweigger, 1812 and rediscovery of the type specimen. Emys 13(4):12–23.

Bour, R. 2006c. *Kinixys belliana domerguei* (Vuillemin, 1972), la Tortue à dos articulé de Madagascar: données historiques et ecologiques. Chéloniens 3:42–55.

Bour, R. 2008. August Friedrich Schweigger (1783–1821). In: Bauer, A.M. (Ed.). The Life and Herpetological Contributions of August Friedrich Schweigger (1783–1821). Facsimile Reprints in Herpetology, Society for the Study of Amphibians and Reptiles, pp. 7–54.

Bour, R. 2009. Type specimens of *Emys ocellata* Duméril & Bibron, 1835 with notes on the species of *Morenia* Gray, 1870. Emys 16(2):33–42.

Bour, R. 2013. Actualités chez les tortues des Seychelles. Chéloniens 29:27–41.

Bour, R. and Dubois, A. 1983. Statut nomenclatural et spécimens-types d'*Emys pseudogeographica* Gray, 1831 et d'*Emys lesueuri* Gray, 1831 (Reptilia, Chelonii, Emydidae). Bull. Mens. Soc. Linn. Lyon 52:42-46.

Bour, R. and Dubois, A. 1984. Nomenclatural availability of *Testudo coriacea* Vandelli, 1761: a case against a rigid application of the rules to old, well-known zoological works. Journal of Herpetology 17(4)(1983):356–361.

Bour, R. and Henkel, M. 2012. Hybridation entre la tortue d'Aldabra *Dipsochelys dussumieri* (Gray, 1831) et la tortue sillonnée *Centrochelys sulcata* (Miller, 1779). Chéloniens 26:36–41.

Bour, R. and Maran, J. 1999 ["1998"]. Taxinomie de *Mauremys leprosa* (Schweigger, 1812) dans le sud du Maroc: la "tortue aux yeux bleus" (Reptilia, Chelonii, Geoemydidae). Manouria 1(2)(1998)[1999]:22–52.

Bour, R. and Maran, J. 2003. Une nouvelle espèce de *Pelusios* de Côte d'Ivoire (Reptilia, Chelonii, Pelomedusidae). Manouria 6(21):24–43.

Bour, R. and Ohler, A. 2008. *Chersine* Merrem, 1820 and *Chersina* Gray, 1831: a nomenclatural survey. Zootaxa 1752:66–68.

Bour, R. and Pauler, I. 1987. Identité de *Phrynops vanderhaegei* Bour, 1973, et des espèces affines (Reptilia - Chelonii - Chelidae). Mésogée – Bulletin du Museum d'Histoire Naturelle de Marseille 47:3–23.

Bour, R. and Zaher, H. 2005. A new species of *Mesoclemmys*, from the open formations of northeastern Brazil (Chelonii, Chelidae). Papeis Avulsos de Zoologia 45:295–311.

Bour, R., Dubois, A., and Webb, R.G. 1995. Types of recent trionychid turtles in the Muséum national d'Histoire naturelle, Paris. Dumerilia 2:73–92.

Bour, R., Pritchard, P., Cheke, A., Collie, J., Arnold, E.N., Meylan, P.A., Bury, R.B., Dodd, C.K., Jr., Kraus, O., McCarthy, C., Fleischer-Dogley, F., et al., Casale, P., Gaffney, E.S., Tatayah, V., Jones, C., Reynolds, R.P., Howell, K.M., Ng, P.K.L., Chellam, R., Palkovacs, E.P., and Gerlach, J. 2009. Comments on the proposed conservation of usage of *Testudo gigantea* Schweigger, 1812 (currently *Geochelone (Aldabrachelys) gigantea*; Reptilia, Testudines) (Case 3463; see BZN 66: 34–50, 80–87). Bulletin of Zoological Nomenclature 66(2):169–186.

Bourque, J.R. 2012a. An extinct mud turtle of the *Kinosternon flavescens* group (Testudines, Kinosternidae) from the middle Miocene (late Barstovian) of New Mexico. Journal of Vertebrate Paleontology 32(1):68–81.

Bourque, J.R. 2012b. A fossil mud turtle (Testudines, Kinosternidae) from the early middle Miocene (early Barstovian) of New Mexico. Journal of Vertebrate Paleontology 32(4) 836–853.

Bourque, J.R. 2016. New mud turtles (Kinosternidae, Kinosternon) from the middle–late Miocene of the United States. Journal of Paleontology 89:821–844.

Bourque, J.R. and Schubert, B.W. 2015. Fossil musk turtles (Kinosternidae, *Sternotherus*) from the Miocene-early Pliocene (Hemphillean) of Tennessee and Florida. Journal of Vertebrate Paleontology 35, doi:10.1080/02724634.2014.885441.

Bourret, R. 1939. Notes herpétologiques sur l'Indochine française. XVI. Tortues de la collection du Laboratoire des Sciences Naturelles de l'Université. Description d'une espèce nouvelle. Annexe au Bulletin Général de l'Instruction Publique 1939(6):1–34.

Bourret, R. 1940 ["1939"]. Notes herpétologiques sur l'Indochine française. XVIII. Reptiles et batraciens reçus au Laboratoire des Sciences Naturelles de l'Université au cours de l'année 1939. Descriptions de quatre espèces et d'une variété nouvelles. Annexe au Bulletin Général de l'Instruction Publique 1939(4)[1940]:1–40.

Bourret, R. 1941a. Note sur un crâne de tortue fossile. Comptes Rendus des Séances du Conseil de Recherches Scientifiques de l'Indochine 1940–1941. 1941(1):9–11.

Bourret, R. 1941b. Notes herpétologiques sur l'Indochine française. XXI. Reptiles et batraciens reçus au Laboratoire des Sciences Naturelles de l'Université au cours de l'année 1940. Description d'une espèce fossile nouvelle. Annexe au Bulletin Général de l'Instruction Publique 1941:1–16.

Bourret, R. 1941c. Les Tortues de l'Indochine. Notes Institut Océanographique de l'Indochine 38:1–235.

Bowen, B.W. and Karl, S.A. 2007. Population genetics and phylogeography of sea turtles. Molecular Ecology 16(23):4886–4907.

Bowen, B.W., Meylan, A.B., Ross, J.P., Limpus, C.J., Balazs, G.H., and Avise, J.C. 1992. Global population structure and natural history of the green turtle (*Chelonia mydas*) in terms of matriarchal phylogeny. Evolution 46:865-881.

Bowen, B.W., Nelson, W.S., and Avise, J.C. 1993. A molecular phylogeny for marine turtles: trait mapping, rate assessment, and conservation relevance. Proceedings of the National Academy of Science 90:5574–5577.

Boycott, R.C. and Bourquin, O. 2000. The Southern African Tortoise Book. A Guide to Southern African Tortoises, Terrapins and Turtles. Revised expanded edition. Pietermaritzburg: Interpak, 228 pp.

Bramble, D.M. 1982. *Scaptochelys*: generic revision and evolution of gopher tortoises. Copeia 1982(4):852–867.

Bramble, D.M. and Hutchison, J.H. 2014. Morphology, taxonomy, and distribution of of North American tortoises. In: Rostal, D.C., McCoy, E.D., and Mushinsky, H.R. (Eds.). Biology and Conservation of North American Tortoises. Baltimore, Maryland: Johns Hopkins University Press, pp. 1–12.

Branch, W.R. 1989. *Homopus bergeri*, nama or Berger's padloper (English), Bergerse skilpad (Afrikaans). In: Swingland, I.R. and Klemens, M.W. (Eds.). The Conservation Biology of Tortoises. Occasional Papers of the IUCN Species Survival Commission No. 5, pp. 75–77.

Branch, W.R. 1992. *Homopus 'bergeri*' - a wrong name for a new tortoise from southern Namibia. Journal of the Herpetological Association of Africa 40:11.

Branch, W.R. 2007. A new species of tortoise of the genus *Homopus* (Chelonia: Testudinidae) from southern Namibia. African Journal of Herpetology 56:1–21.

Branch, W. 2008. Tortoises terrapins and turtles of Africa. Cape Town, Struik Publishers, 128 pp.

Brandt, J.F. 1857. Observationes quadam ad generis Trionychum species duas novas spectantes. Bulletin de la Classe Physico-mathématique de l'Académie Impériale des Sciences de St.-Pétersbourg 16:110–111.

Brimley, C.S. 1928. Two new terrapins of the genus *Pseudemys* from the southern states. Journal of the Elisha Mitchell Science Society 44:66–69.

Broadley, D.G. 1981. A review of the genus *Pelusios* Wagler in southern Africa (Pleurodira: Pelomedusidae). Occasional Papers of the National Museums and Monuments of Rhodesia, B. Natural Sciences 6(9):633–686.

Broadley, D.G. 1989. *Geochelone pardalis*, leopard tortoise (English), bergskilpad (Afrikaans). In: Swingland, I.R. and Klemens, M.W. (Eds.). The Conservation Biology of Tortoises. Occasional Papers of the IUCN Species Survival Commission No. 5, pp. 43–46.

Broadley, D.G. 1992. The Savannah species of *Kinixys* (Testudinidae). The Journal of the Herpetological Association of Africa 40:12–13.

Broadley, D.G. 1993. A review of the southern African species of *Kinixys* Bell (Reptilia, Testudinidae). Annals of the Transvaal Museum 36(6):41–52.

Broin, F. de. 1988. Les tortues et le Gondwana. Examen des rapports entre le fractionnement du Gondwana et la dispersion géographique des tortues pleurodires à partir du Crétacé. Studia Palaeocheloniologica 2:103–142.

Brongersma, L.D. 1961. Notes upon some sea turtles. Zoologische Verhandelingen, Rijksmuseum van Natuurlijke Historie Leiden 51:1–46.

Brongniart, A. 1800a. Essai d'une classification naturelle des reptiles. [1]. Magasin Encyclopédique, ou Journal des Sciences, des Lettres et des Arts (5)6[An 8]:184–201.

Brongniart, A. 1800b. Essai d'une classification naturelle des reptiles. [2]. Bulletin des Sciences par la Société Philomatique 3(2)[An 8]:81–82, 89–91.

Brongniart, A. 1805. Essai d'une classification naturelle des reptiles. [3]. Paris: Baudouin, Imprimeur de l'Institut National, 53 pp.

Brophy, T.R. 2002. Variation and systematics of the Malayan snail-eating turtle, *Malayemys subtrijuga* (Schlegel and Müller, 1844). Ph.D. Thesis, George Mason University, Fairfax, Virginia.

Brophy, T.R. 2004. Geographic variation and systematics in the south-east Asian turtles of the genus *Malayemys* (Testudines: Bataguridae). Hamadryad 29:63–79.

Brown, A.D., Temple-Miller, K., Roosenberg, W.M., and White, M.M. 2012. Mitochondrial DNA variation in the Ouachita map turtle. Copeia 2012:301–306.

Brown, A.E. 1908. Generic types of Nearctic Reptilia and Amphibia. Proceedings of the Academy of Natural Sciences, Philadelphia 60:112–127.

Bruguière, J.G. 1792. Description d'une nouvelle espèce de tortue de Cayenne. Journal d'Histoire Naturelle, Paris 1(7):253–261.

Bruno, S. 1986. Guida a Tartarughe e Sauri d'Italia. Firenze: Giunti, 255 pp.

Buhlmann, K.A., Akre, T.S.B., Iverson, J.B., Karapatakis, D., Mittermeier, R.A., Georges, A., Rhodin, A.G.J., van Dijk, P.P., and Gibbons, J.W. 2009. A global analysis of tortoise and freshwater turtle distributions with identification of priority conservation areas. Chelonian Conservation and Biology 8(2):116–149.

Burbidge, A.A. 1967. The biology of south-western Australian tortoises. Ph.D. Thesis, University of Western Australia.

Burbidge, A.A., Kirsch, J.A.W., and Main, A.R. 1974. Relationships within the Chelidae (Testudines: Pleurodira) of Australia and New Guinea. Copeia 1974:392–409.

Burke, A.C., Anderson, M., Weld, A., and Gaffney, E.S. 1983. The reconstruction and casting of a large extinct turtle, *Meiolania*. Curator 26:5–25.

Burke, R.L., Leuteritz, T.E., and Wolf, A.E. 1996. Phylogenetic relationships of emydine turtles. Herpetologica 52:572–584.

Burmeister, C.H. 1837. Handbuch der Naturgeschichte. Zweite Abtheilung: Zoologie. Berlin: Verlag Enslin, 858 pp.

Butler, J.M., Dodd, C.K., Jr., Aresco, M., and Austin, J.D. 2011. Morphological and molecular evidence indicates that the Gulf Coast box turtle (*Terrapene carolina major*) is not a distinct evolutionary lineage in the Florida Panhandle. Biological Journal of the Linnean Society 102:889–901.

Cabrera, M.R. 1998. Las Tortugas Continentales de Sudamerica Austral. Córdoba: BR Copias, pp. 108.

Cabrera, M.R. and Colantonio, S.E. 1997. Taxonomic revision of the South American subspecies of the turtle *Kinosternon scorpioides*. Journal of Herpetology 31: 507–513.

Cacciali, P., Scott, N.J., Aquino Ortíz, A.L., Fitzgerald, L.A., and Smith, P. 2016. The Reptiles of Paraguay: Literature, Distribution, and an Annotatd Taxonomic Checklist. Special Publication of the Museum of Southwestern Biology No. 11, 373 pp.

Caccone, A., Gibbs, J.P., Ketmaier, V., Suatoni, E., and Powell, J.R. 1999. Origin and evolutionary relationships of giant Galápagos tortoises. Proceedings of the National Academy of Sciences, USA 96:13223–13228.

Caccone, A., Gentile, G., Gibbs, J.P., Fritts, T.H., Snell, H.L., Betts, J., and Powell, J.R. 2002. Phylogeography and history of giant Galápagos tortoises. Evolution 56(10):2052–2066.

Cagle, F.R. 1953a. Two new subspecies of *Graptemys pseudogeographica*. Occasional Papers of the Museum of Zoology of the University of Michigan 546:1–17.

Cagle, F.R. 1953b. The status of the turtle *Graptemys oculifera* (Baur). Zoologica 38:137–144.

Cagle, F.R. 1954. Two new species of the genus *Graptemys*. Tulane Studies in Zoology 1:167–186.

Caldwell, D.K. 1962. Sea turtles in Baja California waters (with special reference to those of the Gulf of California), and the description of a new subspecies of northeastern Pacific green turtle. Contributions in Science, Natural History Museum of Los Angeles County 61:1–31.

Calinescu, R. 1931. Contributiuni sistematice si zoogeografice la studiul amphibiilor si reptilelor din Romania. [In Romanian]. Memoriile Sectiunii Sciintifice Academiei Romane, Bucaresti 3(7):119–291.

Campos, F.S., Moraes, R.L. de, and Pereira, C.S.A. 2011. New state record of *Mesoclemmys perplexa* Bour and Zaher, 2005 (Reptilia: Chelidae) in Brazil. Herpetology Notes 4:263–264.

Cann, J. 1997a. Georges short-necked turtle. Monitor (Journal of the Victorian Herpetological Society) 9(1):18–23, 31–32.

Cann, J. 1997b. The northern yellow-faced turtle. Monitor (Journal of the Victorian Herpetological Society) 9(1):24–29, 31–32, 34–35.

Cann, J. 1997c. Irwin's turtle. Monitor (Journal of the Victorian Herpetological Society) 9(1):36–40, 31–32.

Cann, J. 1997d. Kuchling's turtle. Monitor (Journal of the Victorian Herpetological Society) 9(1):41–44, 32.

Cann, J. 1998. Australian Freshwater Turtles. Singapore: Beaumont Publications, 292 pp.

Cann, J. and Legler, J.M. 1994. The Mary River tortoise: a new genus and species of short-necked chelid from Queensland, Australia (Testudines; Pleurodira). Chelonian Conservation and Biology 1(2):81–96.

Cann, J., McCord, W.P., and Joseph-Ouni, M. 2003. [*Emydura macquarii emmotti* ssp. nov.] In: McCord, W.P., Cann, J., and Joseph-Ouni, M. A taxonomic assessment of *Emydura* (Testudines: Chelidae) with descriptions of new subspecies from Queensland, Australia. Reptilia (GB) (Barcelona) 27:60–61.

Cantor, T. 1842a. Zoology of Chusan, Part 1. Kolkata [Calcutta]: 32 pp.

Cantor, T. 1842b. General features of Chusan, with remarks on the flora and fauna of that island. Annals and Magazine of Natural History (1)9:265–278, 361–370, 481–493.

Cantor, T. 1847. Catalogue of reptiles inhabiting the Malayan peninsula and islands. Journal of the Asiatic Society of Bengal 16:607–656, 897–952, 1026–1078.

Carr, A.F., Jr. 1937. A new turtle from Florida, with notes on *Pseudemys floridana mobiliensis* (Holbrook). Occasional Papers of the Museum of Zoology of the University of Michigan 348:1–7.

Carr, A.F., Jr. 1938a. *Pseudemys nelsoni*, a new turtle from Florida. Occasional Papers of the Boston Society of Natural History 8:305–310.

Carr, A.F., Jr. 1938b. A new subspecies of *Pseudemys floridana* with notes on the *floridana* complex. Copeia 1938(3):105–109.

Carr, A.F., Jr. 1942. A new *Pseudemys* from Sonora, Mexico. American Museum Novitates 1181:1–4.

Carr, A.F., Jr. and Marchand, L.J. 1942. A new turtle from the Chipola River, Florida. Proceedings of the New England Zoology Club 20:95–100.

Carretero, M.A., Znari, M., Harris, D.J., and Macé, J.C. 2005. Morphological divergence among populations of *Testudo graeca* from west-central Morocco. Animal Biology 55:259–279.

Carter, H.J. 1852. Geology of the Island of Bombay. Journal of the Bombay Branch of the Royal Asiatic Society 4(16):161–215.

Carvalho, V.T. de, Martínez, J.G., Hernández-Rangel, S.M., Astolfi-Filho, S., Vogt, R.C., Farias, I.P., and Hrbek, T. 2016. Giving IDs to turtles: SNP markers for assignment of individuals to lineages of the geographically structured *Phrynops geoffroanus* (Chelidae: Testudines). Conservation Genetics Resources, doi: 10.1007/s12686-016-0626-8.

Catesby, M. 1771. The Natural History of Carolina, Florida and Bahama Islands. Folio 2. Edited by G. Edwards. London.

Cerdá-Ardura, A., Soberón-Mobarak, F., McGaugh, S.E., and Vogt, R.C. 2008. *Apalone spinifera atra* (Webb and Legler 1960) – Black Spiny Softshell Turtle, Cuatrociénegas Softshell, Tortuga Concha Blanda, Tortuga Negra de Cuatrociénegas. Chelonian Research Monographs 5(1):021.1–4.

Ceríaco, L.M.P. and Bour, R. 2012. Schweigger's (1812) chelonian types from the extinct eighteenth century Portuguese "Royal cabinet of natural history of Ajuda": some contributions for their identification and nomenclatural implications. Zootaxa 3395:18–32.

Ceselli, L. 1846. Sopra una tartaruga trovata alle Acque Caje di Viterbo: lettera al sig. Prof. Sebastiano Purgotti. Rome: Salviucci, 26 pp.

Chandler, C.H. and Janzen, F.J. 2009. The phylogenetic position of the snapping turtles (Chelydridae) based on nucleotide sequence data. Copeia 2009:209–213.

Chang, M.H., Song, J.Y., and Koo, K.S. 2012. The status of distribution for native freshwater turtles in Korea, with remarks on taxonomic position. Korean Journal of Environmental Biology 30(2):151–155.

Chang, M.L.-Y. 1957. [Testudoformes]. Science (Ko-xue) (China) 33(1):50. [in Chinese].

Chang, T.-H. 1929. Notes on an apparently new or rarely known hard-shelled turtle from Fuchow. Contributions of the Biological Laboratory of the Science Society of China, Nanking 5(1):1–5.

Cheke, A.S. and Hume, J.P. 2008. Lost Land of the Dodo: The Ecological history of the Mascarene Islands. New Haven, Connecticut: Yale University Press.

Cheke, A.S., Pedrono, M., Bour, R., Anderson, A., Griffiths, C., Iverson, J.B., Hume, J.P., and Walsh, M. 2017. Giant tortoises spread to western Indian Ocean islands by sea drift in pre-Holocene times, not by later human agency – response to Wilmé et al. (2016a). Journal of Biogeography 44:1426–1429.

Chen, H.G., Liu, W.B., and Zhang, X.J. 2005. Comparative analysis of mitochondrial DNA 12S rRNA region between *Pelodiscus sinensis* and *Pelodiscus axenaria* and their molecular marker for identification. Journal of Fisheries China 29:318–322.

Chen, H.G., Liu, W.B., Li, J.Z., and Zhang, X.J. 2006. Comparative analysis of mitochondrial DNA cytb gene and their molecular identification markers in three species of soft-turtles. Shuisheng Shengwu Xuebao 30:380–385.

Chesi, F. 2009. Il registro fossile italiano dei cheloni. Ph.D. Thesis, Università di Firenze, Italy.

Chevalier, A. 1935. Les îles du Cap Vert. Géographie, biogéographie, agriculture. Flore de l'archipel. Revue de Botanique Appliquée et d'Agriculture Tropicale, Paris 15:733–1090.

Chiari, Y., Thomas, M., Pedrono, M., and Vieites, D.R. 2005. Preliminary data on genetic differentiation within the Madagascar spider tortoise, *Pyxis arachnoides* (Bell, 1827). Salamandra 41:35–43.

Chiari, Y., Hyseni, C., Fritts, T.H., Glaberman, S., Marquez, C., Gibbs, J.P., Claude, J., and Caccone, A. 2009. Morphometrics parallel genetics in a newly discovered and endangered taxon of Galápagos tortoise. PLoS One 4(7):e6272.

Chkhikvadze, V.M. 1970. [On the origin of the modern Palaearctic land tortoises]. Soobshcheniya Akademii Nauk Gruzinskoi SSR [Bulletin of the Academy of Sciences of Georgia] 57(1):245–247. [in Russian].

Chkhikvadze, V.M. 1983. [Les tortues fossiles du Caucase et du Nord de la Mer Noire]. Tbilisi: Metzniereba, 149 pp. [in Russian].

Chkhikvadze, V.M. 1988. O sistematicheskom polozhenii sobremennykh sukhoputnykh cherepakh srednei Azii i Kazakhstana. [Taxonomic status

of modern land tortoise of Middle Asia and Kazakhstan]. Soobshcheniya Akademii Nauk Gruzinskoi SSR [Bulletin of the Academy of Sciences of Georgia] 14(2):110–114. [in Russian].

Chkhikvadze, V.M. 1989. Neogenovye cherepakhi SSSR. [Neogene turtles of the USSR]. Tbilisi: Metsniereba, 104 pp. [in Russian].

Chkhikvadze, V.M. 2008. [*Agrionemys bogdanovi*]. In: Chkhikvadze, V.M., Brushko, Z.K., and Kubykin, R.A. Краткий обзор систематики среднеазиатских черепах (Testudinidae: *Agrionemys*) и подвижные зоны панциря у этой группы черепах. [A brief overview of the systematics of the Central Asian tortoise (Testudinidae: *Agrionemys*) and mobile shell zone in this group of turtles]. Selevinia (Almaty) 2008:100–104. [in Russian].

Chkhikvadze, V.M. 2009. Среднеазиатская черепахиа в Монголии. [Central Asiatic tortoises in Mongolia]. Problems of Desert Development (Ashgabat) 2009(3/4):60–63. [in Russian].

Chkhikvadze, V.M. and Bakradze, M.A. 1991. [On the systematic position of the Recent land turtle from the Araxes Valley]. Trudy Tbilisskogo Gosudarstvennogo Universitet Tbilisi [Proceedings of Tbilisi University] 305:59–63. [in Russian].

Chkhikvadze, V.M. and Bakradze, M.A. 2002. Novyi podvid sukhoputnoi cherepakhi iz Dagestana. [A new subspecies of land tortoises of Daghestan]. Trudy Instituta Zoologii Akademia Nauk Gruzii [Proceedings of the Zoology Institute of the Georgia Academy of Sciences] 21:276–279. [in Russian].

Chkhikvadze, V.M. and Tuniyev, B.S. 1986. [On the taxonomic status of modern land tortoise of the western Transcaucasus]. Soobshcheniya Akademii Nauk Gruzinskoi SSR [Bulletin of the Academy of Sciences of Georgia] 124(3):617–620. [in Russian].

Chkhikvadze, V.M., Amiranashvili, N.G., and Ataev, C.A. 1990. Noviy podvid sukhoputnoi cherepakhi iz yugo–zapadnovo Turkmenistana. [A new subspecies of tortoise from the southwestern Turkmenistan]. Izvestiya Akademii Nauk Turkmenskoi SSR, Seriya Biologicheskie Nauki 1:72–75. [in Russian].

Chkhikvadze, V.M., Ataev, C.A., Shammakov, S., and Zatoka, A.L. 2009. [*Agrionemys kazachstanica kuznetzovi*]. In: Chkhikvadze, V.M., Ataev, C.A., and Shammakov, S. [New taxons of Central Asian tortoises (Testudinidae: *Agrionemys bogdanovi* and *A. kazachstanica kuznetzovi*)]. Problems of Desert Development (Ashgabat) 2009(1/2):49–54. [in Russian].

Chkhikvadze, V.M., Mazanaeva, L.F., and Shammakov, S.M. 2011. A short account of a new species of land tortoise in Dagestan. Proceedings of the International Conference 'Biological Diversity and Conservation Problems of the Fauna of the Caucasus'. Yerevan, Armenia: National Academy of Sciences of the Republic of Armenia, pp. 336–340. [in Russian].

Chkhikvadze, V.M., Mazanaeva, L.F., and Kvachadze, T.O. 2013. [Terrestrial turtles of the Caucasus and North-West Iran]. Buletin ştinţific–Revistă de Etnografie, Ştiinţele Naturii şi Muzeologie (Ştiinţele Naturii). Serie nouă 18(31):72–86. [In Russian]

Ciofi, C., Wilson, G.A., Beheregaray, L.B., Marquez, C., Gibbs, J.P., Tapia, W., Snell, H.L., Caccone, A., and Powell, J.R. 2006. Phylogeographic history and gene flow among giant Galápagos tortoises on southern Isabela Island. Genetics 172:1727–1744.

CITES. 2010. Interpretation and implementation of the Convention. Trade control and marking. Standard nomenclature. CITES Document CoP15 Doc. 35, 33 pp.

Cliburn, J.W. 1971. The ranges of four species of *Graptemys* in Mississippi. Journal of the Mississippi Academy of Science 16:16–19.

Clostio, R.W., Martinez, A.M., LeBlanc, K.E., and Anthony, N.M. 2012. Population genetic structure of a threatened tortoise across the south-eastern United States: implications for conservation management. Animal Conservation 15(6):613–625.

Cochran, D.M. 1961. Type specimens of reptiles and amphibians in the U.S. National Museum. Bulletin of the U.S. National Museum 220:1–291.

Cocteau, J.-T. and Bibron, G. 1838. Reptilia. In: Sagra, D.R. de la. Historia Fisica, Politica y Natural de la Isla de Cuba. Vol. 4. Reptiles y Peces, pp. 1–143.

Cogger, H.G., Cameron, E.E., and Cogger, H.M. 1983. Zoological Catalogue of Australia. Volume 1. Amphibia and Reptilia. Canberra: Australian Government Publishing Service, 313 pp.

Collins, J.T., Collins, S.L., and Taggart, T.W. 2010. Amphibians, Reptiles, and Turtles in Kansas. Eagle Mountain, UT: Eagle Mountain Publishing, 312 pp.

Conant, R. and Goin, C.J. 1948. A new subspecies of soft-shelled turtle from the central United States, with comments on the application of the name *Amyda*. Occasional Papers of the Museum of Zoology, University of Michigan 510:1–19.

Cooper, J.G. 1861. New Californian animals. Proceedings of the California Academy of Sciences, San Francisco 2:118–123.

Cope, E.D. 1860. Notes and descriptions of foreign reptiles. Proceedings of the Academy of Natural Sciences, Philadelphia 11:294–297.

Cope, E.D. 1864. On the limits and relations of the Raniformes. Proceedings of the Academy of Natural Sciences, Philadelphia 16:181–183.

Cope, E.D. 1865. Third contribution to the herpetology of tropical America. Proceedings of the Academy of Natural Sciences, Philadelphia 17:185–198.

Cope, E.D. 1868a. An examination of the Reptilia and Batrachia obtained by the Orton expedition to Equador and the upper Amazon, with notes on other species. Proceedings of the Academy of Natural Sciences, Philadelphia 20:96–140.

Cope, E.D. 1868b. On the origin of genera. Proceedings of the Academy of Natural Sciences, Philadelphia 20:242–300.

Cope, E.D. 1870a. Seventh contribution to the herpetology of tropical America. Proceedings of the American Philosophical Society 11(1869)[1870]:147–169.

Cope, E.D. 1870b. Synopsis of the extinct Batrachia, Reptilia and Aves of North America. Transactions of the American Philosophical Society, new series 14(1869)[1870]:1–252.

Cope, E.D. 1871. On the homologies of some of the cranial bones of the Reptilia, and on the systematic arrangement of the class. Proceedings of the American Association for the Advancement of Science 1870(19)[1871]:194–247.

Cope, E.D. 1872. Synopsis of the species of the Chelydrinae. Proceedings of the Academy of Natural Sciences, Philadelphia 1872:22–29.

Cope, E.D. 1876. On the Batrachia and Reptilia of Costa Rica. In: Cope, E.D. (Ed.). On the Batrachia and Reptilia of Costa Rica with notes on the Herpetology and Ichthyology of Nicaragua and Peru. Journal of the Academy of Natural Sciences, Philadelphia (2)8(4)1875[1876]:93–154.

Cope, E.D. 1878. Description of new Vertebrata from the upper Tertiary formations of the West. Proceedings of the American Philosophical Society 17:219–231.

Cope, E.D. 1885. A contribution to the herpetology of Mexico. Proceedings of the American Philosophical Society 22:379–404.

Cope, E.D. 1887. Catalogue of Batrachia and Reptilia of Central America and Mexico. Bulletin of the U.S. National Museum 32:1–98.

Cope, E.D. 1892. A contribution to the knowledge of the fauna of the Blanco beds of Texas. Proceedings of the Academy of Natural Sciences, Philadelphia 1892:226–229.

Cope, E.D. 1895. Taylor on box turtles. American Naturalist 29:756–757.

Cope, E.D. 1899. Vertebrate remains from Port Kennedy bone deposit. Journal of the Academy of Natural Sciences, Philadelphia (2)11:193–267.

Cornalia, E. 1849. Vertebratorum Synopsis in Museo Mediolanense Extantium quae per novam orbem Cajetanus Osculati collegit annis 1846-47-1848 speciebus novis vel minus cognitis adjectis nec non descriptionibus atque iconibus illustratis. Modoetiae: Typographia Corbetta, 15 pp.

Coutinho, J.M. da Silva. 1868. Sur les tortues de l'Amazone. Bulletin de la Société Impériale Zoologique d'Acclimatation (2)5:147–166.

Cowan, C.F. 1969. Notes on Griffith's Animal Kingdom of Cuvier (1824-1835). Journal of the Society of Bibliography of Natural History 5:137–140.

Cragin, F.W. 1894. Herpetological notes from Kansas and Texas. Colorado College Studies 5:37–39.

Crawford, N.G., Faircloth, B.C., McCormack, J.E., Brumfield, R.T., Winker, K., and Glenn, T.C. 2012. More than 1000 ultraconserved elements provide evidence that turtles are the sister group of archosaurs. Biology Letters 8(5):783–786.

Crawford, N.G., Parham, J.F., Sellas, A.B., Faircloth, B.C., Glenn, T.C., Papenfuss, T.J., Henderson, J.B., Hansen, M.H., and Simison, W.B. 2015. A phylogenomic analysis of turtles. Molecular Phylogenetics and Evolution 83:250–257.

Crumly, C.R. 1994. Phylogenetic systematics of North American tortoises (genus *Gopherus*): evidence of their classification. In: Bury, R.B. and Germano, D.J. (Eds.). Biology of North American Tortoises. U.S. Fish and Wildlife Research 12:7–32.

Cunha, O.R. da. 1970. Uma nova subespécie de quelônio, *Kinosternon scorpioides carajasensis* da Serra dos Carajás, Pará. Boletim do Museo Paraense Emílio Goeldi 73:1–11.

Cuvier, G.L.C.F.D. 1816 ["1817"]. Le Règne Animal Distribué d'après son Organisation, pour Servir de Base à l'Histoire Naturelle des Animaux et d'Introduction à l'Anatomie Comparée. [Edition 1]. Tome II. Contenant les Reptiles, les Poissons, les Mollusques et les Annélides. Paris: Deterville, 532 pp.

Cuvier, G.L.C.F.D. 1825 ["1824"]. Recherches sur les Ossemens Fossiles, où l'on rétablit les caractères de plusieurs animaux dont les révolutions du globe ont détruit les espèces. Nouvelle édition, entièrement refondue, et considérablement augmentée. Tome cinquième, IIe. partie, contenant les ossemens de reptiles

et le résumé général. Paris: Dufour et d'Ocagne, 547 pp.

Cuvier, G.L.C.F.D. 1829. Le Règne Animal Distribué d'après son Organisation, pour Servir de Base à l'Histoire Naturelle des Animaux et d'Introduction à l'Anatomie Comparée. Nouvelle Édition, Revue et Augmentée [Edition 2]. Tome II. Paris: Deterville, 406 pp.

Daniels, S.R., Hofmeyr, M.D., Henen, B.T., and Crandall, K.A. 2007. Living with the genetic signature of Miocene induced change: evidence from the phylogeographic structure of the endemic angulate tortoise *Chersina angulata*. Molecular Phylogenetics and Evolution 45:915–926.

Daniels, S.R., Hofmeyr, M.D., Henen, B.T., and Baard, E.H.W. 2010. Systematics and phylogeography of a threatened tortoise, the speckled padloper. Animal Conservation 13:237–246.

Danilov, I.G., Cherepanov, G.O., and Vitek, N.S. 2013. Chelonological studies of L.I. Khosatzky with his annotated bibliography on turtles. Proceedings of the Zoological Institute Russian Academy of Sciences 317(4):382–425.

Dao, V.T. 1957. [Rapport sur les recherches zoologiques dans la région de Vinh-Linh (Province de Quang-Tri, centre Vietnam)]. Zoologicheskii Zhurnal 36(8):1209–1216. [in Russian]

Darevsky, I.S. and Mertens, R. 1973. Zwei unveröffentlichte Schildkrötentafeln von Pallas. Salamandra 9(3/4):99–102.

Das, I. 2001. Die Schildkröten des Indischen Subkontinents. Frankfurt am Main: Chimaira, pp. 181.

Das, I., Dattagupta, B., and Gayen, N.C. 1998. History and catalogue of reptile types in the collection of the Zoological Survey of India. Journal of South Asian Natural History 3:121–172.

Daudin, F.M. 1801. Histoire Naturelle, Générale et Particulière des Reptiles. Tome Second. Paris: Imprimerie F. Dufart, 432 pp.

Daudin, F.M. 1802. Histoire Naturelle, Générale et Particulière des Reptiles. Tome Quatrième. Paris: Imprimerie F. Dufart, 397 pp.

David, A. 1875. Journal de mon Troisième Voyage d'Exploration dans l'Empire Chinois. Tome Second. Paris: Hachette, 348 pp.

David, P. 1994. Liste des reptiles actuels du monde. I. Chelonii. Dumerilia 1:7–127.

Davy, C.M. and Murphy, R.W. 2014. Conservation genetics of the endangered Spotted Turtle (*Clemmys guttata*) illustrate the risks of "bottleneck tests". Canadian Journal of Zoology 92:149–162.

Davy, C.M., Bernardo, P.H., and Murphy, R.W. 2014. A Bayesian approach to conservation genetics of Blanding's turtle (*Emys blandingii*) in Ontario, Canada. Conservation Genetics 15:319–330.

de la Fuente, M., de Lapparent de Broin, F., and Bianco, T.M. 2001. The oldest and first nearly complete skeleton of a chelid, of the *Hydromedusa* sub-group (Chelidae, Pleurodira), from the Upper Cretaceous of Patagonia. Bulletin de la Société Géologique de France 172(2):237–244.

De Vis, C.W. 1897. The extinct freshwater turtles of Queensland. Annals of the Queensland Museum 3:1–7.

deBraga, M. and Rieppel, O. 1997. Reptile phylogeny and the interrelationships of turtles. Zoological Journal of the Linnean Society 120:281–354.

del Barco, D.M. and Larriera, A. 1993. Sobre la validez de las subespecies de *Trachemys dorbignyi* y su distribución geographica. Revista Asociacion Ciencias Naturales Litoral 22(2)(1991):11–17.

Deraniyagala, P.E.P. 1933. The loggerhead turtles (Carettidae) of Ceylon. Ceylon Journal of Science 18B:59–70.

Deraniyagala, P.E.P. 1934. Relationships among loggerhead turtles (Carettidae). Ceylon Journal of Science 18B:207–208.

Deraniyagala, P.E.P. 1939. The Tetrapod Reptiles of Ceylon. Volume 1. Testudinates and Crocodilians. London: Dulau Co., 412 pp.

Deraniyagala, P.E.P. 1948. Some scientific results of two visits to Africa. Spolia Zeylanica 25(2):1–42.

Deraniyagala, P.E.P. 1952. The loggerhead turtles (Carettinae) of Europe. Herpetologica 8:57–58.

Deraniyagala, P.E.P. 1953. A Colored Atlas of Some Vertebrates from Ceylon. Vol. 2. Tetrapod Reptilia. Ceylon Natural History Museum Publication, 101 pp.

DeSola, C.R. 1930. The Liebespiel of *Testudo vandenburghi*, a new name for the mid-Albemarle Island Galapagos tortoise. Copeia 1930(3):79–80.

Devaux, B. 2003. Namibie, Afrique du Sud; des tortues d'exception! La Tortue 63/64:40–56.

Devaux, B. 2007. La tortue géante de Seychelles, une survivante: *Dipsochelys elephantina* (Duméril et Bibron, 1835). Chelonii 5:1–120.

Diesing, C.M. 1839. Neue Gattungen von Binnenwurmern nebst einem Nachtrage zur Monographie der Amphistomen. Annalen des Wiener Museums der Naturgeschichte 2:219–242.

Diesmos, A.C., Parham, J.F., Stuart, B.L., and Brown, R. 2005. The phylogenetic position of the recently rediscovered Philippine forest turtle (Bataguridae: *Heosemys leytensis*). Proceedings of the California Academy of Sciences 56:31–41.

Dollo, L. 1886. Première note sur les chéloniens du Bruxellien (Eocène moyen) de la Belgique. Bulletin du Musée Royal d'Histoire Naturelle de Belgique 4:75–96.

Donndorff, J.A. 1798. Zoologische Beyträge zur XIII. Ausgabe des Linneischen Natursystems. Dritter Band. Amphibien und Fische. Leipzig: Weidmannschen Buchhandlung, 980 pp.

Donoso-Barros, R. 1965. Distribución de las tortugas en Sudamerica. Publicaciónes Ocasionales del Museo Nacional de Historia Natural, Santiago 8:1–14.

Dornburg, A., Beaulieu, J.M., Oliver, J.C., and Near, T.J. 2011. Integrating fossil preservation biases in the selection of calibrations for molecular divergence time estimation. Systematic Biology 60:519–527.

Drabeck, D.H., Chatfield, M.W.H., and Richard-Zawacki, C.L. 2014. The status of Louisiana's Diamondback Terrapin (*Malaclemys terrapin*) populations in the wake of the Deepwater Horizon oil spill: insights from population genetic and contaminant analysis. Journal of Herpetology 48:125–136.

Dubois, A. and Bour, R. 2010a. The nomenclatural status of the nomina of amphibians and reptiles created by Garsault (1764), with a parsimonious solution to an old nomenclatural problem regarding the genus *Bufo* (Amphibia, Anura), comments on the taxonomy of this genus, and comments on some nomina created by Laurenti (1768). Zootaxa 2447:1–52.

Dubois, A. and Bour, R. 2010b. The distinction between family-series and class-series nomina in zoological nomenclature, with emphasis on the nomina created by Batsch (1788, 1789) and on the higher nomenclature of turtles. Bonn Zoological Bulletin 57(2):149–171.

Duchene, S., Frey, A., Alfaro-Núñez, A., Dutton, P.H., and Gilbert, M.T.P. 2012. Marine turtle mitogenome phylogenetics and evolution. Molecular Phylogenetics and Evolution 65:241–250.

Duerden, J.E. 1906. South African tortoises of the genus *Homopus*, with description of a new species. Records of the Albany Museum 1:405–411.

Dugès, A.A.D. 1888. Erpetología del Valle de México. La Naturaleza (2)1:97–146.

Duméril, A.H.A. 1852. Description des reptiles nouveaux ou imparfaitement connus de la collection du Muséum d'Histoire Naturelle et remarques sur la classification et les caractères des reptiles. Premiere Mémoire. Ordre des chéloniens et premières familles de l'ordre des sauriens (crocodiliens et caméléoniens). Archives du Muséum d'Histoire Naturelle, Paris 6:209–264.

Duméril, A.H.A. 1855. Notice historique sur la ménagerie des reptiles du Muséum d'Histoire Naturelle et observations qui y ont été recueillies. Archives du Muséum d'Histoire Naturelle, Paris 7:193–320.

Duméril, A.H.A. 1856. Note sur les reptiles du Gabon. Revue et Magasin de Zoologie Pure et Appliquée, Paris (2)8:369–377, 417–424.

Duméril, A.H.A. 1861a. Reptiles et poissons de l'Afrique occidentale. Étude précédée de considérations générales sur leur distribution géographique. Archives du Muséum d'Histoire Naturelle, Paris 10:138–268.

Duméril, A.H.A. 1861b. Catalogue des poissons, reptiles de la collection du Muséum d'Histoire Naturelle de Paris. Archives du Muséum d'Histoire Naturelle, Paris 10:429–460.

Duméril, A.H.A. and Bocourt, M.-F. 1870. Observations sur les reptiles et les batraciens de la Région Centrale de l'Amérique. Classe des reptiles. Ordre des chéloniens. In: Duméril, A.H.A., Bocourt, M.-F., and Mocquard, F. Mission Scientifique au Mexique et dans l'Amérique Centrale. Recherches Zoologiques. Troisième Partie, Première Section. Etude sur les Reptiles. Paris: Imprimerie Impériale, pp. 1–32.

Duméril, A.M.C. 1805 ["1806"]. Zoologie Analytique, ou Méthode Naturelle de Classification des Animaux. Paris: Perronneau, 344 pp. [Published Nov 1805].

Duméril, A.M.C. and Bibron, G. 1834. Erpétologie Générale ou Histoire Naturelle Complète des Reptiles. Tome Premier. Paris: Roret, 439 pp.

Duméril, A.M.C. and Bibron, G. 1835. Erpétologie Générale ou Histoire Naturelle Complète des Reptiles. Tome Second. Paris: Roret, 680 pp.

Duméril, A.M.C. and Bibron, G. 1851. [*Emys areolata, Emys berardii, Cinosternon leucostomum, Cinosternon cruentatum*]. In: Duméril, A.M.C. and Duméril, A.H.A. Catalogue Méthodique de la Collection des Reptiles (Muséum d'Histoire Naturelle de Paris). Paris: Gide and Baudry, 224 pp.

Duméril, A.M.C. and Duméril, A.H.A. 1851. Catalogue Méthodique de la Collection des Reptiles (Muséum d'Histoire Naturelle de Paris). Paris: Gide and Baudry, 224 pp.

Dunn, E.R. 1917. Reptile and amphibian collections from the North Carolina mountains, with especial reference to salamanders. Bulletin of the American

Museum of Natural History 37:593–634.

Dunn, E.R. 1930. A new *Geoemyda* from Costa Rica. Proceedings of the New England Zoological Club 12:31–34.

Dunn, E.R. 1920. Note on *Melanemys* Shufeldt. Copeia 1920:7–8.

Dunn, E.R. and Stuart, L.C. 1951. Comments on some recent restrictions of type-localities of certain South and Central American amphibians and reptiles. Copeia 1951(1):55–61.

Dürigen, B. 1897. Deutschlands Amphibien und Reptilien. Magdeburg: Creutz, 676 pp.

Dutton, P.H., Roden, S.E., Stewart, K.R., LaCasella, E., Tiwari, M., Formia, A., Thomé, J.C., Livingstone, S.R., Eckert, S., Chacon-Chaverri, D., Rivalan, P., and Allman, P. 2013. Population stock structure of leatherback turtles (*Dermochelys coriacea*) in the Atlantic revealed using mtDNAand microsatellite markers. Conservation Genetics 14:625–636.

Echelle, A.A., Hackler, J.C., Lack, J.B., Ballard, S.R., Roman, J., Fox, S.F., Leslie, D.M., Jr., and Van Den Bussche, R.A. 2009 [2010]. Conservation genetics of the alligator snapping turtle: cytonuclear evidence of range-wide bottleneck effects and unusually pronounced geographic structure. Conservation Genetics 11(4):1375–1387.

Echternacht, A.C., Burton, F.J., and Blumenthal, J.M. 2011. The amphibians and reptiles of the Cayman Islands: conservation issues in the face of invasion. In: Hailey, A., Wilson, B.S., and Horrocks, J.A. (Eds.). Conservation of Caribbean Island Herpetofaunas. Volume 2. Regional Accounts of the West Indies. Brill, pp. 129–147.

Edwards, D.L., Garrick, R.C., Tapia, W., and Caccone, A. 2014. Cryptic structure and niche divergence within threatened Galapagos giant tortoises from southern Isabela Island. Conservation Genetics 15:1357–1369.

Edwards, T., Berry, K.H., Inman, R.D., Esque, T.C., Nussear, K.E., Jones, C.A., and Culver, M. 2015a. Testing taxon tenacity of tortoises: evidence for a geographical selection gradient at a secondary contact zone. Ecology and Evolution 5:2095–2114.

Edwards, T., Tollis, M., Hsieh, P., Gutenkunst, R.N., Liu, Z., Kusimi, K., Culver, M., and Murphy, R.W. 2015b. Assessing models of speciation under different biogeographic scenarios; an empirical study using multi-locus and RNA-seq analyses. Ecology and Evolution; doi: 10.1002/ece3.1865.

Edwards, T., Karl, A.E., Vaughn, M., Rosen, P.C., Melendez Torres, C., and Murphy, R.W. 2016. The desert tortoise trichotomy: Mexico hosts a third, new sister species of tortoise in the *Gopherus morafkai – G. agassizii* group. ZooKeys 562:131–158.

Ehret, D.J., Bourque, J.R., and Hulbert, R.C., Jr. 2013. Case 3628. *Terrapene putnami* Hay, 1906 (Testudines, Emydidae): replacement of the holotype by designation of a neotype. Bulletin of Zoological Nomenclature 70(3):193–198.

Eichwald, C.E. von. 1831. Zoologia Specialis quam Expositis Animalibus, tum Fossilibus Potissimum Rossiae in Universum, et Poloniae in Specie, in usum Lectionum Publicarum in Universitate Caesarea Vilnensi. Pars Posterior. Vilna: Josephi Zawadzki, 404 pp.

Eichwald, C.E. von. 1840. Fauna Caspio-Caucasia nonnullis observationibus novis. Fasciculus I. Petropoli (St. Petersburg): Litteris Typhographiae Diarii, 233 pp.

Ellis, R.J. and Georges, A. 2015. An annotated type catalogue of the turtles (Testudines: Pleurodira: Chelidae) in the collection of the Western Australian Museum. Records of the Western Australian Museum 30(1):52–60.

Emerson, B.C. and Faria, C.M.A. 2014. Fission or fusion in island taxa – serendipity, or something to be expected? Molecular Ecology 23:5132–5134.

Engstrom, T.N., Shaffer, H.B., and McCord, W.P. 2004. Multiple data sets, high homoplasy, and the phylogeny of softshell turtles (Testudines: Trionychidae). Systematic Biology 53:693–710.

Ennen, J.R., Lovich, J.E., Kreiser, B.R., Selman, W., and Qualls, C.P. 2010. Genetic and morphological variation between populations of the Pascagoula Map Turtle (*Graptemys gibbonsi*) in the Pearl and Pascagoula rivers with description of a new species. Chelonian Conservation and Biology 9(1):98–113.

Ennen, J.R., Kreiser, B.R., Qualls, C.P., Gaillard, D., Aresco, M., Birkhead, R., Tuberville, T., McCoy, E., Mushinsky, H., Henges, T., and Schrey, A. 2012. Mitochondrial DNA assessment of the phylogeography of the gopher tortoises. Journal of Fish and Wildlife Management 3:110–122.

Ennen, J.R., Kalis, M.E., Patterson, A.L., Kreiser, B.R., Lovich, J.E., Godwin, J., and Qualls, C.P. 2014. Clinal variation or validation of a subspecies? A case study of the *Graptemys nigrinoda* complex (Testudines: Emydidae). Biological Journal of the Linnean Society 111:810–822.

Ennen, J.R., Godwin, J., Lovich, J.E., Kreiser, B.R., Folt, B., and Hazzard, S. 2016. Interdrainage morphological and genetic differentiation in the Escambia Map Turtle, *Graptemys ernsti*. Herpetological Conservation and Biology 11:122–131.

Ernst, C.H. 1967. Intergradation between the painted turtles *Chrysemys picta picta* and *Chrysemys picta dorsalis*. Copeia 1967(1):131–136.

Ernst, C.H. 1978. A revision of the neotropical turtle genus *Callopsis* (Testudines: Emydidae: Batagurinae). Herpetologica 34(2):113–134.

Ernst, C.H. 1984. Geographic variation in the neotropical turtle, *Platemys platycephala*. Journal of Herpetology 17(4)(1983)[1984]:345–355.

Ernst, C.H. 1988. *Cuora mccordi*, a new Chinese box turtle from Guangxi Province. Proceedings of the Biological Society of Washington 101:466–470.

Ernst, C.H. 1990. *Pseudemys gorzugi*. Catalogue of American Amphibians and Reptiles 461:1–2.

Ernst, C.H. and Barbour, R.W. 1989. Turtles of the World. Washington, DC: Smithsonian Institution Press, 313 pp.

Ernst, C.H. and Hartsell, T.D. 2000. An earlier name for the mangrove diamondback terrapin, *Malaclemys terrapin rhizophorarum* (Reptilia: Testudines: Emydidae). Proceedings of the Biological Society of Washington 113:887–889.

Ernst, C.H. and Laemmerzahl, A. 2002. Geographic variation in the Asian big-headed turtle *Platysternon megacephalum* (Reptilia: Testudines: Platysternidae). Proceedings of the Biological Society of Washington 115:18–24.

Ernst, C.H. and Lovich, J.E. 1990. A new species of *Cuora* (Reptilia: Testudines: Emydidae) from the Ryukyu Islands. Proceedings of the Biological Society of Washington 103:26–34.

Ernst, C.H. and Lovich, J.E. 2009. Turtles of the United States and Canada. Second Edition. Baltimore: Johns Hopkins University Press, 827 pp.

Ernst, C.H. and McCord, W.P. 1987. Two new turtles from southeast Asia. Proceedings of the Biological Society of Washington 100:624–628.

Ernst, C.H., Laemmerzahl, A.F., and Creque, T.R. 2006. A review of morphological and pattern variation in the painted turtle, *Chrysemys picta*, in Missouri, USA, with an alternate hypothesis of the origin of *Chrysemys picta marginata*. Herpetological Bulletin 95:6–15.

Ernst, C.H., Laemmerzahl, A.F., and Lovich, J.E. 2008. A morphological review of the *Cuora flavomarginata* complex (Testudines: Geoemydidae). Proceedings of the Biological Society of Washington 121:391–397.

Ernst, C.H., Laemmerzahl, A.F., and Lovich, J.E. 2011. Does the "*kamaroma*"-plastron pattern morph occur in both Philippine subspecies of the turtle *Cuora amboinensis*? Proceedings of the Biological Society of Washington 124(4):259–269.

Ernst, C.H., Laemmerzahl, A.F., and Lovich, J.E. 2016. A morphological review of subspecies of the Asian box turtle, *Cuora amboinensis* (Testudines, Geomydidae). Proceedings of the Biological Society of Washington 129:144–156.

Eschscholtz, J.F. von. 1829a [previously cited as 1829b]. Beschreibungen dreier neuer Meerschildkröten. Die Quatember, Mitau [Jelgava, Latvia] 1(1):10–18. [published Jan 1829].

Eschscholtz, J.F. von. 1829b [previously cited as 1829a]. Zoologischer Atlas, enthaltend Abbildungen und Beschreibungen neuer Thierarten, während des Flottcapitains von Kotzebue zweiter Reise um die Welt, auf der Russisch–Kaiserlichen Kriegsschlupp Predpriaetië in den Jahren 1823–1826. Berlin: G. Reimer, Erstes Heft, 17 pp. + 15 pl. [published after May 1829].

Ewert, M.A., Etchberger, C.R., and Nelson, C.E. 2004. Turtle sex-determining modes and TSD patterns, and some TSD pattern correlates. In: Valenzuela, N. and Lance, V.A. (Eds.). Temperature–Dependent Sex Determination in Vertebrates. Washington, DC: Smithsonian Books, pp. 21–32.

Fan, T.-H. 1931. Preliminary report of reptiles from Yaoshan, Kwangsi, China. Bulletin of the Department of Biology, College of Science, Sun Yatsen University 11:1–154.

Fang, P.-W. 1934. Notes on some chelonians of China. Sinensia 4(7):145–200.

Farkas, B. 1992. Wiederentdeckung eines Exemplars von *Rafetus swinhoei* (Gray, 1873) im Naturhistorischen Museum Wien. Salamandra 28(2):145–152.

Farkas, B. and Webb, R.G. 2003. *Rafetus leloii* Ha Dinh Duc, 2000 – an invalid species of softshell turtle from Hoan Kiem Lake, Hanoi, Vietnam (Reptilia, Testudines, Trionychidae). Zoologische Abhandlungen (Dresden) 53:107–112.

Farkas, B., Le, M.D., and Nguyen, T.Q. 2011. *Rafetus vietnamensis* Le, Le, Tran, Phan, Phan, Tran, Pham, Nguyen, Nong, Phan, Dinh, Truong, and Ha, 2010 — another invalid name for an invalid species of softshell turtle (Reptilia: Testudines: Trionychidae). Russian Journal of Herpetology 18(1):65–72.

Feldman, C.R. and Parham, J.F. 2002. A molecular phylogeny for emydine turtles: taxonomic revision and the evolution of shell kinesis. Molecular Phylogenetics and Evolution 22:388–398.

Feldman, C.R. and Parham, J.F. 2004. Molecular systematics of Old World stripe-necked turtles (Testudines: *Mauremys*). Asiatic Herpetological Research 10:28–37.

Fermin, P. 1765. Histoire Naturelle de la Hollande Equinoxiale, ou Description des Animaux, Plantes, Fruits, et Autres Curiosités Naturelles, qui se Trouvent dans la Colonie de Surinam. Amsterdam: M. Magerus, 240 pp.

Fernández, M.S. 1988. Las Testudinidae (Reptilia: Chelonii) argentinas: osteología, sistemática y distribución geográfica. Doctoral Thesis, Universidad Nacional de La Plata.

Ferreira, G.S., Rincón, A.S., Solórzano, A., and Langer, M.C. 2016. Review of the fossil matamata turtles: earliest well-dated record and hypotheses on the origin of their present geographical distribution. The Science of Nature 103:28:1–12.

Ferreira, J.B. 1897. Sobre alguns reptis ultimamente enviados a seccao zoologica do Museu de Lisboa. Jornal de Sciencias Mathematicas Physicas e Naturaes, Lisboa (2)5(18):111–116.

Fielder, D. 2013. Ancient phenotypes revealed through present day species—a morphological analysis of Australia's Saw-Shelled Turtles including the Threatened *Myuchelys bellii* (Testudines: Chelidae). Chelonian Conservation and Biology 12(1):101–111.

Fielder, D., Vernes, K., Alacs, E., and Georges, A. 2012. Mitochondrial variation among Australian freshwater turtles (genus *Myuchelys*), with special reference to the Endangered *M. bellii*. Endangered Species Research 17:63–71.

Fischer, J. von. 1872. *Staurotypus marmoratus* n. sp. Archiv für Naturgeschichte 38:265–272.

Fitzinger, L.J. 1826. Neue Classification der Reptilien, nach ihren Natürlichen Verwandtschaften nebst einer Verwandtschafts–Tafel und einem Verzeichnisse der Reptilien–Sammlung des k.k. Zoologischen Museum zu Wien. Wien: J.G. Hübner Verlagen, 66 pp.

Fitzinger, L.J. 1835. Entwurf einer systematischen Anordnung der Schildkröten nach den Grundsätzen der natürlichen Methode. Annalen des Wiener Museums der Naturgeschichte 1:105–128.

Fitzinger, L.J. 1843. Systema Reptilium. Fasciculus Primus: Amblyglossae. Vindobona [Vienna]: Braumüller und Seidel, 106 pp.

Fitzinger, L.J. 1853. Versuch einer Geschichte der Menagerien des Österreichisch-Kaiserlichen Hofes. Wien: Kaiserlich-Königliche Hof- und Staatsdruckerei in Commission bei W. Braumüller, 198 pp.

FitzSimons, V.F.M. 1932. Preliminary descriptions of new forms of South African Reptilia and Amphibia, from the Vernay-Lang Kalahari Expedition, 1930. Annals of the Transvaal Museum 15:35–40.

FitzSimons, V.F.M. 1938. Transvaal Museum Expedition to South-West Africa and Little Namaqualand, May to August 1937. Reptiles and Amphibians. Annals of the Transvaal Museum 19:153–209.

Fleming, J. 1822. The Philosophy of Zoology; or a General View of the Structure, Functions, and Classification of Animals. Vol. II. Edinburgh: Archibald Constable and Co., 618 pp.

Fleming, J. 1828. A History of British Animals. Edinburgh: Archibald Constable and Co., 568 pp.

Flores-Villela, O.A. 1993. Herpetofauna Mexicana: lista anotada de las especies de anfibios y reptiles de Mexico, cambios taxonomicos recientes, y nuevas especies. Carnegie Museum of Natural History Special Publications 17:1–73.

Flores-Villela, O., Adler, K., and Eimermacher, T.G. 2016. Identity of three new sea turtles named by J. Friedrich Eschscholtz. Chelonian Conservation and Biology 15(1):157–162.

Folkerts, G.W. and Mount, R.H. 1969. A new subspecies of the turtle *Graptemys nigrinoda* Cagle. Copeia 1969(4):677–682.

Folt, B. and Guyer, G. 2015. Evaluating recent taxonomic changes for alligator snapping turtles (Testudines: Chelydridae). Zootaxa 3947(3):447–450.

Fong, J.J. and Chen, T.H. 2010. DNA evidence for the hybridization of wild turtles in Taiwan: possible genetic pollution from trade animals. Conservation Genetics 11:2061–2066.

Fong, J.J., Parham, J.F., and Fu, J. 2002. A reassessment of the distribution of *Cuora flavomarginata* Gray 1863 on mainland China. Russian Journal of Herpetology 9:9–14.

Forskål, P. [Forsskål, P.]. 1775. Descriptiones Animalium: Avium, Amphibiorum, Piscium, Insectorum, Vermium; quae in Itinere Orientali Observavit. Post mortem auctoris edidit Carsten Niebuhr. Hauniae [Copenhagen]: Mölleri, 164 pp.

Fowler, H.W. 1906. Some cold–blooded vertebrates of the Florida Keys. Proceedings of the Academy of Natural Sciences, Philadelphia 58:77–113.

França, M.A.G. and Langer, M.C. 2006. Phylogenetic relationships of the Bauru Group turtles (Late Cretaceous of south-central Brazil). Revista Brasileira de Paleontologia 9(3):365–373.

Franz, R. 2014. The fossil record of North American tortoises. In: Rostal, D.C., McCoy, E.D., and Mushinsky, H.R. (Eds.). Biology and Conservation of North American Tortoises. Baltimore, Maryland: Johns Hopkins University Press, pp. 13–24.

Frazier, J. 2006. A neotype for the Aldabra tortoise, *Testudo gigantea* Schweigger, 1812. Herpetological Review 37:275–280.

Frazier, J. 2008. Case 3463: *Testudo gigantea* Schweigger, 1812 (Reptilia, Testudines): proposed conservation of usage. Bulletin of Zoological Nomenclature 65(2):82.

Frazier, J. 2009. Case 3463: *Testudo gigantea* Schweigger, 1812 (currently *Geochelone (Aldabrachelys) gigantea*; Reptilia, Testudines): proposed conservation of usage of the specific name by maintenance of a designated neotype, and suppression of *Testudo dussumieri* Gray, 1831 (currently *Dipsochelys dussumieri*). Bulletin of Zoological Nomenclature 66(1):34–50.

Freedberg, S. and Myers, E.M. 2012. Cytonuclear equilibrium following interspecific introgression in a turtle lacking sex chromosomes. Biological Journal of the Linnean Society 106:405–417.

Freiberg, M.A. 1936. Una nueva tortuga del norte Argentino. Physis 12:169–171.

Freiberg, M.A. 1945. Una nueva especie de tortuga del genero *Platemys* Wagler. Physis 20:19–23.

Freiberg, M.A. 1969. Una nueva subespecie de *Pseudemys dorbignyi* (Duméril et Bibron) (Reptilia, Chelonia, Emydidae). Physis 28:299–314.

Freiberg, M.A. 1973. Dos nuevas tortugas terrestres de Argentina. Boletín de la Sociedad de Biología de Concepción 46:81–93.

Fretey, J. and Bour, R. 1980. Redecouverte du type de *Dermochelys coriacea* (Vandelli) (Testudinata, Dermochelyidae). Bollettino di Zoologia 47:193–205.

Fritts, T.H. 1983. Morphometrics of Galapagos tortoises: evolutionary implications. In: Bowman, R.I. and Leviton, A.E. (Eds.). Patterns of Evolution in Galapagos Organisms. San Francisco: American Association for the Advancement of Science, pp. 107–122.

Fritz, U. 1989. Zur innerartlichen Variabilität von *Emys orbicularis* (Linnaeus, 1758). 1. Eine neue Unterart der Europäischen Sumpfschildkröte aus Kleinasien *Emys orbicularis luteofusca* subsp. nov. Salamandra 25:143–168.

Fritz, U. 1992. Zur innerartlichen Variabilität von *Emys orbicularis* (Linnaeus, 1758). 2. Variabilität in Osteuropa und Redefinition von *Emys orbicularis orbicularis* (Linnaeus, 1758) und *E. o. hellenica* (Valenciennes, 1832) (Reptilia, Testudines: Emydidae). Zoologische Abhandlungen, Staatliches Museum für Tierkunde Dresden 47:37–77.

Fritz, U. 1993. Zur innerartlichen Variabilität von *Emys orbicularis* (Linnaeus, 1758). 3. Zwei neue Unterarten von der Iberischen Halbinsel und aus Nordafrika, *Emys orbicularis fritzjuergenobsti* subsp. nov. und *E. o. occidentalis* subsp. nov. (Reptilia, Testudines: Emydidae). Zoologische Abhandlungen, Staatliches Museum für Tierkunde Dresden 47:131–155.

Fritz, U. 1994. Zur innerartlichen Variabilität von *Emys orbicularis* (Linnaeus, 1758). 4. Variabilität und Zoogeographie im pontokaspischen Gebiet mit Beschreibung von drei neuen Unterarten (Reptilia: Testudines: Emydidae). Zoologische Abhandlungen, Staatliches Museum für Tierkunde Dresden 48:53–93.

Fritz, U. 1995. Zur innerartlichen Variabilität von *Emys orbicularis* (Linnaeus, 1758). 5a. Taxonomie in Mittel–Westeuropa, auf Korsika, Sardinien, der Apenninen–Halbinsel und Sizilien und Unterartengrupppen von *E. orbicularis* (Reptilia: Testudines: Emydidae). Zoologische Abhandlungen, Staatliches Museum für Tierkunde Dresden 48:185–242.

Fritz, U. 1998. Introduction to zoogeography and subspecific differentiation in *Emys orbicularis* (Linnaeus, 1758). In: Fritz, U., Joger, U., Podloucky, R., and Servan, J. (Eds.). Proceedings of the EMYS Symposium Dresden 96. Mertensiella 10:1–27.

Fritz, U. and Bininda-Emonds, O.R.P. 2007. When genes meet nomenclature: tortoise phylogeny and the shifting generic concepts of *Testudo* and *Geochelone*. Zoology 110:298–307.

Fritz, U. and Havaš, P. 2006. Checklist of Chelonians of the World, at the request of the CITES Nomenclature Committee and the German Agency for Nature Conservation. Dresden: German Federal Ministry of Environment, Nature Conservation and Nuclear Safety and Museum of Zoology, 230 pp.

Fritz, U. and Havaš, P. 2007. Checklist of chelonians of the world. Vertebrate Zoology 57:149–368.

Fritz, U. and Havaš, P. 2013. Order Testudines: 2013 update. Zootaxa 3703:12–14.

Fritz, U. and Havaš, P. 2014. On the reclassification of Box Turtles (*Terrapene*):

a response to Martin et al. (2014). Zootaxa 3835:295–298.

Fritz, U. and Kraus, O. 2008. Comments on "*Chersine* Merrem, 1820 and *Chersina* Gray, 1831: a nomenclatural survey by Bour and Ohler, Zootaxa, 1752: 66–68". Zootaxa 1893:65–68.

Fritz, U. and Obst, F.J. 1996. Zur Kenntnis der Celebes-Erdschildkröte, *Heosemys yuwonoi* (McCord, Iverson and Boeadi, 1995). Herpetofauna 18(102):27–34.

Fritz, U. and Pauler, I. 1992. *Phrynops chacoensis* spec. nov. (Reptilia, Chelidae), eine neue Krötenkopfschildkröte. Mitteilung des Zoologischen Museums Berlin 68:299–307.

Fritz, U. and Pauler, I. 1999. *Phrynops chacoensis* Fritz & Pauler, 1992, ein Juniorsynonym von *Platemys macrocephala* Rhodin, Mittermeier & McMorris, 1984. Salamandra 35:53–56.

Fritz, U. and Wischuf, T. 1997. Zur Systematik westasiatisch–südosteuropäischer Bachschildkröten (Gattung *Mauremys*) (Reptilia: Testudines: Bataguridae). Zoologische Abhandlungen, Staatliches Museum für Tierkunde Dresden 49:223–260.

Fritz, U., Obst, F.-J., and Günther, R. 1994. Kritischer Typen-Katalog der Schildkrötensammlung (Reptilia: Testudines) des Zoologischen Museums Berlin. Mitteilung des Zoologischen Museums Berlin 70:157–175.

Fritz, U., Keller, C., and Budde, M. 1996. Eine neue Unterart der Europäischen Sumpfschildkröte aus Südwestspanien, *Emys orbicularis hispanica* subsp. nov. Salamandra 32:129–152.

Fritz, U., Gaulke, M., and Lehr, E. 1997. Revision der südostasiatischen Dornschildkröten-Gattung *Cyclemys* Bell, 1834, mit Beschreibung einer neuen Art. Salamandra 33:183–212.

Fritz, U., Andreas, B., and Lehr, E. 1998a. Eine neue Unterart der Dreikiel–Scharnierschildkröte, *Pyxidea mouhotii* (Gray, 1862) (Reptilia: Testudines: Bataguridae). Zoologische Abhandlungen, Staatliches Museum für Tierkunde Dresden 50:33–43.

Fritz, U., Baran, I., Budak, A., and Amthauer, E. 1998b. Some notes on the morphology of *Emys orbicularis* in Anatolia, especially on *E. o. luteofusca* and *E. o. colchica*, with the description of a new subspecies from southeastern Turkey. In: Fritz, U., Joger, U., Podloucky, R., and Servan, J. (Eds.). Proceedings of the EMYS Symposium Dresden 96. Mertensiella 10:103–122.

Fritz, U., Ziegler, T., Herrmann, H.W., and Lehr, E. 2002. Intergradation between subspecies of *Cuora galbinifrons* Bourret, 1939 and *Pyxidea mouhotii* (Gray, 1862) in southern North Vietnam (Reptilia: Testudines: Geoemydidae). Faunistische Abhandlungen Staatliches Museum für Tierkunde Dresden 23:59–74.

Fritz, U., Guicking, D., Lenk, P., Joger, U., and Wink, M. 2004. When turtle distribution tells European history: mtDNA haplotypes of *Emys orbicularis* reflect in Germany former division by the Iron Curtain. Biologia 59 (Suppl. 14):19–25.

Fritz, U., Fattizzo, T., Guicking, D., Tripepi, S., Pennisi, M.G., Lenk, P., Joger, U., and Wink, M. 2005a. A new cryptic species of pond turtle from southern Italy, the hottest spot in the range of the genus *Emys* (Reptilia, Testudines, Emydidae). Zoologica Scripta 34:351–371.

Fritz, U., Široký, P., Kami, H., and Wink, M. 2005b. Environmentally caused dwarfism or a valid species—is *Testudo weissingeri* Bour, 1996 a distinct evolutionary lineage? New evidence from mitochondrial and nuclear genomic markers. Molecular Phylogenetics and Evolution 37:389–401.

Fritz, U., Barata, M., Busack, S.D., Fritzsch, G., and Castillo, R. 2006a. Impact of mountain chains, sea straits and peripheral populations on genetic and taxonomic structure of a freshwater turtle, *Mauremys leprosa* (Reptilia, Testudines, Geoemydidae). Zoologica Scripta 35:97–108.

Fritz, U., Auer, M., Bertolero, A., Cheylan, M., Fattizzo, T., Hundsdörfer, A.K., Sampayo, M.M., Pretus, J.L., Široký, P., and Wink, M. 2006b. A rangewide phylogeography of Hermann's tortoise, *Testudo hermanni* (Reptilia: Testudines: Testudinidae): implications for taxonomy. Zoologica Scripta 35:531–543.

Fritz, U., Petzold, A., and Auer, M. 2006c. Osteology in the *Cuora galbinifrons* complex suggests conspecifity of *C. bourreti* and *C. galbinifrons*, with notes on shell osteology and phalangeal formulae within the Geoemydidae. Amphibia-Reptilia 27:195–205.

Fritz, U., Hundsdörfer, A.K., Široký, P., Auer, M., Kami, H., Lehmann, J., Mazanaeva, L.F., Türkozan, O., and Wink, M. 2007. Phenotypic plasticity leads to incongruence between morphology-based taxonomy and genetic differentiation in western Palearctic tortoises (*Testudo graeca* complex; Testudines, Testudinidae). Amphibia-Reptilia 28:97–121.

Fritz, U., Ayaz, D., Buschbom, J., Kami, H.G., Mazanaeva, L.F., Aloufi, A.A., Auer, M., Rifai, L., Silic, T., and Hundsdörfer, A.K. 2008a. Go east: phylogeographies of *Mauremys caspica* and *M. rivulata*–discordance of morphology, mitochondrial and nuclear genomic markers and rare hybridization. Journal of Evolutionary Biology 21:527–540.

Fritz, U., Guicking, D., Auer, M., Sommer, R.S.; Wink, M., and Hundsdörfer, A.K. 2008b. Diversity of the Southeast Asian leaf turtle genus *Cyclemys*: how many leaves on its tree of life? Zoologica Scripta 37:367–390.

Fritz, U., Auer, M., Chirikova, M.A., Duysebayeva, T.N., Eremchenko, V.K., Kami, H.G., Kashkarov, R.D., Masroor, R., Moodley, Y., Pindrani, A., Široký, P., and Hundsdörfer, A.K. 2009a. Mitochondrial diversity of the widespread Central Asian steppe tortoise (*Testudo horsfieldii* Gray, 1844): implications for taxonomy and relocation of confiscated tortoises. Amphibia-Reptilia 30:245–257.

Fritz, U., Ayaz, D., Hundsdörfer, A.K., Kotenko, T., Guicking, D., Wink, M., Tok, C.V., Çiçek, K., and Buschbom, J. 2009b. Mitochondrial diversity of European pond turtles (*Emys orbicularis*) in Anatolia and the Ponto-Caspian Region: multiple old refuges, hotspot of extant diversification and critically endangered endemics. Organisms Diversity and Evolution 9:100–114.

Fritz, U., Harris, D.J., Fahd, S., Rouag, R., Graciá Martínez, E., Giménez Casalduero, A., Široký, P., Kalboussi, M., Jdeidi, T.B., and Hundsdörfer, A.K. 2009c. Mitochondrial phylogeography of *Testudo graeca* in the Western Mediterranean: old complex divergence in North Africa and recent arrival in Europe. Amphibia-Reptilia 30:63–80.

Fritz, U., Daniels, S.R., Hofmeyr, M.D., González, J., Barrio-Amorós, C.L., Široký, P., Hundsdörfer, A.K., and Stuckas, H. 2010a. Mitochondrial phylogeography and subspecies of the wide-ranging sub-Saharan leopard tortoise *Stigmochelys pardalis* (Testudines: Testudinidae) – a case study for the pitfalls of pseudogenes and GenBank sequences. Journal of Zoological Systematics and Evolutionary Research 48:348–359.

Fritz, U., Gong, S., Auer, M., Kuchling, G., Schneeweiss, N., and Hundsdörfer, A.K. 2010b. The world's economically most important chelonians represent a diverse species complex (Testudines: Trionychidae: *Pelodiscus*). Organisms, Diversity and Evolution 10:227–242.

Fritz, U., Branch, W.R., Hofmeyr, M.D., Maran, J., Prokop, H., Schleicher, A., Široký, P., Stuckas, H., Vargas-Ramírez, M., Vences M., and Hundsdörfer, A.K. 2011a. Molecular phylogeny of African hinged and helmeted terrapins (Testudines: Pelomedusidae: *Pelusios* and *Pelomedusa*). Zoologica Scripta 40:115–125.

Fritz, U., Schmidt, C., and Ernst, C.H. 2011b. Competing generic concepts for Blanding's, Pacific and European pond turtles (*Emydoidea*, *Actinemys* and *Emys*) – which is best? Zootaxa 2791:41–53.

Fritz, U., Stuckas, H., Vargas-Ramirez, M., Hundsdörfer, A.K., Maran, J., and Päckert, M. 2011c [2012]. Molecular phylogeny of Central and South American slider turtles: implications for biogeography and systematics (Testudines: Emydidae: *Trachemys*). Journal of Zoological Systematics and Evolutionary Research 50:125–136.

Fritz, U., Alcalde, L., Ramírez-Vargas, M., Goode, E.V., Fabius-Turoblin, D.U., and Praschag, P. 2012a. Northern genetic richness and southern purity, but just one species in the *Chelonoidis chilensis* complex. Zoologica Scripta 41:220–232.

Fritz, U., Branch, W.R., Gehring, P.S., Harvey, J., Kindler, C., Meyer, L., Du Preez, L., Široký, P., Vieites, D.R., and Vences, M. 2012b [2013]. Weak divergence among African, Malagasy and Seychellois hinged terrapins (*Pelusios castanoides, P. subniger*) and evidence for human-mediated oversea dispersal. Organisms, Diversity and Evolution 13:215–224.

Fritz, U., Gemel, R., Kehlmaier, C., Vamberger, M., and Praschag, P. 2014a. Phylogeography of the Asian softshell turtle *Amyda cartilaginea* (Boddaert, 1770): evidence for a species complex. Vertebrate Zoology 64:229–243.

Fritz, U., Petzold, A., Kehlmaier, C., Kindler, C., Campbell, P., Hofmeyr, M.D., and Branch, W.R. 2014b. Disentangling the *Pelomedusa* complex using type specimens and historical DNA (Testudines: Pelomedusidae). Zootaxa 3795:501–522.

Fritz, U., Mazuch, T., Petzold, A., and Prokop, H. 2015a. Coloration and pattern of hatchlings of six *Pelomedusa* species. Salamandra 51:277–282.

Fritz, U., Kehlmaier, C., Mazuch, T., Hofmeyr, M.D., du Preez, L., Vamberger, M., and Vörös, J. 2015b. Important new records of *Pelomedusa* species for South Africa and Ethiopia. Vertebrate Zoology 65:383–389.

Fry, D.B. 1915. On a new *Chelodina* from Australia, with a key to the genus. Proceedings of the Royal Society of Queensland 27:88–90.

Fry, E. 1850. Remarks on the morphology of the vertebrate skeleton. Proceedings of the Zoological Society of London 1850:15–22.

Gadow, H. 1894. On the remains of some gigantic land-tortoises, and of an

extinct lizard, recently discovered in Mauritius. Transactions of the Zoological Society of London 13(8):313–324.

Gadow, H. 1905. Distribution of Mexican amphibians and reptiles. Proceedings of the Zoological Society of London 2:191–244.

Gaffney, E.S. 1975. A taxonomic revision of the Jurassic turtles *Portlandemys* and *Plesiochelys*. American Museum Novitates 2574:1–19.

Gaffney, E.S. 1977. The side-necked turtle family Chelidae: a theory of relationships using shared derived characters. American Museum Novitates 2620:1–28.

Gaffney, E.S. and Meylan, P.A. 1988. A phylogeny of turtles. In: Benton, M.J. (Ed.). The Phylogeny and Classification of the Tetrapods, Volume I: Amphibians, Reptiles, Birds. Systematics Association Special Volume 35A:157–219.

Gaffney, E.S., Tong, H., and Meylan, P.A. 2006. Evolution of the side-necked turtles: the families Bothremydidae, Euraxemydidae, and Araripemydidae. Bulletin of the American Museum of Natural History 300:1–698.

Gaffney, E.S., Meylan, P.A., Wood, R.C., Simons, E., and Almeida Campos, D. de. 2011. Evolution of the side-necked turtles: the family Podocnemididae. Bulletin of the American Museum of Natural History 350:1–237.

Gaos, A.R., Lewison, R.L., Liles, M.J., Gadea, V., Altamirano, E., Henríquez, A.V., Torres, P., Urteaga, J., Vallejo, F., Baquero, A., LeMarie, C., Muñoz, J.P., Chaves, J.A., Hart, C.E., Peña de Niz, A., Chácon, D., Fonseca, L., Otterstrom, S., Yañez, I.L., LaCasella, E.L., Frey, A., Jensen, M.P., and Dutton, P.H. 2016. Hawksbill turtle terra incognita: conservation genetics of eastern Pacific rookeries. Ecology and Evolution 6:1251–1264.

Garbin, R.C., Karlguth, D.H., Fernandes, D.S., and Pinto, R.R. 2016. Morphological variation in the Brazilian Radiated Swamp Turtle *Acanthochelys radioloata* (Mikan, 1820) (Testudines: Chelidae). Zootaxa 4105:45–64.

García-Díaz, P., Ross, J.V., Ayres, C., and Cassey, P. 2015. Understanding the biological invasion risk posed by the global wildlife trade: propagule pressure drives the introduction and establishment of Nearctic turtles. Global Change Biology 21:1078–1091.

Garman, S. 1880. On certain species of Chelonioidae. Bulletin of the Museum of Comparative Zoology 6:123–126.

Garman, S. 1884. The reptiles of Bermuda. In: Jones, J.M. and Goode, G.B. (Eds.). Contributions to the Natural History of the Bermudas. Bulletin of the U.S. National Museum 25:285–303.

Garman, S. 1891. On a tortoise found in Florida and Cuba, *Cinosternum baurii*. Bulletin of the Essex Institute 23:141–144.

Garman, S. 1917. The Galapagos tortoises. Memoirs of the Museum of Comparative Zoology 30(4):261–296.

Garrick, R.C., Benavides, E., Russello, M.A., Gibbs, J.P., Poulakakis, N., Dion, K.B., Hyseni, C., Kajdacsi, B., Márquez, L., Baran, S., Ciofi, C., Tapia, W., and Caccone., A. 2012. Genetic rediscovery of an 'extinct' Galápagos giant tortoise species. Current Biology 22:R10–R11.

Garrick, R.C., Benavides, E., Russello, M.A., Hyseni, C., Edwards, D.L., Gibbs, J.P., Tapia, W., Ciofi, C., and Caccone, A. 2014. Lineage fusion in Galápagos giant tortoises. Molecular Ecology 23:5276–5290.

Garrick, R.C., Kajdacsi, B., Russello, M.A., Benavides, E., Hyseni, C., Gibbs, J.P., Tapia, W., and Caccone, A. 2015. Naturally rare versus newly rare: demographic inferences on two timescales inform conservation of Galápagos giant tortoises. Ecology and Evolution 5:676–694.

Garsault, F.A.P. de. 1764. Les Figures des plantes et animaux d'usage en médecine, décrits dans la Matière Médicale de Mr. Geoffroy Médecin. Paris: 20 pp., 87 pl.

Gasperetti, J., Stimson, A.F., Miller, J.D., Ross, J.P., and Gasperetti, P.R. 1993. Turtles of Arabia. Fauna of Saudi Arabia 13:170–367.

Gemel, R. and Grillitsch, H. 2008. *Hydrochelys picta* Wagler, 1821: a junior synonym of *Chrysemys picta picta* (Schneider, 1783). Herpetozoa 20(3/4):187–189.

Geoffroy Saint-Hilaire, E. 1809a. Mémoire sur les tortues molles. Nouveau Bulletin des Sciences, par la Société Philomatique de Paris 1(22):363–367.

Geoffroy Saint-Hilaire, E. 1809b. Mémoire sur les tortues molles, nouveau genre sous le nom de *Trionyx*, et sur la formation des carapaces. Annales du Muséum d'Histoire Naturelle de Paris 14:1–20.

Georges, A. and Adams, M. 1992. A phylogeny for Australian chelid turtles based on allozyme electrophoresis. Australian Journal of Zoology 40:453–476.

Georges, A. and Adams, M. 1996. Electrophoretic delineation of species boundaries within the short-necked chelid turtles of Australia. Zoological Journal of the Linnean Society 118:241–260.

Georges, A. and Thomson, S. 2006. Evolution and zoogeography of Australian freshwater turtles. In: Merrick, J.R., Archer, M., Hickey, G.M., and Lee, M.S.Y. (Eds.). Evolution and Biogeography of Australasian Vertebrates. Sydney: Australian Scientific Publishing, pp. 291–308.

Georges, A. and Thomson, S. 2010. Diversity of Australasian freshwater turtles, with an annotated synonymy and keys to species. Zootaxa 2496:1–37.

Georges, A., Birrell, J., Saint, K., McCord, W.P., and Donnellan, S. 1998. A phylogeny for side-necked turtles (Chelonia: Pleurodira) based on mitochondrial and nuclear gene sequence variation. Biological Journal of the Linnean Society 67:213–246.

Georges, A., Doody, S., Young, J., and Cann, J. 2000. The Australian Pig-Nosed Turtle. Canberra: Robey, 37 pp.

Georges, A., Adams, M., and McCord, W. 2002. Electrophoretic delineation of species boundaries within the genus *Chelodina* (Testudines: Chelidae) of Australia, New Guinea and Indonesia. Zoological Journal of the Linnean Society 134:401–421.

Georges, A., Guarino, F., and Bito, B. 2006. Freshwater turtles of the TransFly region of Papua New Guinea – notes on diversity, distribution, reproduction, harvest and trade. Wildlife Research 33:373–384.

Georges, A., Zhang, X., Unmack, P., Reid, B.N., Le, M., and McCord, W.P. 2014. Contemporary genetic structure of an endemic freshwater turtle reflects Miocene orogenesis of New Guinea. Biological Journal of the Linnean Society 111(1):192–208.

Gerlach, J. 2001. Tortoise phylogeny and the '*Geochelone*' problem. Phelsuma 9a:1–24.

Gerlach, J. 2004. Giant Tortoises of the Indian Ocean. The genus *Dipsochelys* inhabiting the Seychelles Islands and the extinct giants of Madagascar and the Mascarenes. Frankfurt: Chimaira, 208 pp.

Gerlach, J. 2011a. Development of distinct morphotypes in captive Seychelles–Aldabra giant tortoises. Chelonian Conservation and Biology 10(1):102–112.

Gerlach, J. and Bour, R. 2003. Morphology of hatchling giant tortoises. Radiata 12:11–12.

Gerlach, J. and Canning, K.L. 1996. The Seychelles giant tortoise, its rediscovery and prospects for conservation. In: Devaux, B. (Ed.). Proceedings – International Congress of Chelonian Conservation. Gonfaron, France: Editions SOPTOM, pp. 133–135.

Gerlach, J. and Canning, K.L. 1998. Taxonomy of Indian Ocean giant tortoises (*Dipsochelys*). Chelonian Conservation and Biology 3(1):3–19.

Gerlach, J. and Canning, L. 2001. Range contractions in the critically endangered Seychelles terrapins (*Pelusios* spp.). Oryx 35:313–321.

Gerlach, J. and Paquette, S.R. 2014. Evolution of the tortoises of the western Indian Ocean. In: Gerlach, J. (Ed.). Western Indian Ocean Tortoises: Ecology, Diversity, Evolution, Conservation, Paleontology. Manchester, UK: Siri Scientific Press, pp. 9–30.

Gerlach, J., Rocamora, G., Gane, J., Jolliffe, K., and Vanherck, L. 2013. Giant tortoise distribution and abundance in the Seychelles Islands: past, present, and future. Chelonian Conservation and Biology 12(1):70–83.

Gervais, P. 1843. Dictionnaire Universal d'Histoire Naturelle. Vol. 3, p. 457.

Gidis, M., Spinks, P.Q., Çevik, E., Kaska, Y., and Shaffer, H.B. 2011. Shallow genetic divergence indicates a Congo–Nile riverine connection for the softshell turtle *Trionyx triunguis*. Conservation Genetics 12:589–594.

Giebel, C.G. 1866a. *Cistudo anhaltina* n. sp. aus der Latdorfer Braunkohle. Zeitschrift für die Gesammten Naturwissenschaften 27:1–11.

Giebel, C.G. 1866b. Die Schildkröten der Insel Banka. Zeitschrift für die Gesammten Naturwissenschaften 27:11–21.

Gilmore, C.W. 1923. A new fossil turtle, *Kinosternon arizonense*, from Arizona. Proceedings of the United States National Museum 62:1–8.

Gilmore, C.W. 1927. On fossil turtles from the Pleistocene of Florida. Proceedings of the United States National Museum 71:1–10.

Girard, C. 1858. United States Exploring Expedition during the years 1838, 1839, 1840, 1841, 1842. Under the command of Charles Wilkes, U.S.N. Volume XX. Herpetology. Philadelphia: J.B. Lippincott, 496 pp.

Gistel, J. 1848. Naturgeschichte des Thierreichs für höhere Schulen bearbeitet durch Johannes Gistel...mit einem Atlas von 32 Tafeln (darstelland 617 illuminierte Figuren) und mehrern dem Texte eingedruckten Xylographien. Stuttgart: 216 pp.

Gistel, J. 1868. Die Lurche Europa's. Ein Beitrag zur Lehre von der geographischen Verbreitung derselben. In: Gistel, J. Blicke in das Leben der Natur und des Menschen. Leipzig: Verlag Ed. Wartig, pp. 144–167.

Glass, B.P. and Hartweg, N. 1951. *Kinosternon murrayi*, a new musk turtle of the *hirtipes* group from Texas. Copeia 1951(1):50–52.

Glauert, L. 1923. A new freshwater tortoise from the Murchison River. Journal of the Royal Society of Western Australia 9:53–56.

Glauert, L. 1954. A new swamp tortoise from the Swan River district. Western Australian Naturalist 4:125–127.

Gmelin, J.F. 1789 ["1788"]. Caroli a Linné, Systema Naturae per regna tria naturae secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Ed. 13. Tom. I. Pars III. Leipzig: G.E. Beer, Ed. 13, 1(3):1033–1516.

Gmelin, S.G. 1774. Reise durch Russland zur Untersuchung der drey Natur-Reiche. Dritter Theil. Reise durch das nordliche Persien, in den Jahren 1770, 1771, bis im April 1772. St. Petersburg: Kayserliche Academie der Wissenschaften, 508 pp.

Gmira, S. 1993. Une nouvelle espéce de tortue Testudininei (*Testudo kenitrensis* n. sp.) de l'inter Amirien-Tensiftien de Kénitra (Maroc). Comptes Rendus de l'Académie des Sciences Série II 316:701–707.

Gmira, S. 1995. Étude des Chéloniens Fossiles du Maroc. Paris: Cahier de Paléontologie, 140 pp.

Godwin, J.C., Lovich, J.E., Ennen, J.R., Kreiser, B.R., Folt, B., and Lechowicz, C. 2014. Hybridization of two megacephalic map turtles (Testudines: Emydidae: *Graptemys*) in the Choctawhatchee River drainage of Alabama and Florida. Copeia 2014:725–742.

Göldi, E.A. 1886. Ueber eine vermuthlich neue Schildkröte der Gattung *Podocnemis* vom Rio Negro und über die Chelonier des Amazonas-Gebietes im Allgemeinen. St. Gallische Naturwissenschaftliche Gesellschaft, Bericht über die Thäligheit 1884–1885[1886]:273–280.

Gong, S., Shi, H., Mo, Y., Auer, M., Vargas-Ramírez, M., Hundsdörfer, A.K., and Fritz, U. 2009. Phylogeography of the endangered black-breasted leaf turtle (*Geoemyda spengleri*) and conservation implications for other chelonians. Amphibia-Reptilia 30:57–62.

González-Porter, G.P., Hailer, F., Flores-Villela, O.A., Garcia-Anleu, R., and Maldonado, J.E. 2011. Patterns of genetic diversity in the critically endangered Central American river turtle: human influence since the Mayan age? Conservation Genetics 12:1229–1242.

González-Porter, G.P., Maldonado, J.E., Flores-Villela, O., Vogt, R.C., Janke, A., Fleischer, R.C., and Hailer, F. 2013. Cryptic population structuring and the role of the Isthmus of Tehuantepec as a gene flow barrier in the Critically Endangered Central American River Turtle. PLoS ONE 8(9):e71668.

Goode, J. 1967. Freshwater Tortoises of Australia and New Guinea (in the Family Chelidae). Melbourne: Lansdowne Press, 154 pp.

Graciá, E., Vargas-Ramírez, M., Delfino, M., Anadón, J.D., Giménez, A., Fahd, S., Corti, C., Jdeidi, T.B., and Fritz, U. 2017a. Expansion after expansion: dissecting the phylogeography of the widely distributed spur-thighed tortoise, *Testudo graeca* (Testudines: Testudinidae). Biological Journal of the Linnean Society 121:641–654.

Graciá, E., Rodríguez-Caro, R.C., Andreu, A.C., Fritz, U., Giménez, A., and Botella, F. 2017b. Human-mediated secondary contact of two tortoise lineages results in sex-biased introgression. Scientific Reports 7:4019.

Graham, T.E. 1991. *Pseudemys rubriventris*. Catalogue of American Amphibians and Reptiles 510:1–4.

Grandidier, A. 1867. Liste des reptiles nouveaux découverts, en 1866, sur la côte sud-ouest de Madagascar. Revue et Magazine de Zoologie, Paris (2)19:223–234.

Grandidier, A. 1868. Sur les découvertes zoologiques faites récemment à Madagascar. Annales des Sciences Naturelles. Zoologie et Paléontologie, Paris (5)10:375–378.

Grandidier, A. 1869. Descriptions d'un Rhinolophe et d'une Tortue de Madagascar. Revue et Magazine de Zoologie, Paris (2)21:257–258.

Gravenhorst, J.L.C. 1829. Deliciae Musei Zoologici Vratislaviensis. Fasciculus primus, continens chelonios et batrachia. Lipsiae: Leopoldi Vossii, 106 pp.

Gray, J.E. 1825. A synopsis of the genera of reptiles and amphibia, with a description of some new species. Annals of Philosophy (2)10:193–217.

Gray, J.E. 1828. Spicilegia Zoologica; or original figures and short systematic descriptions of new and unfigured animals. Part I. London: Richard Taylor, 8 pp.

Gray, J.E. 1830a. Illustrations of Indian Zoology, chiefly selected from the collection of Major-General Hardwicke. Vol. I, Part 1, pl. 77. London: Treuttel, Wurtz, Treuttel, Jun. and Richter. [Published Jan 1830].

Gray, J.E. 1830b. Illustrations of Indian Zoology, chiefly selected from the collection of Major-General Hardwicke. Vol. I, Part 2, pl. 72. London: Treuttel, Wurtz, Treuttel, Jun. and Richter. [Published Mar 1830].

Gray, J.E. 1830c. [*Emys occipitatis; Emys ornata*]. In: Griffith E. and Pidgeon, E. The Class Reptilia arranged by the Baron Cuvier, with specific descriptions. In: Griffith, E. (Ed.). The Animal Kingdom Arranged in Conformity with its Organization, by the Baron Cuvier, with Additional Descriptions of all the Species Hitherto Named, and of many not before Noticed. Vol. 9. Reptilia. London: Whittaker, Treacher, and Co., pp. 75–76. [Part 25, published Sep 1830].

Gray, J.E. 1830d. Illustrations of Indian Zoology, chiefly selected from the collection of Major-General Hardwicke. Vol. I, Part 4, pls. 75, 78. London: Treuttel, Wurtz, Treuttel, Jun. and Richter. [Published Oct 1830].

Gray, J.E. 1830e. A Synopsis of the Species of the Class Reptilia. In: Griffith E. and Pidgeon, E. The Class Reptilia arranged by the Baron Cuvier, with specific descriptions. In: Griffith, E. (Ed.). The Animal Kingdom Arranged in Conformity with its Organization, by the Baron Cuvier, with Additional Descriptions of all the Species Hitherto Named, and of many not before Noticed. Vol. 9. Reptilia. Supplement. London: Whittaker, Treacher, and Co., 110 pp. [Part 26, published Dec 1830].

Gray, J.E. 1831a. Illustrations of Indian Zoology, chiefly selected from the collection of Major-General Hardwicke. Vol. I, Part 5, pl. 74. London: Treuttel, Wurtz, Treuttel, Jun. and Richter. [Published Jan 1831].

Gray, J.E. 1831b. Illustrations of Indian Zoology, chiefly selected from the collection of Major-General Hardwicke. Vol. I, Part 6, pl. 76. London: Treuttel, Wurtz, Treuttel, Jun. and Richter. [Published Apr 1831].

Gray, J.E. 1831c. A specimen of a tortoise regarded as the type of a new genus in the family Emydidae. Proceedings of the Zoological Society of London 1831(1):106–107. [Published May 1831].

Gray, J.E. 1831d. Synopsis Reptilium; or Short Descriptions of the Species of Reptiles. Part I.—Cataphracta. Tortoises, Crocodiles, and Enaliosaurians. London: Treuttel, Wurz, and Co., 85 pp. [Published May 1831].

Gray, J.E. 1832a. Illustrations of Indian Zoology, chiefly selected from the collection of Major-General Hardwicke. Vol. I, Part 10, Direction. London: Treuttel, Wurtz, Treuttel, Jun. and Richter. [Published Apr 1832].

Gray, J.E. 1832b. Illustrations of Indian Zoology, chiefly selected from the collection of Major-General Hardwicke. Vol. II, Part 11, pl. 60. London: Adolphus Richter and Co. [Published Jul 1832].

Gray, J.E. 1834a. Characters of several new species of freshwater tortoises (*Emys*) from India and China. Proceedings of the Zoological Society of London 1834(2):53–54.

Gray, J.E. 1834b. Characters of two new genera of reptiles (*Geoemyda* and *Gehyra*). Proceedings of the Zoological Society of London 1834(2):99–101.

Gray, J.E. 1835. Illustrations of Indian Zoology, chiefly selected from the collection of Major-General Hardwicke. Vol. II, Parts 19-20, pls. 57, 65-66, Direction. London: Adolphus Richter and Co. [Published Feb 1835].

Gray, J.E. 1841. A catalogue of the species of reptiles and amphibia hitherto described as inhabiting Australia, with a description of some new species from Western Australia, and some remarks on their geographical distribution. In: Grey, G. Journals of Two Expeditions of Discovery in Northwest and Western Australia. London: T. and W. Boone, Vol. 2. Appendix E, pp. 422–449.

Gray, J.E. 1842. Description of some hitherto unrecorded species of Australian reptiles and batrachians. Zoological Miscellany 2:51–57.

Gray, J.E. 1844. Catalogue of the Tortoises, Crocodiles, and Amphisbaenians in the Collection of the British Museum. London: Edward Newman, 80 pp.

Gray, J.E. 1847. Description of a new genus of Emydae. Proceedings of the Zoological Society of London 1847(15):55–56.

Gray, J.E. 1849. Description of a new species of box tortoise from Mexico. Proceedings of the Zoological Society of London 1849:16–17.

Gray, J.E. 1854a. Description of a new genus and some new species of tortoises. Proceedings of the Zoological Society of London 1852[1854]:133–135.

Gray, J.E. 1854b. Description of a new species of tortoise (*Testudo planiceps*), from the Galapagos Islands. Proceedings of the Zoological Society of London 1853[1854]:12–13.

Gray, J.E. 1856a. On some new species of freshwater tortoises from North America, Ceylon and Australia, in the collection of the British Museum. Proceedings of the Zoological Society of London 1855[1856](23):197–202. [Published Feb 1856].

Gray, J.E. 1856b ["1855"]. Catalogue of Shield Reptiles in the Collection of the British Museum. Part I. Testudinata (Tortoises). London: British Museum, 79 pp. [Published Mar 1856].

Gray, J.E. 1857. Description of a new species of *Chelodina* from Australia. Proceedings of the Zoological Society of London 1856[1857]:369–371.

Gray, J.E. 1859. Description of a new species of freshwater tortoise from Siam. Proceedings of the Zoological Society of London 1859(27):478–479.

Gray, J.E. 1860a. Description of a soft tortoise (*Aspidochelys livingstonii*) from the Zambesi, sent to the British Museum by Dr. Livingstone. Proceedings of

the Zoological Society of London 1860(28):5–6.
Gray, J.E. 1860b. Description of a new species of *Geoclemmys* from Ecuador. Proceedings of the Zoological Society of London 1860(28):231–232.
Gray, J.E. 1860c. Description of a new species of *Emys* lately living in the gardens of the Zoological Society. Proceedings of the Zoological Society of London 1860(28):232–233.
Gray, J.E. 1860d. On some new species of Mammalia and tortoises from Cambojia. Annals and Magazine of Natural History (3)6:217–218.
Gray, J.E. 1861a. Description of a soft tortoise from Camboja. Proceedings of the Zoological Society of London 1861:41–42.
Gray, J.E. 1861b. On a new species of water–tortoise (*Geoclemmys melanosterna*) from Darien. Proceedings of the Zoological Society of London 1861:204–205.
Gray, J.E. 1862a. Notice of a new species of *Cyclemys* from the Lao Mountains, in Siam. Annals and Magazine of Natural History (3)10:157.
Gray, J.E. 1862b. Notice of two new species of *Batagur* in the collection of the British Museum. Proceedings of the Zoological Society of London 1862:264–265.
Gray, J.E. 1862c. Notice of a new species of *Dogania* from Asia. Proceedings of the Zoological Society of London 1862:265–266.
Gray, J.E. 1863a. On the species of *Chelymys* from Australia; with the description of a new species. Annals and Magazine of Natural History (3)12:98–99.
Gray, J.E. 1863b. Notice of a new species of *Pelomedusa* from Natal. Annals and Magazine of Natural History (3)12:99–100.
Gray, J.E. 1863c. Notes on American Emydidae, and Professor Agassiz's observations on my catalogue of them. Annals and Magazine of Natural History (3)12:176–183.
Gray, J.E. 1863d. Notice of a new species of *Kinixys* and other tortoises from central Africa. Annals and Magazine of Natural History (3)12:381–382.
Gray, J.E. 1863e. Observations on the box tortoises, with the descriptions of three new Asiatic species. Proceedings of the Zoological Society of London 1863:173–179.
Gray, J.E. 1863f. On the species of the genus *Sternothaerus*, with some observations on *Kinixys*. Proceedings of the Zoological Society of London 1863:192–197.
Gray, J.E. 1863g. Notice of a new species of *Batagur* from north-western India. Proceedings of the Zoological Society of London 1863:253.
Gray, J.E. 1863h. Description of a new *Geoclemys* lately living in the Gardens of the Zoological Society. Proceedings of the Zoological Society of London 1863:254–255.
Gray, J.E. 1864a. Notes on certain species of tortoises from the Asiatic Islands transmitted to the British Museum by Dr. Bleeker. Proceedings of the Zoological Society of London 1864:11–13.
Gray, J.E. 1864b. Revision of the species of Trionychidae found in Asia and Africa, with the descriptions of some new species. Proceedings of the Zoological Society of London 1864:76–98.
Gray, J.E. 1864c. Description of a new species of *Staurotypus* (*S. salvinii*) from Guatemala. Proceedings of the Zoological Society of London 1864:127–128.
Gray, J.E. 1864d. On the genera of Chelydidae and the characters furnished by the study of their skulls. Proceedings of the Zoological Society of London 1864:128–135.
Gray, J.E. 1865a. Notice of a new genus and species of the family Trionychidae from Western Africa. Annals and Magazine of Natural History (3)16:204–206.
Gray, J.E. 1865b. On the development of the sternal callosities in *Cyclanosteus senegalensis*, and on the synonyms of *Cyclanosteus* and its allied genera. Proceedings of the Zoological Society of London 1865:422–428.
Gray, J.E. 1867. Description of a new Australian tortoise (*Elseya latisternum*). Annals and Magazine of Natural History (3)20:43–45.
Gray, J.E. 1868. Notice of *Hydraspis gordoni*, a new species from Trinidad, living in the gardens of the Society. Proceedings of the Zoological Society of London 1868:563–564.
Gray, J.E. 1869a. Notes on the families and genera of tortoises (Testudinata), and on the characters afforded by the study of their skulls. Proceedings of the Zoological Society of London 1869:165–225.
Gray, J.E. 1869b. Description of *Mauremys laniaria*, a new freshwater tortoise. Proceedings of the Zoological Society of London 1869:499–500.
Gray, J.E. 1869c. Description of *Emys flavipes*. Proceedings of the Zoological Society of London 1869:643–644.
Gray, J.E. 1870a. Notice of a new Chilian tortoise (*Testudo chilensis*). Annals and Magazine of Natural History (4)6:190.
Gray, J.E. 1870b. Notes on tortoises in the British Museum, with descriptions of some new species. Proceedings of the Zoological Society of London 1870:653–659.
Gray, J.E. 1870c. Supplement to the Catalogue of Shield Reptiles in the Collection of the British Museum. Part I. Testudinata (Tortoises). London: British Museum, 120 pp.
Gray, J.E. 1870d. Notes on three species of tortoises living in the Society's gardens. Proceedings of the Zoological Society of London 1870:706–708.
Gray, J.E. 1870e. On the family Dermatemydae, and a description of a living species in the gardens of the Society. Proceedings of the Zoological Society of London 1870:711–716.
Gray, J.E. 1870f. Notes on *Bartlettia*, a new species of freshwater tortoises belonging to the family Peltocephalidae. Proceedings of the Zoological Society of London 1870:718–721.
Gray, J.E. 1871a. On *Euchelymys*, a new genus and two new species of Australian freshwater tortoises. Annals and Magazine of Natural History (4)8:117–118.
Gray, J.E. 1871b. Notes on Australian freshwater tortoises. [1]. Annals and Magazine of Natural History (4)8:291–292.
Gray, J.E. 1871c. Notes on Australian freshwater tortoises. [2]. Annals and Magazine of Natural History (4)8:366.
Gray, J.E. 1871d. *Damonia oblonga*, a new species of freshwater tortoise. Annals and Magazine of Natural History (4)8:367.
Gray, J.E. 1872a. Notes on the mud-tortoises of India (*Trionyx*, Geoffroy). Annals and Magazine of Natural History (4)10:326–340.
Gray, J.E. 1872b. On *Spatulemys lasalae*, a new genus of Hydraspidae from Rio Parana, Corrientes. Annals and Magazine of Natural History (4)10:463.
Gray, J.E. 1872c. Appendix to the Catalogue of Shield Reptiles in the Collection of the British Museum. Part I. Testudinata (Tortoises). London: British Museum, 28 pp.
Gray, J.E. 1872d. On the genus *Chelymys* and its allies from Australia. Proceedings of the Zoological Society of London 1872:504–514.
Gray, J.E. 1873a. Notes on tortoises. Annals and Magazine of Natural History (4)11:143–149.
Gray, J.E. 1873b. On a new freshwater tortoise from Borneo (*Orlitia borneensis*). Annals and Magazine of Natural History (4)11:156–157.
Gray, J.E. 1873c. Observations on chelonians, with descriptions of new genera and species. Annals and Magazine of Natural History (4)11:289–308.
Gray, J.E. 1873d. Notes on the family Chelydradae. Annals and Magazine of Natural History (4)12:66–70.
Gray, J.E. 1873e. *Damonia unicolor*, a new species of water-tortoise from China, sent by Mr. Swinhoe. Annals and Magazine of Natural History (4)12:77–78.
Gray, J.E. 1873f. Notes on the tortoises of the 'Zoology of Mexico' of MM. A. Duméril and Bocourt. Annals and Magazine of Natural History (4)12:109–114.
Gray, J.E. 1873g. Notes on Chinese mud-tortoises (Trionychidae), with the description of a new species sent to the British Museum by Mr. Swinhoe, and observations on the male organ of this family. Annals and Magazine of Natural History (4)12:156–161.
Gray, J.E. 1873h. Notes on mud-tortoises (*Trionyx*, Geoffroy), and on the skulls of the different kinds. Proceedings of the Zoological Society of London 1873:38–72.
Gray, J.E. 1873i. Notes on the genera of turtles (Oiacopodes), and especially on their skeletons and skulls. Proceedings of the Zoological Society of London 1873:395–411.
Gray, J.E. 1873j. Hand-List of the Specimens of Shield Reptiles in the British Museum. London: British Museum, 124 pp.
Gray, J.E. 1873k ["1872"]. List of the Books, Memoirs, and Miscellaneous Papers by Dr. John Edward Gray, F.R.S., with a few Historical Notes. London: Private Distribution, 55 pp.
Gray, J.E. 1874. On the skulls and alveolar surfaces of land-tortoises (Testudinata). Proceedings of the Zoological Society of London 1873[1874]:722–728.
Gregory, S.M.S. 2010. The two 'editions' of Duméril's Zoologie analytique, and the potential confusion caused by Froriep's translation Analytische Zoologie. Zoological Bibliography 1(1):6–8.
Griffith, E. and Pidgeon, E. 1830. The Class Reptilia Arranged by the Baron Cuvier, with Specific Descriptions. In: Griffith, E. (Ed.). The Animal Kingdom Arranged in Conformity with its Organization, by the Baron Cuvier, with Additional Descriptions of all the Species Hitherto Named, and of many not before Noticed. Vol. 9. Reptilia. London: Whittaker, Treacher, and Co., 481 pp. [Part 25, pp. 1–192, published Sep 1830].
Güçlü, Ö., Ulger, C., Türkozan, O., Gemel, R., Reimann, M., Levy, Y., Ergene, S., Uçar, A.H., and Aymak, C. 2009. First assessment of mitochondrial DNA diversity in the endangered Nile Softshell Turtle, *Trionyx triunguis*, in the

Mediterranean. Chelonian Conservation and Biology 8(2):222–226.
Guérin, F.E. 1829. Iconographie du Règne Animal de G. Cuvier. I. Planches des animaux vertébrés. Paris: J.B. Baillibre, Reptiles, planches 1–30.
Guicking, D., Fritz, U., Wink, M., and Lehr, E. 2002. New data on the diversity of the Southeast Asian leaf turtle genus *Cyclemys* Bell, 1834. Molecular results (Reptilia: Testudines: Geoemydidae). Faunistische Abhandlungen Staatliches Museum für Tierkunde Dresden 23:75–86.
Guillon, J.M., Guéry, L., Hulin, V., and Girondot, M. 2012. A large phylogeny of turtles (Testudines) using molecular data. Contributions to Zoology 81(3):147–158.
Guyer, C., Bailey, M.A., and Mount, R.H. 2015. Turtles of Alabama. Tuscaloosa, AL: University of Alabama Press, 288 pp.
Günther, A.C.L.G. 1860. On the reptiles of Siam. Proceedings of the Zoological Society of London 1860:113–117.
Günther, A.C.L.G. 1864. The Reptiles of British India. London: Ray Society, Robert Hardwicke, 452 pp.
Günther, A.C.L.G. 1869. Report on two collections of Indian reptiles. Proceedings of the Zoological Society of London 1869:500–507.
Günther, A.C.L.G. 1873. Preliminary notice of some extinct tortoises from the islands of Rodriguez and Mauritius. Annals and Magazine of Natural History (4)11:397.
Günther, A.C.L.G. 1874. Descriptions of the living and extinct races of gigantic land-tortoises. Parts I and II. Introduction, and the tortoises of the Galapagos Islands. [Abstract]. Proceedings of the Royal Society of London 153:421–422.
Günther, A.C.L.G. 1875a. Descriptions of the living and extinct races of gigantic land–tortoises. Parts I and II. Introduction, and the tortoises of the Galapagos Islands. Philosophical Transactions of the Royal Society of London 165:251–284.
Günther, A.C.L.G. 1875b. The gigantic land tortoises of the Mascarene and Galapagos Islands. Nature, London (1875):238–239, 259–261, 296–297.
Günther, A.C.L.G. 1877. The Gigantic Land-Tortoises (Living and Extinct) in the Collection of the British Museum. London: Taylor and Francis, 96 pp.
Günther, A.C.L.G. 1882. Description of a new species of tortoise (*Geoemyda impressa*) from Siam. Proceedings of the Zoological Society of London 1882:343–346.
Günther, A.C.L.G. 1884. Contribution to our knowledge of *Hydromedusa*, a genus of South-American freshwater turtles. Annals and Magazine of Natural History (5)14:421–425.
Günther, A.C.L.G. 1885. Reptilia and Batrachia. In: Godman, F.D. and Salvin, O. (Eds.). Biologia Centrali-Americana. London: R.H. Porter, 326 pp. [parts 37–38; pp. 1–24].
Guo, C.-W., Nie, L.-W., and Wang, M. 1997. The karyotypes and NORs of two species of *Chinemys*. In: Zhao, E. (Ed.). Chinese Chelonian Research. Chinese Society for the Study of Amphibians and Reptiles, Herpetological Series No. 9, Sichuan Journal of Zoology 15 (Supplement):97–104.
Gutsche, A. and McCranie, J.R. 2016. Johann Georg Wagler and the "Natürliches System der Amphibien." Bibliotheca Herpetologica 12:41–49.
Ha, D.D. 1995. Are Hoan Kiem tortoises an unknown species? Vietnam News (Hanoi) [Newspaper] 31 December 1995, p. 4.
Ha, D.D. 2000. Rua Ho Guom, loai rua moi cho khoa hoc. [Turtles in Hoan Kiem Lake, new species for science]. Khao co Hoc [Archaeology Magazine], Vietnam 4:104–111. [in Vietnamese]
Hallowell, E. 1839. Description of a species of land tortoise, from Africa. Journal of the Academy of Natural Sciences, Philadelphia 8:161–169.
Hallowell, E. 1844. Description of new species of reptiles from Africa. Proceedings of the Academy of Natural Sciences, Philadelphia 1844:118–120.
Hallowell, E. 1854. Descriptions of some new reptiles from California. Proceedings of the Academy of Natural Sciences, Philadelphia 7:91–97.
Hansen, D.M., Austin, J.J., Baxter, R.H., de Boer, E.J., Falcon, W., Norder, S.J., Rijsdijk, K.F., Thebaud, C., Bunbury, N.J., and Warren, B.H. 2017. Origins of endemic island tortoises in the western Indian Ocean: a critique of the human-translocation hypothesis. Journal of Biogeography 44:1430–1435.
Harfush-Meléndez, M. and Buskirk, J.R. 2008. New distributional data on the Tehuantepec Slider, *Trachemys grayi*, in Oaxaca, Mexico. Chelonian Conservation and Biology 7(2):274–276.
Harlan, R. 1827. Description of a land tortoise, from the Gallapagos Islands, commonly known as the "elephant tortoise". Journal of the Academy of Natural Sciences, Philadelphia 5:284–292.
Harlan, R. 1835. Genera of North American Reptilia, and a synopsis of the species. In: Harlan, R. Medical and Physical Researches: or Original Memoirs in Medicine, Surgery, Physiology, Geology, Zoology, and Comparative Anatomy. Philadelphia: L.R. Bailey, pp. 84–163.
Harlan, R. 1837. Description of a new species of fresh water tortoise, inhabiting the Columbia River. American Journal of Science 31:382–383.
Harper, F. 1940. Some works of Bartram, Daudin, Latreille, and Sonnini, and their bearing upon North American herpetological nomenclature. American Midland Naturalist 23:692–723.
Harris, D.J., Znari, M., Mace, J.C., and Carretero, M.A. 2003. Genetic variation in *Testudo graeca* from Morocco estimated using 12S rRNA DNA sequencing. Revista Española de Herpetología 16:5–9.
Hart, K.M., Hunter, M.E., and King, T.L. 2014. Regional differentiation among populations of the Diamondback Terrapin (*Malaclemys terrapin*). Conservation Genetics 15:593–603.
Hartweg, N. 1934. Description of a new kinosternid from Yucatan. Occasional Papers of the Museum of Zoology, University of Michigan 277:1–2.
Hartweg, N. 1938. *Kinosternon flavescens stejnegeri*, a new turtle from northern Mexico. Occasional Papers of the Museum of Zoology, University of Michigan 371:1–5.
Hartweg, N. 1939. A new American *Pseudemys*. Occasional Papers of the Museum of Zoology, University of Michigan 397:1–4.
Hawkins, S., Worthy, T.H., Bedford, S., Spriggs, M., Clark, G., Irwin, G., Best, S., and Kirch, P. 2016. Ancient tortoise hunting in the southwest Pacific. Nature Scientific Reports 6:38317; doi:10.1038/srep38317.
Hawlitschek, O., Ramírez Garrido, S., and Glaw, F. 2017. How marine currents influenced the widespread natural overseas dispersal of reptiles in the Western Indian Ocean region. Journal of Biogeography 44:1435–1440.
Haworth, A.H. 1825. A binary arrangement of the class Amphibia. Philosophical Magazine and Journal (1)65:372–373.
Hay, O.P. 1892. The Batrachians and Reptiles of the State of Indiana. Annual Report of the Indiana Department of Geology and Natural Resources 17:412–602.
Hay, O.P. 1902. Descriptions of two new species of extinct tortoise, one new. Proceedings of the Academy of Natural Sciences, Philadelphia 54:383–388.
Hay, O.P. 1903. Two new species of fossil turtles from Oregon. University of California Publications, Bulletin of the Department of Geological Sciences 3:237–241.
Hay, O.P. 1904. On the existing genera of the Trionychidae. Proceedings of the American Philosophical Society 42:268–274.
Hay, O.P. 1906. Descriptions of two new genera (*Echmatemys* and *Xenochelys*) and two new species (*Xenochelys formosa* and *Terrapene putnami*) of fossil turtles. Bulletin of the American Museum of Natural History 22(3):27–31.
Hay, O.P. 1907. Description of seven new species of turtles from Tertiary of the United States. Bulletin of the American Museum of Natural History 23:847–863.
Hay, O.P. 1908a. On three existing species of sea-turtles, one of them (*Caretta remivaga*) new. Proceedings of the United States National Museum 34:183–198.
Hay, O.P. 1908b. The Fossil Turtles of North America. Carnegie Institution of Washington, Publication 75:1–568.
Hay, O.P. 1908c. Descriptions of five species of North American fossil turtles, four of which are new. Proceedings of the United States National Museum 35:161–169.
Hay, O.P. 1916a. Descriptions of some Floridian fossil vertebrates, belonging mostly to the Pleistocene. Annual Report of the Florida State Geological Survey 8:39–76.
Hay, O.P. 1916b. Descriptions of some fossil vertebrates found in Texas. Bulletin of the University of Texas 71:3–24.
Hay, O.P. 1920. Descriptions of some Pleistocene Vertebrata found in the United States. Proceedings of the U.S. National Museum 58:83–146.
Hay, O.P. 1924. The Pleistocene of the middle region of North America and its vertebrated animals. Carnegie Institution of Washington, Publication 322:1–374.
Hay, W.P. 1905 ["1904"]. A revision of *Malaclemmys*, a genus of turtles. Bulletin of the U.S. Bureau of Fisheries 24:1–19. [Published Feb 1905].
Haynes, D. and McKown, R.R. 1974. A new species of map turtle (Genus *Graptemys*) from the Guadalupe River system in Texas. Tulane Studies in Zoology and Botany 18(4):143–152.
He, J., Zhou, T., Rao, D.-Q., and Zhang, Y.-P. 2007. [Studies on the molecular identification and phylogeny of *Cuora yunnanensis*.] Chinese Science Bulletin 52(17):2085–2088. [In Chinese]
Hemprich, W. 1820. Grundriss der Naturgeschichte für höhere Lehranstalten. Berlin: August Rucker, 432 pp.
Henderson, J.R. 1912. Preliminary note on a new tortoise from South India. Records of the Indian Museum, Calcutta 7(3):217–218.

Hennessy, E. 2015. The molecular turn in conservation: genetics, pristine nature, and the rediscovery of an extinct species of Galápagos giant tortoise. Annals of the Association of American Geographers 105:87–104.

Hermann, J. 1793. [*Testudo graja*]. In: Schoepff, J.D. Historia Testudinum Iconibus Illustrata. Erlangae: Ioannis Iacobi Palm, 136 pp. [p. 52].

Hermann, J. 1804. Observationes Zoologicae. Opus posthumum edidit Fridericus Ludovicus Hammer. Argentorati [Strasbourg]: A. Koenig, 332 pp.

Herrera, A.L. 1901. Nouvelle nomenclature des êtres organisés et des minéraux. Mexico: Gouvernement Federal, 88 pp.

Hervet, S. 2004. A new genus of 'Ptychogasteridae' (Chelonii, Testudinoidea) from the Geiseltal (Lucetian of Germany). Comptes Rendus Palevol 3:125–132.

Heude, P.M. 1880. Mémoire sur les *Trionyx*. Mémoires concernant l'Histoire Naturelle de l'Empire Chinois 1(1):1–38.

Hewitt, J. 1927. Further descriptions of reptiles and batrachians from South Africa. Records of the Albany Museum 3:371–415.

Hewitt, J. 1931. Descriptions of some African tortoises. Annals of the Natal Museum 6:461–506.

Hewitt, J. 1933a. Descriptions of some new reptiles and a frog from Rhodesia. Occasional Papers of the Rhodesian Museums 1(2):45–50.

Hewitt, J. 1933b. On the Cape species and subspecies of the genus *Chersinella* Gray. Part I. Annals of the Natal Museum 7(2):255–293.

Hewitt, J. 1934. On the Cape species and subspecies of the genus *Chersinella* Gray. Part II. Annals of the Natal Museum 7(3):303–349.

Hewitt, J. 1935. Some new forms of batrachians and reptiles from South Africa. Records of the Albany Museum 4:283–357.

Highfield, A.C. 1990. Tortoises of North Africa; taxonomy, nomenclature, phylogeny and evolution with notes on field studies in Tunisia. Journal of Chelonian Herpetology 1(2):1–56.

Highfield, A.C. and Martin, J. 1989a. *Testudo whitei* Bennett 1836 - new light on an old carapace - Gilbert White's Selborne tortoise re-discovered. Journal of Chelonian Herpetology 1(1):13–22.

Highfield, A.C. and Martin, J. 1989b. Description of a miniature tortoise *Testudo flavominimaralis* n. species from North Africa. In: Highfield, A.C. Introduction to a Conservation Project for the North African Tortoise. London: Tortoise Trust, no pagination [pp. 9–12].

Hirayama, R., Kaneko, N., and Okazaki, H. 2007. *Ocadia nipponica*, a new species of aquatic turtle (Testudines: Testudinoidea: Geoemydidae) from the Middle Pleistocene of Chiba Prefecture, central Japan. Paleontological Research 11:1–19.

Hirth, H.F. 1980. *Chelonia mydas*. Catalogue of American Amphibians and Reptiles 249:1–4.

Hitschfeld, E., Auer, M., and Fritz, U. 2008. Phalangeal formulae and ontogenetic variation of carpal morphology in *Testudo horsfieldii* and *T. hermanni*. Amphibia-Reptilia 29:93–99.

Hodges, K., Donnellan, S., and Georges, A. 2014. Phylogeography of the Australian freshwater turtle *Chelodina expansa* reveals complex relationships among inland and coastal bioregions. Biological Journal of the Linnean Society 111:789–805.

Hodges, K., Donnellan, S., and Georges, A. 2015. Significant genetic structure despite high vagility revealed through mitochondrial phylogeography of an Australian freshwater turtle (*Chelodina longicollis*). Marine and Freshwater Research; doi: 10.1071/MF14102; 12 pp.

Hoffmann, C.K. 1890. Schildkröten. In: Bronn, H.G. (Ed.). Klassen und Ordnungen des Thier–Reichs. Vol. 6, Part 3, Reptilien, Vol. 1. Leipzig: Winter'sche Verlagshandlung, 442 pp.

Hoffmann, M., Hilton-Taylor, C., Angulo, A., Böhm, M., Brooks, T.M., Butchart, S.H.M., Carpenter, K.E., Chanson, J., Collen, B., Cox, N.A., Darwall, W.R.T., Dulvy, N.K., Harrison, L.R., Katariya, V., Pollock, C.M., Quader, S., Richman, N.I., Rodrigues, A.S.L., Tognelli, M.F., Vié, J.-C., Aguiar, J.M., Allen, D.J., Allen, G.R., Amori, G., Ananjeva, N.B., Andreone, F., Andrew, P., Aquino Ortiz, A.L., Baillie, J.E.M., Baldi, R., Bell, B.D., Biju, S.D., Bird, J.P., Black-Decima, P., Blanc, J.J., Bolaños, F., Bolivar-G., W., Burfield, I.J., Burton, J.A., Capper, D.R., Castro, F., Catullo, G., Cavanagh, R.D., Channing, A., Chao, N.L., Chenery, A.M., Chiozza, F., Clausnitzer, V., Collar, N.J., Collett, L.C., Collette, B.B., Cortez Fernandez, C.F., Craig, M.T., Crosby, M.J., Cumberlidge, N., Cuttelod, A., Derocher, A.E., Diesmos, A.C., Donaldson, J.S., Duckworth, J.W., Dutson, G., Dutta, S.K., Emslie, R.H., Farjon, A., Fowler, S., Freyhof, J., Garshelis, D.L., Gerlach, J., Gower, D.J., Grant, T.D., Hammerson, G.A., Harris, R.B., Heaney, L.R., Hedges, S.B., Hero, J.-M., Hughes, B., Hussain, S.A., Icochea M., J., Inger, R.F., Ishii, N., Iskandar, D.T., Jenkins, R.K.B., Kaneko, Y., Kottelat, M., Kovacs, K.M., Kuzmin, S.L., Marca, E.L., Lamoreux, J.F., Lau, M.W.N., Lavilla, E.O., Leus, K., Lewison, R.L., Lichtenstein, G., Livingstone, S.R., Lukoschek, V., Mallon, D.P., McGowan, P.J.K., McIvor, A., Moehlman, P.D., Molur, S., Alonso, A.M., Musick, J.A., Nowell, K., Nussbaum, R.A., Olech, W., Orlov, N.L., Papenfuss, T.J., Parra-Olea, G., Perrin, W.F., Polidoro, B.A., Pourkazemi, M., Racey, P.A., Ragle, J.S., Ram, M., Rathbun, G., Reynolds, R.P., Rhodin, A.G.J., Richards, S.J., Rodríguez, L.O., Ron, S.R., Rondinini, C., Rylands, A.B., Sadovy de Mitcheson, Y., Sanciangco, J.C., Sanders, K.L., Santos-Barrera, G., Schipper, J., Self-Sullivan, C., Shi, Y., Shoemaker, A., Short, F.T., Sillero-Zubiri, C., Silvano, D.L., Smith, K.G., Smith, A.T., Snoeks, J., Stattersfield, A.J., Symes, A.J., Taber, A.B., Talukdar, B.K., Temple, H.J., Timmins, R., Tobias, J.A., Tsytsulina, K., Tweddle, D., Ubeda, C., Valenti, S.V., van Dijk, P.P., Veiga, L.M., Veloso, A., Wege, D.C., Wilkinson, M., Williamson, E.A., Xie, F., Young, B.E., Akçakaya, H.R., Bennun, L., Blackburn, T.M., Boitani, L., Dublin, H.T., Fonseca, G.A.B. da, Gascon, C., Lacher, T.E., Jr., Mace, G.M., Mainka, S.A., McNeely, J.A., Mittermeier, R.A., Reid, G.M., Rodriguez, J.P., Rosenberg, A.A., Samways, M.J., Smart, J., Stein, B.A., and Stuart, S.N. 2010. The impact of conservation on the status of the world's vertebrates. Science 330:1503–1509.

Hofmeyr, M.D., Boycott, R.C., and Baard, E.H.W. 2014. Family Testudinidae. In: Bates, M.F., Branch, W.R., Bauer, A.M., Burger, M., Marais, J., Alexander, G.J., and De Villiers, M. (Eds.). Atlas and Red List of the Reptiles of South Africa, Lesotho and Swaziland. Pretoria: South African Biodiversity Institute, pp. 70–85.

Hofmeyr, M.D., Vamberger, M., Branch, W., Schleicher, A., and Daniels, S.R. 2016. Tortoise (Reptilia, Testudinidae) radiations in Southern Africa from the Eocene to the present. Zoologica Scripta, doi:10.1111/zsc.12223, 12 pp.

Holbrook, J.E. 1836. North American Herpetology; or, a Description of the Reptiles Inhabiting the United States. Ed. 1, Vol. 1. Philadelphia: J. Dobson, 120 pp.

Holbrook, J.E. 1838a. North American Herpetology; or, a Description of the Reptiles Inhabiting the United States. Ed. 1, Vol. 2. Philadelphia: J. Dobson, 125 pp.

Holbrook, J.E. 1838b. North American Herpetology; or, a Description of the Reptiles Inhabiting the United States. Ed. 1, Vol. 3. Philadelphia: J. Dobson, 122 pp.

Holbrook, J.E. 1840. North American Herpetology; or, a Description of the Reptiles Inhabiting the United States. Ed. 1, Vol. 4. Philadelphia: J. Dobson, 126 pp.

Honda, M., Yasukawa, Y., Hirayama, R., and Ota, H. 2002a. Phylogenetic relationships of the Asian box turtles of the genus *Cuora* sensu lato (Reptilia: Bataguridae) inferred from mitochondrial DNA sequences. Zoological Science 19:1305–1312.

Honda, M., Yasukawa, Y., and Ota, H. 2002b. Phylogeny of Eurasian freshwater turtles of the genus *Mauremys* Gray 1869 (Testudines), with special reference to a close affinity of *Mauremys japonica* with *Chinemys reevesii*. Journal of Zoological Systematics and Evolutionary Research 40:195–200.

Hoogmoed, M.S. and Crumly, C.R. 1984. Land tortoise types in the Rijksmuseum van Natuurlijke Historie with comments on nomenclature and systematics (Reptilia: Testudines: Testudinidae). Zoologische Mededelingen, Leiden 58:241–259.

Hoogmoed, M.S., Gassó Miracle, M.E., and van den Hoek Ostende, L.W. 2010. Type specimens of recent and fossil Testudines and Crocodylia in the collections of the Netherlands Centre for Biodiversity Naturalis, Leiden, the Netherlands. Zoologische Mededelingen, Leiden 84(8):159–199.

Hoser, R.T. 2013. An updated taxonomy of the living Alligator Snapping Turtles (*Macrochelys* Gray, 1856), with descriptions of a new tribe, new species and new subspecies. Australasian Journal of Herpetology 16:53–63.

Hoser, R.T. 2014a. A review of the turtle genus *Pelochelys* Gray, 1864 (Trionychidae) including the division into two subgenera and the formal descriptions of two new species. Australasian Journal of Herpetology 22:60–64.

Hoser, R.T. 2014b. A taxonomic revision of the Giant Long-necked Terrapin, *Chelodina expansa* Gray, 1857 species complex and related matters of taxonomy and nomenclature. Australasian Journal of Herpetology 24:3–11.

Hsü, H.F. 1930. Preliminary note on a new variety of *Cyclemys flavomarginata* from China. Contributions from the Biological Laboratory of the Science Society of China, Zoological Series 6(1):1–7.

Hu, Q., Huang, C., Xu, S., Zhang, Q., Ma, N., and Zhong, H. 2013. Primary phylogenies of *Mauremys guangxiensis* and *Mauremys iversoni* inferred from DNA sequences of mitochondrial ND4 gene and nuclear c-mos gene. Sichuan Journal of Zoology 32(2):180–186.

Hubrecht, A.A.W. 1881. On certain tortoises in the collections of the Leyden

Museum. Notes from the Leyden Museum 3:41–50.

Huebinger, R.M., Bickham, J.W., Rhodin, A.G.J., and Mittermeier, R.A. 2013. Mitochondrial DNA corroborates taxonomy of the South American chelid turtles of the genera *Platemys* and *Acanthochelys*. Chelonian Conservation and Biology 12(1):168–171.

Humboldt, A. de. 1819a. Voyage aux Régions Équinoxiales du Nouveau Continent, fait en 1799, 1800, 1801, 1802, 1803 et 1804, par Al. de Humboldt et A. Bonpland. Tome Second. Paris: N. Maze, 381 pp.

Humboldt, A. de. 1819b. Personal Narrative of Travels to the Equinoctial Regions of the New Continent, during the years 1799–1804, by Alexandre de Humboldt and Aimé Bonpland. Vol. IV. [Translated by H.M. Williams]. London: Longman, Hurst, Rees, Orme, and Brown.

Humboldt, A. von. 1820. Reise in die Aequinoctial-Gegenden des neuen Continents in den Jahren 1799, 1800, 1801, 1802, 1803, und 1804. Verfasst von Alexander von Humboldt und A. Bonpland. Dritter Theil. Stüttgart und Tübingen: J.G. Cotta'schen Buchhandlung.

Hummel, K. 1929. Die fossilen weichschildkröten (Trionychia). Eine morphologisch-systematische und stammesgeschichtliche Studie. Geologische und Palaeontologische Abhandlungen 16:359–487.

Hurter, J. 1911. Herpetology of Missouri. Transactions of the Academy of Sciences, St. Louis 20:59–274.

Husson, A.M. and Holthuis, L.B. 1955. The dates of publication of "Verhandelingen over de Natuurlijke Geschiedenis der Nederlandsche Overzeesche Bezittingen" edited by C.J. Temminck. Zoologische Mededelingen, Leiden 34(2):17–24.

Hutchison, J.H. 1991. Early Kinosterninae (Reptilia: Testudines) and their phylogenetic significance. Journal of Vertebrate Paleontology 11:145–167.

Hutchison, J.H. 2006. *Bridgeremys* (Geoemydidae, Testudines) a new genus from the middle Eocene of North America. Fossil Turtle Research 1:63–83.

Ibarra Portillo, R., Henriquez, V., and Greenbaum, E. 2009. Geographic distribution. *Trachemys emolli* (Moll's Slider). Herpetological Review 40(1):111.

ICZN. (see International Commission on Zoological Nomenclature).

Ihering, H. von. 1926. [*Hydraspis lutzi*]. In: Luederwaldt, H. Os chelonios brasileiros. Revista Museo Paulista 14:403–470. [p. 441].

Ihlow, F., Ahmadzadeh, F., Ghaffari, H., Taskavak, E., Hartmann, T., Etzbauer, C., and Rödder, D. 2014. Assessment of genetic structure, habitat suitability and effectiveness of reserves for future conservation planning of the Euphrates soft-shelled turtle *Rafetus euphraticus* (Daudin, 1802). Aquatic Conservation: Marine and Freshwater Ecosystems 24:831–840.

Ihlow, F., Vamberger, M., Flecks, M., Hartmann, T., Cota, M., Makchai, S., Meewattana, P., Dawson, J.E., Kheng, L., Rödder, D., and Fritz, U. 2016. Integrative taxonomy of Southeast Asian snail-eating turtles (Geoemydidae: *Malayemys*) reveals a new species and mitochondrial introgression. PLoS ONE 11:e0153108, 26 pp.

International Commission on Zoological Nomenclature [ICZN]. 1922. Opinion 72. Herrera's zoological formulae. Smithsonian Miscellaneous Collections 73(1):19–22.

International Commission on Zoological Nomenclature [ICZN]. 1956. Direction 56: Completion and in certain cases correction of entries relating to the names of genera belonging to the Classes Pisces, Amphibia and Reptilia made in the Official List of Generic Names in Zoology in the period up to the end of 1936. Opinions and Declarations Rendered by the International Commission on Zoological Nomenclature, Vol. 1, Sec. D, pp. 337–364.

International Commission on Zoological Nomenclature [ICZN]. 1963. Opinion 660. Suppression under the plenary powers of seven specific names of turtles (Reptilia, Testudines). Bulletin of Zoological Nomenclature 20:187–190.

International Commission on Zoological Nomenclature [ICZN]. 1982. Opinion 1236. *Trionyx steindachneri* Siebenrock, 1906 (Reptilia, Testudines): conserved. Bulletin of Zoological Nomenclature 39:258–259.

International Commission on Zoological Nomenclature [ICZN]. 1984. Opinion 1280. Rafinesque, C.S., 1822 "On the turtles of the United States": suppressed. Bulletin of Zoological Nomenclature 41:221–222.

International Commission on Zoological Nomenclature [ICZN]. 1985a. Opinion 1309. *Geoemyda* Gray, 1834, and *Rhinoclemmys* Fitzinger, 1835 (Reptilia, Testudines): conserved. Bulletin of Zoological Nomenclature 42:152–153.

International Commission on Zoological Nomenclature [ICZN]. 1985b. Opinion 1313. *Testudo scripta* Schoepff, 1792 and *Emys cataspila* Günther, 1885 (Reptilia, Testudines): conserved. Bulletin of Zoological Nomenclature 42:160–161.

International Commission on Zoological Nomenclature [ICZN]. 1985c. Opinion 1343. *Kinosternon alamosae* Berry and Legler, 1980 and *Kinosternon oaxacae* Berry and Iverson, 1980 (Reptilia, Testudines): conserved. Bulletin of Zoological Nomenclature 42:266–268.

International Commission on Zoological Nomenclature [ICZN]. 1987. Opinion 1463. De Lacépède, 1788–1789, Histoire Naturelle des Serpens and later editions: rejected as a non-binomial work. Bulletin of Zoological Nomenclature 44(4):265–267.

International Commission on Zoological Nomenclature [ICZN]. 1989. Opinion 1534. *Sternotherus* Gray, 1825 and *Pelusios* Wagler, 1830 (Reptilia, Testudines): conserved. Bulletin of Zoological Nomenclature 46:81–82.

International Commission on Zoological Nomenclature [ICZN]. 1991. Opinion 1659. *Trionyx sinensis* Wiegmann, 1834 (Reptilia, Testudines): specific name conserved. Bulletin of Zoological Nomenclature 48(3):276.

International Commission on Zoological Nomenclature [ICZN]. 1995. Opinion 1800. *Emys* Duméril, 1806 (Reptilia, Testudines): conserved. Bulletin of Zoological Nomenclature 52(1):111–112.

International Commission on Zoological Nomenclature [ICZN]. 1999. International Code of Zoological Nomenclature. Fourth Edition. London: International Trust for Zoological Nomenclature, 306 pp.

International Commission on Zoological Nomenclature [ICZN]. 2005a. Opinion 2104 (Case 3226). Lacepède, B.G.É. de la V., 1788, Histoire Naturelle de Quadrupèdes Ovipares: rejected as a non-binomial work. Bulletin of Zoological Nomenclature 62(1):55.

International Commission on Zoological Nomenclature [ICZN]. 2005b. Opinion 2119 (Case 3277). *Chitra chitra* Nutaphand, 1986 (Reptilia, Testudines): specific name given precedence over *Chitra selenkae* Jaekel, 1911. Bulletin of Zoological Nomenclature 62(2):118–119.

International Commission on Zoological Nomenclature [ICZN]. 2012. Amendment of Articles 8, 9, 10, 21, and 78 of the International Code of Zoological Nomenclature to expand and refine methods of publication. ZooKeys 219:1–10.

International Commission on Zoological Nomenclature [ICZN]. 2013a. Opinion 2315 (Case 3351). *Chelodina rugosa* Ogilby, 1890 (currently *Macrochelodina rugosa*; Reptilia, Testudines): precedence not granted over *Chelodina oblonga* Gray, 1841. Bulletin of Zoological Nomenclature 70(1):57–60.

International Commission on Zoological Nomenclature [ICZN]. 2013b. Opinion 2316 (Case 3463). *Testudo gigantea* Schweigger, 1812 (currently *Geochelone (Aldabrachelys) gigantea*; Reptilia, Testudines): usage of the specific name conserved by maintenance of a designated neotype, and suppression of *Testudo dussumieri* Gray, 1831 (currently *Dipsochelys dussumieri*). Bulletin of Zoological Nomenclature 70(1):61–65.

International Union for the Conservation of Nature [IUCN]. 2001. IUCN Red List Categories and Criteria: Version 3.1. Gland, Switzerland: IUCN Species Survival Commission, 30 pp.

International Union for the Conservation of Nature [IUCN]. 2016. Guidelines for Using the IUCN Red List Categories and Criteria. Version 12. Prepared by the Standards and Petitions Subcommittee. Gland, Switzerland: IUCN Species Survival Commission, 101 pp. http://www.iucnredlist.org/documents/RedListGuidelines.pdf.

Iskandar, D.T. 2004. On the giant Javanese softshelled turtles (Trionychidae). Hamadryad 28:128–130.

Iturralde-Vinent, M.A. 2006. Meso-Cenozoic Caribbean paleogeography: implications for the historical biogeography of the region. International Geology Review 48(9):791–827.

IUCN (see International Union for the Conservation of Nature).

Iverson, J.B. 1977. Geographic variation in the musk turtle, *Sternotherus minor*. Copeia 1977(3):502–517.

Iverson, J.B. 1978. Distributional problems of the genus *Kinosternon* in the American southwest. Copeia 1978(3):476–479.

Iverson, J.B. 1979a. On the validity of *Kinosternon arizonense* Gilmore. Copeia 1979(1):175–177.

Iverson, J.B. 1979b. A taxonomic reappraisal of the yellow mud turtle, *Kinosternon flavescens* (Testudines: Kinosternidae). Copeia 1979(2):212–225.

Iverson, J.B. 1980. *Kinosternon acutum*. Catalogue of American Amphibians and Reptiles 261:1–2.

Iverson, J.B. 1981. Biosystematics of the *Kinosternon hirtipes* species group (Testudines: Kinosternidae). Tulane Studies in Zoology and Botany 23:1–74.

Iverson, J.B. 1986. A Checklist with Distribution Maps of the Turtles of the World. Richmond, IN: Privately Printed, 283 pp.

Iverson, J.B. 1991. Phylogenetic hypotheses for the evolution of modern

kinosternine turtles. Herpetological Monographs 4:1–27.

Iverson, J.B. 1992. A Revised Checklist with Distribution Maps of the Turtles of the World. Richmond, IN: Privately printed, 363 pp.

Iverson, J.B. 1998. Molecules, morphology, and mud turtle phylogenetics (family Kinosternidae). Chelonian Conservation and Biology 3(1):113–117.

Iverson, J.B. and McCord, W.P. 1992a. A new Chinese eyed turtle of the genus *Sacalia* (Batagurinae: Testudines). Proceedings of the Biological Society of Washington 105(3):426–432.

Iverson, J.B. and McCord, W.P. 1992b. A new subspecies of *Cuora galbinifrons* (Testudines: Batagurinae) from Hainan Island, China. Proceedings of the Biological Society of Washington 105(3):433–439.

Iverson, J.B. and McCord, W.P. 1994. Variation in east Asian turtles of the genus *Mauremys* (Bataguridae; Testudines). Journal of Herpetology 28(2):178–187.

Iverson, J.B. and McCord, W.P. 1997. A new species of *Cyclemys* (Testudines: Bataguridae) from southeast Asia. Proceedings of the Biological Society of Washington 110(4):629–639.

Iverson, J.B, Ernst, C.H., Gotte, S., and Lovich, J.E. 1989. The validity of *Chinemys megalocephala* (Testudines: Batagurinae). Copeia 1989:494–498.

Iverson, J.B., Kimerling, J., Kiester, A.R., Hughes, L.E., and Nicolello, J. 2001a. Turtles of the World. [http://emys.geo.orst.edu].

Iverson, J.B., Thomson, S.A., and Georges, A. 2001b. Validity of taxonomic changes for turtles proposed by Wells and Wellington. Journal of Herpetology 35:361–368.

Iverson, J.B., Spinks, P.Q., Shaffer, H.B., McCord, W.P., and Das, I. 2001c. Phylogenetic relationships among the Asian tortoises of the genus *Indotestudo* (Reptilia: Testudines: Testudinidae). Hamadryad 26(2):272–275.

Iverson, J.B., Brown, R.M., Akre, T.S., Near, T.J., Le, M., Thomson, R.C., and Starkey, D.E. 2007. In search of the tree of life for turtles. In: Shaffer, H.B., FitzSimmons, N.N., Georges, A., and Rhodin, A.G.J. (Eds.). Defining Turtle Diversity: Proceedings of a Workshop on Genetics, Ethics, and Taxonomy of Freshwater Turtles and Tortoises. Chelonian Research Monographs 4:85–106.

Iverson, J.B., Meylan, P.A., and Seidel, M.E. 2008. Testudines—Turtles. In: Crother, B.I. (Ed.). Scientific and standard English names of amphibians and reptiles of North America north of Mexico, with comments regarding confidence in our understanding. Sixth Edition. Society for the Study of Amphibians and Reptiles, Herpetological Circulars No. 37, pp. 67–74.

Iverson, J.B., Le, M., and Ingram, C. 2013. Molecular phylogenetics of the mud and musk turtle family Kinosternidae. Molecular Phylogenetics and Evolution 69(3):929–939.

Jackson, D.R. 1995. Systematics of the *Pseudemys concinna–floridana* complex (Testudines: Emydidae): an alternative interpretation. Chelonian Conservation and Biology 1(4):329–333.

Jackson, J.T., Starkey, D.E., Guthrie, R.W., and Forstner, M.R.J. 2008. A mitochondrial DNA phylogeny of extant species of the genus *Trachemys* with resulting taxonomic implications. Chelonian Conservation and Biology 7(1):131–135.

Jackson, T.G., Jr., Nelson, D.H., and Morris, A.B. 2012. Phylogenetic relationships in the North American genus *Pseudemys* (Emydidae) inferred from two mitochondrial genes. Southeastern Naturalist 11(2):297–310.

Jaekel, O. 1911. Die fossilen Schildkrötenreste von Trinil. In: Selenka, M.L. and Blanckenhorn, M. (Eds.). Die Pithecanthropus-Schichten auf Java. Geologische und Paläontologische Ergebnisse der Trinil-Expedition (1907 und 1908). Leipzig: Wilhelm Engelmann, pp. 75–81.

Jarocki, F.P.N. 1822. Zoologia czyly zwierzetopismo ogolne podlug naynowszego systematu. Vol. 3. Warsaw. [in Polish]

Jaruthanin, K. 2002. Talui thin pla hayak. [Salween: the dangerous river]. Fish Zone, Bangkok 3(19):27–40. [In Thai]

Javanbakht, H., Ihlow, F., Jablonski, D., Široky, P., Fritz, U., Rödder, D., Sharifi, M., and Mikulícek, P. 2017. Genetic diversity and Quaternary range dynamics in Iranian and Transcaucasian tortoises. Biological Journal of the Linnean Society 121:627–640.

Jensen, E.L., Govindarajulu, P., and Russello, M.A. 2014a. When the shoe doesn't fit: applying conservation unit concepts to western painted turtles at their northern periphery. Conservation Genetics 15:261–274.

Jensen, E.L., Govindarajulu, P., Madsen, J., and Russello, M.A. 2014b. Extirpation by introgression? Genetic evidence reveals hybridization between introduced *Chrysemys picta* and endangered Western Painted Turtles (*C. p. bellii*) in British Columbia. Herpetological Conservation and Biology 9:342–353.

Jensen, E.L., Govindarajulu, P., and Russello, M.A. 2015a. Genetic assessment of taxonomic uncertainty in painted turtles. Journal of Herpetology 49:314–324.

Jensen, E.L., Tapia, W., Caccone, A., and Russello, M.A. 2015b. Genetics of a head-start program to guide conservation of an endangered Galápagos tortoise (*Chelonoidis ephippium*). Conservation Genetics 16:823–832.

Jerdon, T.C. 1870. Notes on Indian herpetology. Proceedings of the Asiatic Society of Bengal 1870(3):66–85.

Jesu, R., Piombo, R., Salvidio, S., Lamagni, L., Ortale, S., and Genta, P. 2004. Un nuovo taxon di testuggine palustre endemico della Liguria occidentale: *Emys orbicularis ingauna* n. ssp. (Reptilia, Emydidae). Annali del Museo Civico di Storia Naturale "G. Doria" 96:133–192. [in Italian]

Johnston, C.S. 1937. Osteology of *Bysmachelys canyonensis*, a new turtle from the Pliocene of Texas. Journal of Geology 45:439–447.

Jones, P.J. 1994. Biodiversity in the Gulf of Guinea: an overview. Biodiversity and Conservation 3:772–785.

Joyce, W.G. and Bourque, J.R. 2016. A review of the fossil record of turtles of the clade Pan-Kinosternoidea. Bulletin of the Peabody Museum of Natural History 57:57–95.

Joyce, W.G., Parham, J.F., and Gauthier, J.A. 2004. Developing a protocol for the conversion of rank-based taxon names to phylogenetically defined clade names, as exemplified by turtles. Journal of Paleontology 78:989–1013.

Joyce, W.G., Petričević, A., Lyson, T.R., and Czaplewski, N.J. 2012. A new Box Turtle from the Miocene/Pliocene boundary (Latest Hemphillian) of Oklahoma and a refined chronology of box turtle diversification. Journal of Paleontology 86(1):177–190.

Kaiser, H. 2014. Best practices in herpetological taxonomy: errata and addenda. Herpetological Review 45:257–268.

Kaiser, H., Crother, B.I., Kelly, C.M.R., Luiselli, L., O'Shea, M., Ota, H., Passos, P., Schleip, W.D., and Wüster, W. 2013. Best practices: in the 21st Century, taxonomic decisions in herpetology are acceptable only when supported by a body of evidence and published via peer-review. Herpetological Review 44:8–23.

Kanberg, H. 1924. Über eine neue Schildkröte aus Kamerun. Zoologischer Anzeiger 60:195–197.

Kanberg, H. 1930. Eine neue Schildkröte aus Costa Rica. Zoologischer Anzeiger 88:161–162.

Karl, H.-V. and Paust, E. 2014. Die Geschichte der Europäischen Sumpfschildkröte in Deutschland 2: Checkliste zur prähistorischen Verbreitung der Europäischen Sumpfschildkröte (*Emys orbicularis* L., 1758) in Thüringen. Mainzer Naturwissenschaftliches Archiv 51:145–165.

Karl, H.-V. and Tichy, G. 2002. Erstnachweis von *Testudo hermanni* Gmelin 1789 aus dem Pleistozän Zentraleuropas nördlich der Alpen (Testudines; Testudinidae). Revue de Paléobiologie 21:781–787.

Karl, S.A. and Bowen, B.W. 1999. Evolutionary significant units versus geopolitical taxonomy: molecular systematics of an endangered sea turtle (genus *Chelonia*). Conservation Biology 13:990–999.

Khosatzky, L.I. 1987. Mesontology–a particular direction in the study of evolution. Ezhegodnik Vsesoyuznogo Paleontologicheskogo Obshchestva 30:50–66. [In Russian]

Khosatzky, L.I. and Mlynarski, M. 1966. *Agrionemys*—nouveau genre de tortues terrestres (Testudinidae). Bulletin de l'Académie Polonaise des Sciences. Cl. 2. Série des Sciences Biologiques 14:123–125.

Kimble, S.J.A., Rhodes, O.E., Jr., and Williams, R.N. 2014. Unexpectedly low rangewide population genetic structure of the imperiled eastern box turtle *Terrapene c. carolina*. PLoS ONE 9:e92274.

Kindler, C., Branch, W.R., Hofmeyr, M.D., Maran, J., Široký, P., Vences, M., Harvey, J., Hauswaldt, J.S., Schleicher, A., Stuckas, H., and Fritz, U. 2012. Molecular phylogeny of African hinge-back tortoises (*Kinixys*): implications for phylogeography and taxonomy (Testudines: Testudinidae). Journal of Zoological Systematics and Evolutionary Research 50(3):192–201.

Kindler, C., Moosig, M., Branch, W.R., Harvey, J., Kehlmaier, C., Nagys, Z.T., Prokop, H., Široký, P., and Fritz, U. 2016. Comparative phylogeographies of six species of hinged terrapins (*Pelusios* spp.) reveal discordant patterns and unexpected differentiation in the *P. castaneus* / *P. chapini* complex and *P. rhodesianus*. Biological Journal of the Linnaean Society 117:305–321.

Kirsch, J.A.W. and Mayer, G.C. 1998. The platypus is not a rodent: DNA hybridization, amniote phylogeny and the palimpsest theory. Philosophical Transactions of the Royal Society of London 353(B):1221–1237.

Klein, J.T. 1751. Quadrupedum Dispositio Brevisque Historia Naturalis. Lipsiae: B.C. Breitkopfium, 127 pp.

Klein, J.T. 1760. [Testudinata]. In: Behn, F.D. (Transl.). Jakob Theodor Kleins Classification und Kurze Geschichte der Vierfüssigen Thiere. Lübeck: Jonas

Schmidt, 381 pp.

Kou, Z. 1989. *Cyclemys* from Yunnan, a description of a new species and a new record to China (Testudinata: Emydidae). In: Matsui, M., Hikida, T. and Goris, R.C. (Eds.). Current Herpetology in East Asia. Proceedings of the Second Japan–China Herpetological Symposium. Herpetological Society of Japan 1989:193–197.

Kraus, F. 2009. Alien Reptiles and Amphibians. A Scientific Compendium and Analysis. Springer Verlag, 563 pp.

Krefft, G. 1876. Notes on Australian animals in New Guinea with description of a new species of fresh water tortoise belonging to the genus *Euchelymys* (Gray). Annali del Museo Civico di Storia Naturale Giacomo Doria (1)8:390–394.

Krenz, J.G., Naylor, G.J.P., Shaffer, H.B., and Janzen, F.J. 2005. Molecular phylogenetics and evolution of turtles. Molecular Phylogenetics and Evolution 37:178–191.

Krysko, K.L., Burgess, J.P., Rochford, M.R., Gillette, C.R., Cueva, D., Enge, K.M., Somma, L.A., Stabile, J.L., Smith, D.C., Wasilewski, J.A., Kieckhefer, G., III, Granatosky, M.C., and Nielsen, S.V. 2011. Verified non-indigenous amphibians and reptiles in Florida from 1863 through 2010: outlining the invasion process and identifying invasion pathways and stages. Zootaxa 3028:1–64.

Kuchling, G. 1988. Gonadal cycles of the Western Australian long-necked turtles *Chelodina oblonga* and *Chelodina steindachneri* (Chelonia: Chelidae). Records of the Western Australian Museum 14:189–198.

Kuchling, G. 2010. Taxonomy and nomenclature of the longneck turtle (genus *Chelodina*) from south-western Australia. Records of the Western Australian Museum 25:449–454.

Kuchling, G., Rhodin, A.G.J., Ibarrondo, B.R., and Trainor, C.R. 2007. A new subspecies of the snakeneck turtle *Chelodina mccordi* from Timor-Leste (East Timor) (Testudines: Chelidae). Chelonian Conservation and Biology 6(2):213–222.

Kuhl, H. 1820. Beiträge zur Kenntniss der Amphibien. In: Kuhl, H. Beiträge zur Zoologie und vergleichenden Anatomie. Erste Abtheilung. Beiträge zur Zoologie. Frankfurt: Hermannschen Buchhandlung, pp. 75–132.

Kuhn, O. 1960. Die Familien der fossilen Amphibien und Reptilien. Bericht der Naturforschenden Gesellschaft in Bamberg 37:20–52.

Kundu, S., Laskar, B.A., Venkataraman, K., Banerjee, D., and Kumar, V. 2016. DNA barcoding of *Nilssonia* congeners corroborates existence of wild *N. nigricans* in northeast India. Mitochondrial DNA Part A: Mapping, Sequencing and Analysis 27:2753–2756.

Kurck, C. 1917. Den forntida utbredningen af kärrsköldpaddan *Emys orbicularis* (Lin.) i Sverige, Danmark och angränsande länder. [The ancient distribution of the pond turtle *Emys orbicularis* (Lin.) in Sweden, Denmark and adjacent countries]. Lunds Universitets Årsskrift (N.F.) (2)13:1–129. [In Swedish]

Lacepède, B.G.E. de. 1788. Histoire Naturelle des Quadrupèdes Ovipares et des Serpens. Tome Premier. Paris: Hôtel de Thou, 651 pp. [octavo edition, 8º].

Lamb, T., Avise, J.C., and Gibbons, J.W. 1989. Phylogeographic patterns in mitochondrial DNA of the desert tortoise (*Xerobates agassizii*), and evolutionary relationships among the North American gopher tortoises. Evolution 43:76–87.

Lapparent de Broin, F. de. 2000a. Les chéloniens de Sansan. Mémoires du Muséum national d'Histoire Naturelle 183:219–261.

Lapparent de Broin, F. de. 2000b. African chelonians from the Jurassic to the present. A preliminary catalog of the African fossil chelonians. Palaeontologica Africana 36:43–82.

Lapparent de Broin, F. de, Bour, R., Parham, J.F., and Perälä, J. 2006a. *Eurotestudo*, a new genus for the species *Testudo hermanni* Gmelin, 1789 (Chelonii, Testudinidae). Comptes Rendus Palevol 5:803–811.

Lapparent de Broin, F. de, Bour, R., and Perälä, J. 2006b. Morphological definition of *Eurotestudo* (Testudinidae, Chelonii): second part. *Eurotestudo* (Chelonii, Testudinidae), définition, approche morphologique. Deuxième partie. Annales de Paléontologie 92:325–357.

Lataste, F. 1881. Diagnose d'une nouvelle tortue *Testudo graeca bettai*, n. sbsp. Le Naturaliste (1)3:396.

Lataste, F. 1886. Description d'une tortue nouvelle du Haut Sénégal (*Homopus nogueyi*). Le Naturaliste (2)8:286–287.

Lataste, F. 1888. Description d'une tortue nouvelle originaire du Haut-Sénégal (*Cinixys dorri*, n. sp.). Le Naturaliste (2)10:164–166.

Latreille, P.A. 1800. Histoire naturelle des Salamandres de France, précédée d'un tableau méthodique des autres Reptiles indigènes. Paris: Imprimerie de Crapelet, 61 pp.

Latreille, P.A. 1801. Histoire Naturelle des Reptiles. In: Sonnini, C.S. and Latreille, P.A. Histoire Naturelle des Reptiles, avec figures dessinées d'après nature. Tome Premier. Première Partie. Quadrupèdes et Bipèdes Ovipares. Paris: Imprimerie de Crapelet, 280 pp.

Latreille, P.A. 1825. Familles Naturelles du Règne Animal, exposées succinctement et dans un ordre analytique, avec l'indication de leurs genres. Paris: Baillière, 570 pp.

Laurent, R.F. 1956. Contribution à l'herpétologie de la région des grands lacs de l'Afrique centrale. I. Généralités. II. Chéloniens. III. Ophidiens. Annales du Musée Royal du Congo Belge, Tervuren, Sciences Zoologiques 48:5–390.

Laurent, R.F. 1965. A contribution to the knowledge of the genus *Pelusios* (Wagler). Annales du Musée Royal de l'Afrique Centrale, Sciences Zoologiques, Tervuren 135:1–33.

Laurin, M. and Reisz, R.R. 1995. A reevaluation of early amniote phylogeny. Zoological Journal of the Linnean Society 113:165–223.

Le, M. and McCord, W.P. 2008. Phylogenetic relationships and biogeographical history of the genus *Rhinoclemmys* Fitzinger, 1835 and the monophyly of the turtle family Geoemydidae (Testudines: Testudinoidea). Zoological Journal of the Linnean Society 153:751–767.

Le, M. and Pritchard, P.C.H. 2009. Genetic variability of the critically endangered softshell turtle, *Rafetus swinhoei*: a preliminary report. Proceedings of the First Vietnamese National Symposium on Reptiles and Amphibians, pp. 84–92.

Le, M., Raxworthy, C.J., McCord, W.P., and Mertz, L. 2006. A molecular phylogeny of tortoises (Testudines: Testudinidae) based on mitochondrial and nuclear genes. Molecular Phylogenetics and Evolution 40:517–531.

Le, M., McCord, W.P., and Iverson, J.B. 2007. On the paraphyly of the genus *Kachuga* (Testudines: Geoemydidae). Molecular Phylogenetics and Evolution 45:398–404.

Le, M., Reid, B.N., McCord, W.P., Naro-Maciel, E., Raxworthy, C.J., Amato, G., and Georges, A. 2013. Resolving the phylogenetic history of the short-necked turtles, genera *Elseya* and *Myuchelys* (Testudines: Chelidae) from Australia and New Guinea. Molecular Phylogenetics and Evolution 68:251–258.

Le, M., Duong, H.T., Dinh, L.D., Nguyen, T.Q., Pritchard, P.C.H., and McCormack, T. 2014. A phylogeny of softshell turtles (Testudines: Trionychidae) with reference to the taxonomic status of the critically endangered, giant softshell turtle, *Rafetus swinhoei*. Organisms, Diversity and Evolution 14:279-293.

Le, T.B., Le, Q.H., Tran, M.L., Phan, T.H., Phan, M.T., Tran, T.T.H., Pham, T.T., Nguyen, D.T., Nong, V.H., Phan, V.C., Dinh, D.K., Truong, N.H., and Ha, D.D. 2010. Comparative morphological and DNA analysis of specimens of giant freshwater soft-shelled turtle in Vietnam related to Hoan Kiem turtle. Tạp Chí Công Nghệ Sinh Học [Journal of Biotechnology, Vietnamese Academy of Science and Technology] 8(3A):949–954.

Le Conte, J. 1830. Description of the species of North American tortoises. Annals of the Lyceum of Natural History, New York 3:91–131.

Le Conte, J. 1854. Description of four new species of *Kinosternum*. Proceedings of the Academy of Natural Sciences, Philadelphia 7:180–190.

Le Conte, J. 1860. Description of two new species of tortoises. Proceedings of the Academy of Natural Sciences, Philadelphia 11(1859)[1860]:4–7.

Legler, J.M. 1959. A new tortoise, genus *Gopherus*, from north-central Mexico. University of Kansas Publications of the Museum of Natural History 11(5):335–343.

Legler, J.M. 1960. A new subspecies of slider turtle (*Pseudemys scripta*) from Coahuila, Mexico. University of Kansas Publications of the Museum of Natural History 13(3):73–84.

Legler, J.M. 1965. A new species of turtle, genus *Kinosternon*, from Central America. University of Kansas Publications of the Museum of Natural History 15(13):617–625.

Legler, J.M. 1981. The taxonomy, distribution, and ecology of Australian freshwater turtles (Testudines: Pleurodira: Chelidae). National Geographic Society Research Reports 13:391–404.

Legler, J.M. 1990. The genus *Pseudemys* in Mesoamerica: taxonomy, distribution and origins. In: Gibbons, J.W. (Ed.). Life History and Ecology of the Slider Turtle. Washington, DC: Smithsonian Institution Press, pp. 82–105.

Legler, J.M. and Cann, J. 1980. A new genus and species of chelid turtle from Queensland, Australia. Contributions in Science, Natural History Museum of Los Angeles County 324:1–18.

Legler, J.M. and Vogt, R.C. 2013. The Turtles of Mexico: Land and Freshwater Forms. Berkeley: University of California Press, 416 pp.

Legler, J.M. and Webb, R.G. 1970. A new slider turtle (*Pseudemys scripta*) from Sonora, Mexico. Herpetologica 26(2):157–168.

Lehr, E., Fritz, U., and Obst, F.J. 1998. *Cuora galbinifrons picturata* subsp. nov., eine neue Unterart der Hinterindischen Scharnierschildkröte. Herpetofauna

20(113):5–11.

Leidy, J. 1868. Notice of some vertebrate remains from Harden Co., Texas. Proceedings of the Academy of Natural Sciences, Philadelphia 1868:174–176.

Leidy, J. 1889. Fossil vertebrates from Florida. Proceedings of the Academy of Natural Sciences, Philadelphia 1889:96–97.

Lenk, P., Fritz, U., Joger, U., and Wink, M. 1999. Mitochondrial phylogeography of the European pond turtle, *Emys orbicularis* (Linnaeus 1758). Molecular Ecology 8:1911–1922.

Lescure, J. and Fretey, J. 1976 ("1975"). Etude taxinomique de *Phrynops (Batrachemys) nasutus* (Schweigger) (Testudinata, Chelidae). Bulletin du Muséum Nationale d'Histoire Naturelle, Paris, Zoologie 239(1975):1317–1328.

Lesson, R.P. 1830. Centurie Zoologique, ou Choix d'Animaux Rares, Nouveaux ou Imparfaitement Connus. Paris: F.G. Levrault, 235 pp.

Lesson, R.P. 1831a. Catalogue des Reptiles qui font partie d'une Collection zoologique recueillie dans l'Inde continentale ou en Afrique, et apportée en France par M. Lamare-Piquot. Bulletin des Sciences Naturelles et Géologiques, Paris 25(2):119–123.

Lesson, R.P. 1831b. Reptiles. In: Bélanger, C. (Ed.). Voyage aux Indes-Orientales, par le Nord de l'Europe, les Provinces du Caucase, la Géorgie, l'Arménie et la Perse, suivi de Détails topographiques, statistiques et autres sur le Pégou, les Iles de Java, de Maurice et de Bourbon, sur le Cap de Bonne-Espérance et Sainte-Hélène, pendant les Années 1825, 1826, 1827, 1828 et 1829. Zoologie. Paris: A. Bertrand, pp. 289–336.

Lesson, R.P. 1832. Illustrations de Zoologie, ou Recueil de figures d'Animaux peintes d'après nature. Pl. 7. Paris: A. Bertrand, 60 pls.

LeSueur, C.A. 1817. An account of an American species of tortoise, not noticed in the systems. Journal of the Academy of Natural Sciences, Philadelphia 1:86–88.

LeSueur, C.A. 1827. Note sur deux espèces de tortues, du genre *Trionyx* de M. Geoffroy-Saint-Hilaire. Mémoires du Muséum d'Histoire Naturelle, Paris 15:257–268.

Leven, B. 1764. Natuurlyke Historie of uitvoerige beschryving der Dieren, Planten en Mineraalen, volgens het samenstel van den Heer Linnaeus. Met naauwkeurige Afbeeldingen. Eerste deels, zesde stuk. Dieren. Amsterdam: F. Houttuyn, 558 pp.

Li, J., Lu, Y., Zan, J., and Nie, L. 2017. Complete mitochondrial genome of the *Cyclemys pulchristriata* (Chelonia: Geoemydidae). Mitochondrial DNA Part B: Resources 2:403–404.

Li, W., Zhang, X.C., Zhao, J., Shi, Y., and Zhu, X.P. 2015. Complete mitochondrial genome of *Cuora trifasciata* (Chinese three-striped box turtle), and a comparative analysis with other box turtles. Gene 555:169–177.

Li, Z.Y. 1958. Report on the investigation of reptiles of Hainan Island. Chinese Journal of Zoology 2(4):234–239.

Lichtenstein, H. 1856. Nomenclator reptilium et amphibiorum Musei Zoologici Berolinensis. Namenverzeichniss der in der zoologischen Sammlung der Königlichen Universität zu Berlin ausgestellten Arten von Reptilien und Amphibien nach ihren Ordnungen, Familien und Gattungen. Berlin: Königlichen Akademie der Wissenschaften, 48 pp.

Lidth de Jeude, T.W. van. 1893. On a new species of the genus *Testudo*. Notes from the Leyden Museum 15:312–313.

Liebing, N., Praschag, P., Gosh, R., Vasudevan, K., Rashid, S.M.A., Rao, D.Q., Stuckas, H., and Fritz, U. 2012. Molecular phylogeny of the softshell turtle genus *Nilssonia* revisited, with first records of *N. formosa* for China and wild-living *N. nigricans* for Bangladesh. Vertebrate Zoology 62:261–272.

Lindeman, P.V. 2009. On the type locality and type specimen of *Testudo geographica* LeSueur 1817. Chelonian Conservation and Biology 8(1):95–98.

Lindeman, P.V. 2013. The Map Turtle and Sawback Atlas: Ecology, Evolution, Distribution, and Conservation. Norman, OK: University of Oklahoma Press, 460 pp.

Lindeman, P.V., Louque, I., Huntzinger, C., Lyons, E., Shively, S.H., and Selman, W. 2015. Eye color and chin pattern in the turtle *Graptemys pseudogeographica* in the Calcasieu river drainage of Louisiana, with comparison to adjacent drainages. Herpetological Review 46:179–185.

Lindholm, W.A. 1906. Beschreibung einer neuen Schildkrötenart aus Deutsch-Sudwestafrika nebst Bemerkungen über die Gattung *Homopus* D. et B. Jahrbücher des Nassauischen Vereins für Naturkunde, Wiesbaden 59:345–351.

Lindholm, W.A. 1929. Revidiertes Verzeichnis der Gattungen der rezenten Schildkröten nebst Notizen zur Nomenklatur einiger Arten. Zoologischer Anzeiger 81:275–295.

Lindholm, W.A. 1931. Über eine angebliche *Testudo*-Art aus Südchina. Zoologischer Anzeiger 97:27–30.

Link, H.F. 1807. Beschreibung der Naturalien-Sammlung der Universität zu Rostock, Volume 2. Rostock: Adlers Erben, 100 pp.

Linnaeus, C. [Linné, C. von]. 1758. Systema Naturae, per Regna Tria Naturae, secundum Classes, Ordines, Genera, Species, cum Characteribus, Differentiis, Synonymis, Locis. Tomus I. Editio Decima, Reformata. [10th Ed.]. Holmia [Stockholm]: Laurentii Salvii, 824 pp.

Linnaeus, C. [Linné, C. von]. 1766. Systema Naturae. Editio Duodecima, Reformata. Tomus I, Pars I, Regnum Animale. [12th Ed.]. Holmia [Stockholm]: Laurentii Salvii, 532 pp.

Loire, E., Chiari, Y., Bernard, A., Cahais, V., Romiguier, J., Nabholz, B., Lourenço, J.M., and Galtier, N. 2013. Population genomics of the endangered Galapagos tortoise. Genome Biology 14:R136.

Lortet, L. 1883. Poissons et reptiles du lac de Tibériade et de quelques autres parties de la Syrie. Archives du Muséum d'Histoire Naturelle de Lyon 3:99–194.

Lourenço, J.M., Claude, J., Galtier, N., and Chiari, Y. 2012. Dating cryptodiran nodes: origin and diversification of the turtle superfamily Testudinoidea. Molecular Phylogenetics and Evolution 62(1):496–507.

Loveridge, A. 1923. Notes on East African tortoises collected 1921–1923, with the description of a new species of soft land tortoise. Proceedings of the Zoological Society of London 1923:923–933.

Loveridge, A. 1934. Australian reptiles in the Museum of Comparative Zoology, Cambridge, Massachusetts. Bulletin of the Museum of Comparative Zoology 77:243–383.

Loveridge, A. 1935. Scientific results of an expedition to rain forest regions in eastern Africa. I. New reptiles and amphibians from East Africa. Bulletin of the Museum of Comparative Zoology 79:1–19.

Loveridge, A. and Williams, E.E. 1957. Revision of the African tortoises and turtles of the suborder Cryptodira. Bulletin of the Museum of Comparative Zoology 115(6):163–557.

Lovich, J.E. and McCoy, C.J. 1992. Review of the *Graptemys pulchra* group (Reptilia: Testudines: Emydidae), with descriptions of two new species. Annals of the Carnegie Museum 61(4):293–315.

Luederwaldt, H. 1926. Os chelonios brasileiros. Revista Museo Paulista 14:403–470.

Luján, A.H., Delfino, M., Robles, J.M., and Alba, D.M. 2016. The Miocene tortoise *Testudo catalaunica* Bataller, 1926, and a revised phylogeny of extinct species of genus *Testudo* (Testudines: Testudinidae). Zoological Journal of the Linnean Society 178:312–342.

Luo, B. and Zong, Y. 1988. A new species of *Cuora—Cuora aurocapitata*. Acta Herpetologica Sinica 3:13–15.

Ly, T., Hoang, H.D., and Stuart, B.L. 2011. Market turtle mystery solved in Vietnam. Biological Conservation 144:1767–1771.

Ly, T., Hoang, H.D., and Stuart, B.L. 2013. Occurrence of the Endangered Keeled Box Turtle, *Cuora mouhotii*, in southern Vietnam. Chelonian Conservation and Biology 12(1):184–187.

Lydekker, R. 1880. A sketch of the history of the fossil Vertebrata of India. Journal of the Asiatic Society of Bengal 49(2):8–40.

Lydekker, R. 1885. Indian Tertiary and post-Tertiary Vertebrata. Siwalik and Nerbada Chelonia. Memoirs of the Geological Survey of India, Palaeontologia Indica (10)3:155–208.

Lydekker, R. 1886. On a new emydine chelonian from the Pliocene of India. Quarterly Journal of the Geological Society of London 42:540–541.

Lydekker, R. 1889. Catalogue of the Fossil Reptilia and Amphibia in the British Museum. Part III. Chelonia. London: British Museum of Natural History, 239 pp.

Manaças, S. 1956. Anfíbios e répteis das ilhas de São Tomé e do Príncipe e do ilhéu das Rolas. Conferência Internacional dos Africanistas Ocidentais, Lisboa, Vol. 4, pp. 179–192.

Maran, J. 1996. L'émyde lépreuse, *Mauremys leprosa* (Schweigger, 1812). CITS Bulletin 7:16–43.

Marrone, F., Sacco, F., Arizza, V., and Arculeo, M. 2016. Amendment of the type locality of the endemic Sicilian pond turtle *Emys trinacris* Fritz et al. 2005, with some notes on the highest altitude reached by the species (Testudines, Emydidae). Acta Herpetologica 11(1):59–61.

Martin, B.T., Bernstein, N.P., Birkhead, R.D., Koukl, J.F., Mussmann, S.M., and Placyk, J.S., Jr. 2013. Sequence-based molecular phylogenetics and phylogeography of the American box turtles (*Terrapene* spp.) with support from DNA barcoding. Molecular Phylogenetics and Evolution 68(1):119–134.

Martin, B.T., Bernstein, N.P., Birkhead, R.D., Koukl, J.F., Mussmann, S.M., and

Placyk, J.S., Jr. 2014. On the reclassification of the *Terrapene* (Testudines: Emydidae): a response to Fritz & Havaš. Zootaxa 3835:292–294.

Mashkaryan, V., Vamberger, M., Arakelyan, M., Hezaveh, N., Carretero, M.A., Corti, C., Harris, D.J., and Fritz, U. 2013. Gene flow among deeply divergent mtDNA lineages of *Testudo graeca* (Linnaeus, 1758) in Transcaucasia. Amphibia-Reptilia 34:337–351.

Maslin, T.P. 1959. An annotated check list of the amphibians and reptiles of Colorado. University of Colorado Studies Series in Biology 6:1–98.

Mayer, F.J.C. 1849. System des Thier-Reiches oder Eintheilung der Thiere nach einem Principe. Verhandlungen des Naturhistorischen Vereins der Preussischen Rheinlande und Westphalens 6:169–210.

Mayer, R. 1992. Europäische Landschildkröten. Leben – Haltung – Zucht. Kempten: Agrar Verlag Allgäu, 127 pp.

Mazuch, T., Trailin, V., Fritz, U., and Vamberger, M. 2016. Senegal Flapshell Turtle (*Cyclanorbis senegalensis*) in Ethiopia (Testudines: Trionychidae). Amphibian and Reptile Conservation 10(2):1–5.

McAllister, C.T., Forstner, M.R.J., and Fuller, J.P. 2007. Second report of the southern painted turtle, *Chrysemys dorsalis* (Testudines: Emydidae), from Texas, with comments on its genetic relationship to other populations. Texas Journal of Science 59(2):155–160.

McClusky, E.M., Mockford, S.W., Sands, K., Herman, T.B, Johnson, G., and Gonser, R.A. 2016. Population genetic structure of Blanding's turtles (*Emydoidea blandingii*) in New York. Journal of Herpetology 50:70–76.

McCord, R.D. 2016. What is *Kinosternon arizonense*? Historical Biology 28:310–315.

McCord, W.P. 1997. *Mauremys pritchardi*, a new batagurid turtle from Myanmar and Yunnan, China. Chelonian Conservation and Biology 2(4):555–562.

McCord, W.P. and Iverson, J.B. 1991. A new box turtle of the genus *Cuora* (Testudines: Emydidae) with taxonomic notes and a key to the species. Herpetologica 47(4):407–420.

McCord, W.P. and Iverson, J.B. 1992. A new species of *Ocadia* (Testudines: Bataguridae) from Hainan Island, China. Proceedings of the Biological Society of Washington 105(1):13–18.

McCord, W.P. and Iverson, J.B. 1994. A new species of *Ocadia* (Testudines: Batagurinae) from southwestern China. Proceedings of the Biological Society of Washington 107(1):52–59.

McCord, W.P. and Joseph-Ouni, M. 2007a. A new species of *Chelodina* (Testudines: Chelidae) from southwestern New Guinea (Papua, Indonesia). Reptilia (GB) (Barcelona) 52:47–52.

McCord, W.P. and Joseph-Ouni, M. 2007b. A new genus of Australian longneck turtle (Testudines: Chelidae) and a new species of *Macrochelodina* from the Kimberley region of Western Australia (Australia). Reptilia (GB) (Barcelona) 55:56–64.

McCord, W.P. and Philippen, H.-D. 1998. A new subspecies of box turtle, *Cuora amboinensis lineata*, from northern Myanmar (Burma), with remarks on the distribution and geographic variation of the species. Reptile Hobbyist 1998(March):51–58.

McCord, W.P. and Pritchard, P.C.H. 2003. A review of the softshell turtles of the genus *Chitra*, with the description of new taxa from Myanmar and Indonesia (Java). Hamadryad 27(1)(2002)[2003]:11–56.

McCord, W.P. and Thomson, S.A. 2002. A new species of *Chelodina* (Testudines: Pleurodira: Chelidae) from northern Australia. Journal of Herpetology 36(2):255–267.

McCord, W.P., Iverson, J.B., and Boeadi. 1995. A new batagurid turtle from northern Sulawesi, Indonesia. Chelonian Conservation and Biology 1(4):311–316.

McCord, W.P., Iverson, J.B., Spinks, P.Q., and Shaffer, H.B. 2000. A new genus of geoemydid turtle from Asia. Hamadryad 25(2):86–90.

McCord, W.P., Joseph-Ouni, M., and Lamar, W.W. 2001. A taxonomic reevaluation of *Phrynops* (Testudines: Chelidae) with the description of two new genera and a new species of *Batrachemys*. Revista de Biologia Tropical 49(2):715–764.

McCord, W.P., Cann, J., and Joseph-Ouni, M. 2003. A taxonomic assessment of *Emydura* (Testudines: Chelidae) with descriptions of new subspecies from Queensland, Australia. Reptilia (GB) (Barcelona) 27:59–63.

McCord, W.P., Joseph-Ouni, M., and Tabaka, C. 2005. Chelonian illustrations #18: African hinge-back tortoises. Reptilia (GB) (Barcelona) 38:71–74.

McCord, W.P., Joseph-Ouni, M., and Hagen, C. 2007a. A new species of *Chelodina* (Testudines: Chelidae) from eastern Timor Island (East Timor). Reptilia (GB) (Barcelona) 52:53–57.

McCord, W.P., Joseph-Ouni, M., and Hagen, C. 2007b. A new subspecies of *Chelodina mccordi* (Testudines: Chelidae) from eastern Rote Island, Indonesia. Reptilia (GB) (Barcelona) 52:58–61.

McCord, W.P., Joseph-Ouni, M., Hagen, C., and Blanck, T. 2010. Three new subspecies of *Trachemys venusta* (Testudines: Emydidae) from Honduras, northern Yucatán (Mexico), and Pacific Coastal Panama. Reptilia (GB) (Barcelona) 71:39–49.

McCranie, J.R., Köhler, F., Gutsche, A., and Valdés Orellana, L. 2013. *Trachemys grayi emolli* (Testudines, Emydidae) in Honduras and its systematic relationships based on mitochondrial DNA. Zoosystematics and Evolution 89(1):21–29.

McCulloch, A.R. 1908. A new genus and species of turtle, from north Australia. Records of the Australian Museum 7:126–128.

McDowell, S.B. 1964. Partition of the genus *Clemmys* and related problems in the taxonomy of the aquatic Testudinidae. Proceedings of the Zoological Society of London 143:239–279.

McGaugh, S.E. 2008. Color variation among habitat types in the spiny softshell turtles (Trionychidae: *Apalone*) of Cuatrociénegas, Coahuila, Mexico. Journal of Herpetology 42(2):347–353.

McGaugh, S.E. 2012. Comparative population genetics of aquatic turtles in the desert. Conservation Genetics 13:1561–1576.

McGaugh, S.E. and Janzen, F.J. 2008. The status of *Apalone atra* populations in Cuatro Ciénegas, Coahuila, Mexico: preliminary data. Chelonian Conservation and Biology 7(1):88–95.

McGaugh, S.E., Eckerman, C.M., and Janzen, F.J. 2008. Molecular phylogeography of *Apalone spinifera* (Reptilia, Trionychidae). Zoologica Scripta 37(3):289–304.

Medem, F. 1958. Informe sobre reptiles Colombianos (II). El conocimiento actual sobre la distribucion geografica de las Testudinata en Colombia. Boletin del Museo de Ciencias Naturales 2–3:13–45.

Mehnert, E. 1890. Untersuchungen über die Entwicklung des Beckengürtels der *Emys lutaria taurica*. Morphologische Jahrbucher 16:537–571.

Meiri, S., Itescu, Y., Shacham, H., and Werner, Y.L. 2011. What tortoise is *Testudo floweri* from the Negev, named by Bodenheimer (1935)? Israel Journal of Ecology and Evolution 57:261.

Mendes-Pinto, T.J., de Souza, S.M., Vogt, R.C., and Bernhard, R. 2011. First record of *Platemys platycephala melanonota* Ernst, 1984 (Reptilia, Testudines, Chelidae) for the Brazilian Amazon. Revista de Ciências Ambientais, Canoas 5(2):103–107.

Merrem, B. 1820. Versuch eines Systems der Amphibien. Tentamen Systematis Amphibiorum. Marburg: J.C. Krieger, 191 pp.

Mertens, R. 1937. Bemerkungen über die Rassen von Pelomedusa subrufa (La Cepède). Zoologischer Anzeiger 117:139–142.

Mertens, R. 1946. Uber einige mediterrane Schildkröten-Rassen. Senckenbergiana 27:111–118.

Mertens, R. 1949. *Medaestia* Wussow, 1916, a synonym of *Testudo* Linnaeus, 1758. Copeia 1949(3):232.

Mertens, R. 1954. Zur Kenntnis der Schildkrötenfauna Venezuelas. Senckenbergiana Biologica 35(1/2):3–7.

Mertens, R. 1967. Bemerkenswerte Süsswasserschildkröten aus Brasilien. Senckenbergiana Biologica 48:71–82.

Mertens, R. 1969a. Eine neue Rasse der Dachschildkröte, *Kachuga tecta*. Senckenbergiana Biologica 50:23–30.

Mertens, R. 1969b. Eine neue Halswender-Schildkröte aus Peru. Senckenbergiana Biologica 50:132.

Mertens, R. and Müller, L. 1928. Liste der Amphibien und Reptilian Europas. Abhandlungen Senckenbergische Naturforschende Gesellschaft 41:1–62.

Mertens, R. and Wermuth, H. 1955. Die rezenten Schildkröten, Krokodile und Brückenechsen. Eine kritische Liste der heute lebenden Arten und Rassen. Zoologische Jahrbücher 83:323–440.

Métrailler, S. and Le Gratiet, G. 1996. Tortues continentales de Guyane française. Continental Turtles of the French Guiana. Martigny, Switzerland: Pillet SA, 127 pp.

Meuschen, F.C. 1778. Museum Gronovianum sive Index Rerum Naturalium. Lugduni Batavorum: Th. Haak and J. Meerburg, 251 pp.

Meyer, A.B. 1887. Verzeichniss der von mir in den Jahren 1870-1873 im Ostindischen Archipel gesammelten Reptilien und Batrachier. Abhandlungen und Berichte des Königl. Zoologischen und Anthropologisch-Ethnographischen Museums zu Dresden 1887(2):1–16.

Meyer, A.B. 1874. Eine Mittheilung über die von mir auf Neu-Guinea und den Inseln Jobi, Mysore und Mafoor im Jahre 1873 gesammelten Amphibien. Monatsberichte der Akademie der Wissenschaften zu Berlin 39:128–140.

Meyer, F.A.A. 1790. Kurze Beschreibungen neuer Thiere. Ausgezogen aus dem Leipziger Naturhistorischen Magazin. Magazin für Thiergeschichte, Thieranatomie und Thierarzenkunde, Göttingen 1:80–83.

Meyer, H. von. 1835. Mittheilungen an Professor Bronn gerichtet. Neues Jahrbuch für Mineralogie, Geognosie, Geologie und Petrefaktenkunde, Stuttgart 1835:63–69.

Meylan, P.A. 1987. The phylogenetic relationships of soft-shelled turtles (Family Trionychidae). Bulletin of the American Museum of Natural History 186:1–101.

Michael, D. and Lindermeyer, D.G. 2010. Reptiles of the NSW Murray Catchment: A Guide to Their Identification, Ecology and Conservation. Canberra: CSIRO Publishing.

Michahelles, C. 1829. Commentatio de speciebus aut rarioribus, aut novis cheloniorum Europam meridionalem inhabitantibus. Isis von Oken 22:1295–1300.

Mikan, J.C. 1820. Delectus Florae et Faunae Brasiliensis. Fasciculus Primus. Vindobonae: 6 pp., 6 pls.

Mikan, J.C. 1825. Delectus Florae et Faunae Brasiliensis. Fasciculus Quartus. Vindobonae: 6 pp., 6 pls.

Mikulíček, P., Jandzik, D., Fritz, U., Schneider, C., and Široký, P. 2013. AFLP analysis shows high incongruence between genetic differentiation and morphology-based taxonomy in a widely distributed tortoise. Biological Journal of the Linnean Society 108(1):151–160.

Miller, J.F. 1779. *Testudo sulcata*, pl. 26. In: Miller, J. F. 1776–1784. Icones Animalium et Plantarum. (Various subjects of Natural History, wherein are delineated birds, animals and many curious plants). London, 10 pp., 60 pls.

Milstead, W.M. 1969. Studies on the evolution of the box turtles (genus *Terrapene*). Bulletin of the Florida State Museum, Biological Sciences 14(1):1–113.

Mittermeier, R.A. and Wilson, R.A. 1974. Redescription of *Podocnemis erythrocephala* (Spix, 1824), an Amazonian pelomedusid turtle. Papéis Avulsos de Zoologia, São Paulo 28(8):147–162.

Mittermeier, R.A., van Dijk, P.P., Rhodin, A.G.J., and Nash, S.D. 2015. Turtle hotspots: an analysis of the occurrence of tortoises and freshwater turtles in Biodiversity Hotspots, High-Biodiversity Wilderness Areas, and Turtle Priority Areas. Chelonian Conservation and Biology 14(1):2–10.

Mittleman, M.B. 1945. Type localities of two American turtles. Copeia 1945(3):171.

Mittleman, M.B. 1947. The allocation of *Testudo rugosa* Shaw. Herpetologica 3:173–176.

Mlynarski, M. 1976. Handbuch der Palaeoherpetologie. Part 7. Testudines. Stuttgart, Germany: Fischer Verlag, 130 pp.

Modesto, S.P. and Anderson, J.S. 2004. The phylogenetic definition of Reptilia. Systematic Biology 53(5):815–821.

Mojsisovics, A. von. 1889. Zoogeographische Notizen über Süd-Ungarn aus den Jahren 1886–1888. III. Nachtrag zur "Fauna von Béllye und Darda". Mitteilungen des Naturwissenschaftlichen Vereines für Steiermark, Graz 25(1888)[1889]:233–269.

Molfetti, E., Torres Vilaça, S., Georges, J.Y., Plot, V., Delcroix, E., Le Scao, R., Lavergne, A., Barrioz, S., Rodrigues dos Santos, F., and de Thoisy, B. 2013. Recent demographic history and present fine-scale structure in the Northwest Atlantic Leatherback (*Dermochelys coriacea*) turtle population. PLOS ONE 8:e58061.

Molina, F.B., Machado, F.A., and Zaher, H. 2012. Taxonomic validity of *Mesoclemmys heliostemma* (McCord, Joseph-Ouni and Lamar, 2001) (Testudines, Chelidae) inferred from morphological analysis. Zootaxa 3575:63–77.

Moll, E.O. 1987. Survey of the freshwater turtles of India. Part II: The genus *Kachuga*. Journal of the Bombay Natural History Society 84:7–25.

Mooser, O. 1972. A new species of Pleistocene fossil tortoise, genus *Gopherus*, from Aguascalientes, Aguascalientes, Mexico. Southwestern Naturalist 17(1):61–65.

Mosimann, J.E. and Rabb, G.B. 1953. A new subspecies of the turtle *Geoemyda rubida* (Cope) from western Mexico. Occasional Papers of the Museum of Zoology, University of Michigan 548:1–7.

Müller, L. 1935. Uber eine neue *Podocnemis*-Art (*Podocnemis vogli*) aus Venezuela nebst ergänzenden Bemerkungen über die systematischen Merkmale der ihr nächstverwandten Arten. Zoologischer Anzeiger 110(5/6):97–109.

Müller, L. 1936. Beiträge zur Kenntnis der Schildkrötenfauna von Mexiko. Zoologischer Anzeiger 113:97–114.

Müller, L. 1940. Über *Pseudemys callirostris* (Gray). Ibero–amerikanische Studien, Hamburg 13:108–125.

Müller, L. and Hellmich, W. 1936. Amphibien und Reptilien. I. Teil: Amphibia, Chelonia, Loricata. Wissenschaftliche Ergebnisse der Deutschen Gran Chaco Expedition. Stuttgart: Verlag Von Strecker und Schroder, pp. 96–108.

Murphy, R.W. 2014. Systematics of extant North American tortoises. In: Rostal, D.C., McCoy, E.D., and Mushinsky, H.R. (Eds.). Biology and Conservation of North American Tortoises. Baltimore, Maryland: Johns Hopkins University Press, pp. 25–29.

Murphy, R.W., Berry, K.H., Edwards, T., Leviton, A.E., Lathrop, A., and Riedle, J.D. 2011. The dazed and confused identity of Agassiz's land tortoise, *Gopherus agassizii* (Testudines, Testudinidae) with the description of a new species, and its consequences for conservation. ZooKeys 113:39–71.

Murray, C.M., McMahan, C.D., Dobie, J.L., and Guyer, C. 2014. Cranial variation amongst independent lineages of the alligator snapping turtle (*Macrochelys temminckii*). Journal of Zoological Systematics and Evolutionary Research 52: 305–311.

Murray, J.A. 1884. Additions to the reptilian fauna of Sind. Annals and Magazine of Natural History (5)14:106–111.

Myers, E.M. 2008. Post-orbital color pattern variation and the evolution of a radiation of turtles (*Graptemys*). Ph.D. Thesis, Iowa State University, Ames.

Nagy, Z.T., Kielgast, J., Moosig, M., Vamberger, M., and Fritz, U. 2015. Another candidate species of *Pelomedusa* (Testudines: Pelomedusidae) from the Democratic Republic of the Congo? Salamandra 51:212–214.

Nardo, G.D. 1864. Sopra una nuovo rarissima specie di cheloniano pescato alle nostre spiaggie. Atti del Reale Istituto Veneto di Scienze, Lettere ed Arti (3)9:1418–1423. [in Italian]

Naro-Maciel, E., Le, M., FitzSimmons, N.N., and Amato, G. 2008. Evolutionary relationships of marine turtles: a molecular phylogeny based on nuclear and mitochondrial genes. Molecular Phylogenetics and Evolution 49:659–662.

Naro-Maciel, E., Reid, B.N., Alter, S.E., Amato, G., Bjorndal, K.A., Bolten, A.B., Martin, M., Nairn, C.J., Shamblin, B., and Pineda-Catalan, O. 2014. From refugia to rookeries: phylogeography of Atlantic green turtles. Journal of Experimental Marine Biology and Ecology 461:306–316.

Neill, W.T. 1965. New and noteworthy amphibians and reptiles from British Honduras. Bulletin of the Florida State Museum, Biological Sciences 9:77–130.

Neill, W.T. and Allen, E.R. 1959. Studies on the amphibians and reptiles of British Honduras. Publications of the Research Division of Ross Allen Reptile Institute 2(1):1–76.

Nikolsky, A.M. 1896. Diagnosis Reptilium et Amphibiorum novorum in Persia orientali a N. Zarudny Collectorum. Annuaire du Musée Zoologique de l'Académie Impériale des Sciences de St. Pétersbourg 4:369–372.

Nikolsky, A.M. 1897. Les reptiles, amphibiens et poissons recueillis par Mr. N. Zaroudny dans la Perse orientale. Annuaire du Musée Zoologique de l'Academie Imperiale des Sciences de St. Petersbourg 2:306–348.

Nikolsky, A.M. 1915. [Faune de la Russie et des Pays Limitrophes. Reptiles (Reptilia). Volume I. Chelonia et Sauria.] Petrograd: 532 pp. [in Russian]

Nilsson, S. 1841. Beskrifning öfver en i Skåne funnen fossil sköldpadda, jemförd med andra i Svensk jord funna qvarlefvor af samma djurordning. [Description of a fossil turtle found in Skåne, compared with other Swedish remains of the same order of animals]. Kongliga Svenska Vetenskaps-Academiens Handlingar 1839[1841]:194–211. [in Swedish]

Nori, J., Tessarolo, G., Ficetola, G.F., Loyola, R., Di Cola, V., and Leynaud, G. 2017. Buying environmental problems: the invasive potential of imported freshwater turtles in Argentina. Aquatic Conservation: Marine and Freshwater Ecosystems 27:685–691.

Nowak-Kemp, M. and Fritz, U. 2010. Chelonian type specimens at the Oxford University Museum. Zootaxa 2604:1–19.

Nutaphand, W. 1979. The Turtles of Thailand. Bangkok: Siamfarm Zoological Garden, 222 pp.

Nutaphand, W. 1986. [Manlai, the world's largest soft-shelled turtle]. Thai Zoological Magazine 1(4):64–70. [in Thai]

Nutaphand, W. 1990. [Softshelled turtles]. Thai Zoological Magazine 5(56):93–104. [in Thai]

Obst, F.J. and Reimann, M. 1994. Bemerkenswerte Variabilität bei *Cuora galbinifrons* Bourret, 1939, mit Beschreibung einer neuen geographischen Unterart: *Cuora galbinifrons bourreti* subsp. nov. (Reptilia: Testudines: Cryptodira: Bataguridae). Zoologische Abhandlungen, Staatliches Museum für Tierkunde Dresden 48(7):125–137.

Oelrich, T.M. 1953. A new boxturtle from the Pleistocene of southwestern Kansas. Copeia 1953(1):33–38.

Ogilby, J.D. 1890. Description of a new Australian tortoise. Records of the Australian Museum 1:56–59.

Ogilby, J.D. 1905. Catalogue of the Emydosaurian and Testudinian reptiles of

New Guinea. Proceedings of the Royal Society of Queensland 19(1):1–31.

Oh, H.S., Park, S.M., and Han, S.H. 2017. Mitochondrial haplotype distribution and phylogenetic relationship of an endangered species Reeve's turtle (*Mauremys reevesii*) in East Asia. Journal of Asia-Pacific Biodiversity 10:27–31.

Okamoto, K. and Kamezaki, N. 2014. Morphological variation in *Chelonia mydas* (Linnaeus, 1758) from the coastal water of Japan, with special reference to the turtles allied to *Chelonia mydas agassizii* Bocourt, 1868. Current Herpetology 33:46–56.

Okayama, T., Díaz-Fernández, R., Baba, Y., Halim, M., Abe, O., Azeno, N., and Koike, H. 1999. Genetic diversity of the hawksbill turtle in the Indo-Pacific and Caribbean regions. Chelonian Conservation and Biology 3(2):362–367.

Olivier, G.A. 1807. Voyage dans l'Empire Othoman, l'Égypte et la Perse. Tome VI. Paris: H. Agasse, 522 pp.

Olson, S.L. 2015. More on the status of *Testudo nigra* Quoy and Gaimard and *Testudo nigrita* Duméril and Bibron as *nomina dubia* for Galapagos tortoises (Testudines: Testudinidae). Proceedings of the Biological Society of Washington 128(4):204–208.

Olson, S.L. and David, N. 2014. The gender of the tortoise genus *Chelonoidis* Fitzinger, 1835 (Testudines: Testudinidae). Proceedings of the Biological Society of Washington 126:393–394.

Olson, S.L. and Humphrey, J.R. 2017. The island of origin of Richard Harlan's Galapagos tortoise *Testudo elephantopus*. Archives of Natural History 44:110–117.

Oppel, M. 1811. Die Ordnungen, Familien und Gattungen der Reptilien als Prodrom einer Naturgeschichte derselben. München: J. Lindauer, 86 pp.

Osculati, G. 1850. Esplorazione delle regioni equatoriali lungo il Napo ed il fiume delle Amazzoni, frammento di un viaggio fatto nelle due Americhe negli anni 1846-1847-1848. Milano: Tipografia Bernardoni, 320 pp.

Ottley, J.R. and Velázques Solis, V.M. 1989. An extant, indigenous tortoise population in Baja California Sur, Mexico, with the description of a new species of *Xerobates* (Testudines: Testudinidae). Great Basin Naturalist 49:496–502.

Ouwens, P.A. 1914. List of Dutch East Indian chelonians in the Buitenzorg Zoological Museum. Contributions à la Faune des Indes Néerlandaises, Buitenzorg 1:29–32.

Owen, J., Perry, G., Lazell, J., and Petrovic, C. 2005. *Pseudemys nelsoni* (Florida red-bellied turtle). Distribution. Herpetological Review 36:466.

Owen, R. 1853. Descriptive Catalogue of the Osteological Series Contained in the Museum of the Royal College of Surgeons of England. Vol I. Pisces, Reptilia, Aves, Marsupialia. London: Taylor and Francis, 350 pp.

Páez, V.P., Morales-Betancourt, M.A., Lasso, C.A., Castaño-Mora, O.V., and Bock, B.C. (Eds.). 2012. Biología y Conservación de las Tortugas Continentales de Colombia. Bogotá, Colombia: Serie Editorial Recursos, Hidrobiológicos y Pesqueros Continentales de Colombia. Instituto de Investigación de Recursos Biológicos Alexander von Humboldt, 528 pp.

Palacios, C., Urrutia, C., Knapp, N., Quintana, M.F., Bertolero, A., Simon, G., Du Preez, L., and Verneau, O. 2015. Demographic structure and genetic diversity of *Mauremys leprosa* in its northern range reveal new populations and mixed origins. Salamandra 51:221–230.

Palkovacs, E.P., Gerlach, J., and Caccone, A. 2002. The evolutionary origin of Indian Ocean tortoises (*Dipsochelys*). Molecular Phylogenetics and Evolution 24:216–227.

Palkovacs, E.P., Marschner, M., Ciofi, C., Gerlach, J., and Caccone, A. 2003. Are the native giant tortoises from the Seychelles really extinct? A genetic perspective based on mtDNA and microsatellite data. Molecular Ecology 12:1403–1413.

Pallas, P.S. 1814. Zoographia Rosso-Asiatica. III. Animalia Monocardia seu Frigidi Sanguinis Imperii Rosso-Asiatici. Petropolis: Officina Caes. Academiae Scientiarum, 428 pp.

Palupcíková, K., Somerová, B., Protiva, T., Rehák, I., Velensky, P., Hulva, P., Gunalen, D., and Frynta, D. 2012. Genetic and shell-shape analyses of *Orlitia borneensis* (Testudines: Geoemydidae) reveal limited divergence among founders of the European zoo population. Zootaxa 3280:56–66.

Paolillo O., A. 1985. Description of a new subspecies of the turtle *Rhinoclemmys punctularia* (Daudin) (Testudines: Emydidae) from southern Venezuela. Amphibia-Reptilia 6(3):293–305.

Parenzan, P. 1932. Revisione delle specie del Gen. *Testudo* della Balcania. Atti del Reale Istituto Veneto di Scienze, Lettere ed Arti 91(11):1149–1169.

Parham, J.F. 2008. Rediscovery of an "extinct" Galapagos tortoise. Proceedings of the National Academy of Sciences of the USA 105:15227–15228.

Parham, J.F. and Fastovsky, D.E. 1997. The phylogeny of cheloniid sea turtles revisited. Chelonian Conservation and Biology 2:548–554.

Parham, J.F. and Feldman, C.R. 2002. Generic revisions of emydine turtles. Turtle and Tortoise Newsletter 6:28–30.

Parham, J.F. and Pyenson, N.D. 2010. New sea turtle from the Miocene of Peru and the iterative evolution of feeding ecomorphologies since the Cretaceous. Journal of Paleontology 84(2):231–247.

Parham, J.F. and Zug, G.R. 1996. *Chelonia agassizii* – valid or not? Marine Turtle Newsletter 72:2–5.

Parham, J.F., Simison, W.B., Kozak, K.H., Feldman, C.R., and Shi, H. 2001. New Chinese turtles: endangered or invalid? A reassessment of two species using mitochondrial DNA, allozyme electrophoresis and known-locality specimens. Animal Conservation 4:357–367.

Parham, J.F., Stuart, B.L., Bour, R., and Fritz, U. 2004. Evolutionary distinctiveness of the extinct Yunnan box turtle revealed by DNA from an old museum specimen. Proceedings of the Royal Society Series B: Biology Letters 271(1556[S6]):391–394.

Parham, J.F., Feldman, C.R., and Boore, J.L. 2006a. The complete mitochondrial genome of the enigmatic bigheaded turtle (*Platysternon*): description of unusual genomic features and the reconciliation of phylogenetic hypotheses based on mitochondrial and nuclear DNA. BMC Evolutionary Biology 6(11):1–11.

Parham, J.F., Macey, J.R., Papenfuss, T.J., Feldman, C.R., Türkozan, O., Polymeni, R., and Boore, J.L. 2006b. The phylogeny of Mediterranean tortoises and their close relatives based on complete mitochondrial genome sequences from museum specimens. Molecular Phylogenetics and Evolution 38:50–64.

Parham, J.F., Türkozan, O., Stuart, B.L., Arakelyan, M., Shafei, S., Macey, J.R., and Papenfuss, T.J. 2006c. Genetic evidence for premature taxonomic inflation in Middle Eastern tortoises. Proceedings of the California Academy of Sciences 57(3):955–963.

Parham, J.F., Outerbridge, M.E., Stuart, B.L., Wingate, D.B., Erlenkeuser, H., and Papenfuss, T.J. 2008. Introduced delicacy or native species? A natural origin of Bermudian terrapins supported by fossil and genetic data. Biology Letters 4:216–219.

Parham, J.F., Stuart, B.L., Danilov, I.G., and Ananjeva, N.B. 2012. A genetic characterization of CITES-listed Iranian tortoises (*Testudo graeca*) through the sequencing of topotypic samples and a 19th century holotype. Herpetological Journal 22:73–78.

Parham, J.F., Papenfuss, T.J., van Dijk, P.P., Wilson, B.S., Marte, C., Schettino, L.R., and Simison, W.B. 2013. Genetic introgression and hybridization in Antillean freshwater turtles (*Trachemys*) revealed by coalescent analyses of mitochondrial and cloned nuclear markers. Molecular Phylogenetics and Evolution 67:176–187.

Parham, J.F., Papenfuss, T.J., Buskirk, J.R., Parra-Olea, G., Chen, J.Y., and Simison, W.B. 2015. *Trachemys ornata* or not *ornata*: reassessment of a taxonomic revision for Mexican *Trachemys*. Proceeding of the California Academy of Science 4:359–367.

Pavlov, P.A. 1932. Materials for the study of fauna of northern China, Manchuria and Mongolia. Reptilia and Amphibia. Part 1. Chelonia. Publications du Musée Hoang ho Pai ho de Tien Tsin 13:1–37.

Pavlov, P.A. 1933. Reptilia and Amphibia collected in 1932 by the staff of the Hoang ho Pai ho Museum. Publications du Musée Hoang ho Pai ho de Tien Tsin 23:1–12.

Pedall, I., Fritz, U., Stuckas, H., Valdeón, A., and Wink, M. 2011. Gene flow across secondary contact zones of the *Emys orbicularis* complex in the Western Mediterranean and evidence for extinction and re-introduction of pond turtles on Corsica and Sardinia (Testudines: Emydidae). Journal of Zoological Systematics and Evolutionary Research 49(1):44–57.

Pennant, T. 1801. [*Testudo tuberculata*]. In: Schoepff, J.D. 1801. Historia Testudinum Iconibus Illustrata. Erlangae: Ioannis Iacobi Palm, 136 pp. [p. 123].

Perälä, J. 1996. Tortoises in southern Turkey. In: Kanza, M., Perälä, J., and Vikberg, J. (Eds.). Herpetokongressi I – The Official Congress Publication, Herpetological Society of Finland, pp. 14–26.

Perälä, J. 2001. A new species of *Testudo* (Testudines: Testudinidae) from the Middle East, with implications for conservation. Journal of Herpetology 35(4):567–582.

Perälä, J. 2002a. The genus *Testudo* (Testudines: Testudinidae): phylogenetic inferences. Chelonii 3:32–39.

Perälä, J. 2002b. Biodiversity in relatively neglected taxa of *Testudo* L., 1758 S. L. Chelonii 3:40–53.

Perälä, J. 2002c. Morphological variation among Middle Eastern *Testudo graeca* L., 1758 (sensu lato), with a focus on taxonomy. Proceedings of the

International Congress on the Genus Testudo. Chelonii 3:78–108.

Pereira, A.G., Sterli, J., Moreira, F.R.R., and Schrago, C.G. 2017. Multilocus phylogeny and statistical biogeography clarify the evolutionary history of major lineages of turtles. Molecular Phylogenetics and Evolution 113:59–66.

Perez, M., Leblois, R., Livoreil, B., Bour, R., Lambourdiere, J., Samadi, S., and Boisselier, M.-C. 2012. Effects of landscape features and demographic history on the genetic structure of *Testudo marginata* populations in the southern Peloponnese and Sardinia. Biological Journal of the Linnean Society 105(3):591–606.

Perez, M., Livoreil, B., Mantovani, S., Boisselier, M.-C., Crestanello, B., Abdelkrim, J., Bonillo, C., Goutner, V., Lambourdière, J., Pierpaoli, M., Sterijovski, B., Tomovic, L., Vilaça, S.T., Mazzotti, S., and Bertorelle, G. 2014. Genetic variation and population structure in the Endangered Hermann's Tortoise: the roles of geography and human-mediated processes. Journal of Heredity 105(1):70–81.

Perry, G. 1810. Arcana; or the Museum of Natural History: Containing the Most Recent Discovered Objects. London: James Stratford, unpaginated text, plate 33 [*Testudo panama*]. [Complete work with 84 plates with unnumbered text issued in several parts: plates 1–48 in 1810, 49–84 in 1811].

Peters, W.K.H. 1848. Ueber eigenthümliche Moschusdrüsen bei Schildkröten. Archiv für Anatomie, Physiologie und Wissenschaftliche Medicin 1848:492–496.

Peters, W.K.H. 1854. Übersicht der auf seiner Reise nach Mossambique beobachteten Schildkröten. Bericht über die Bekanntmachung geeigneten Verhandlungen der Königlich-Preussischen Akademie der Wissenschaften zu Berlin 1854:215–216.

Peters, W.K.H. 1862. Über einen neuen *Phyllodactylus* aus Guayaquil. Monatsberichte der Königlichen Akademie der Wissenschaften zu Berlin 1862:626–627.

Peters, W.K.H. 1864. Eine neue Art der Baumvipern, *Atheris polylepis*, aus Liberia. Monatsberichte der Königlichen Akademie der Wissenschaften zu Berlin 1864:642–645.

Peters, W.K.H. 1866. Eine vorläufige Übersicht der aus dem Nachlass des Baron Carl von der Decken stammenden und auf seiner ostafrikanischen Reise gesammelten Säugethiere und Amphibien. Monatsberichte der Königlichen Akademie der Wissenschaften zu Berlin 1866:884–894.

Peters, W.K.H. 1868. Über eine neue Nagergattung, *Chiropodomys pencillatus*, so wie über neue oder weniger bekannte Amphibien und Fische. Monatsberichte der Königlichen Akademie der Wissenschaften zu Berlin 1868:448–453.

Peters, W.K.H. 1870. *Platemys tuberosa*, eine neue Art von Schildkröten aus British-Guiana. Monatsberichte der Königlichen Akademie der Wissenschaften zu Berlin 1870:311–313.

Peters, W.K.H. 1873. Über eine neue Schildkrötenart, *Cinosternon effeldtii* und einige andere neue oder weniger bekannte Amphibien. Monatsberichte der Königlichen Akademie der Wissenschaften zu Berlin 1873:603–618.

Peters, W.K.H. 1875. Über neue Amphibien (*Gymnopis, Siphonops, Polypedates, Rhacophorus, Hyla, Cyclodus, Euprepes, Clemmys*). Monatsberichte der Königlichen Akademie der Wissenschaften zu Berlin 1874(2)[1875]:616–624.

Petzold, A., Vargas-Ramírez, M., Kehlmaier, C., Vamberger, M., Branch, W.R., Du Preez, L., Hofmeyr, M.D., Meyer, L., Schleicher, A., Široký, P., and Fritz, U. 2014. A revision of African helmeted terrapins (Testudines: Pelomedusidae: *Pelomedusa*), with descriptions of six new species. Zootaxa 3795:523–548.

Philippen, H.-D. and Grossmann, P. 1990. Eine neue Schlangenhalsschildkröte von Neuguinea: *Chelodina reimanni* sp. n. (Reptilia, Testudines, Pleurodira: Chelidae). Zoologische Abhandlungen, Staatliches Museum Tierkunde Dresden 46(5):95–102.

Philippi, R.A. 1887. Vorlaufige Nachricht über die chilenischen Seeschildkröten und einige Fische der chilenischen Küste. Zoologischer Garten 28:84–88.

Philippi, R.A. 1899. Las tortugas chilenas. Anales de Universidad de Chile 104:727–736.

Phillips, C.A., Dimmick, W.W., and Carr, J.L. 1996. Conservation genetics of the common snapping turtle (*Chelydra serpentina*). Conservation Biology 10:397–405.

Pieh, A. 2001. *Testudo graeca soussensis*, eine neue Unterart der Maurischen Landschildkröte aus dem Souss tal (Südwest-Marokko). Salamandra 36(4):209–222.

Pieh, A. and Perälä, J. 2002. Variabilität von *Testudo graeca* Linnaeus, 1758 im östlichen Nordafrika mit Beschreibung eines neuen Taxons von der Cyrenaika (Nordostlibyen). Herpetozoa 15(1/2):3–28.

Pieh, A. and Perälä, J. 2004. Variabilität der Maurischen Landschildkröten (*Testudo graeca* Linnaeus, 1758 – Komplex) im zentralen und norwestlichen Marokko mit Beschreibung zweier neuer Taxa (Testudines: Testudinidae). Herpetozoa 17(1/2):19–47.

Ping, C. 1930. Notes on the shell of a land tortoise from the ancient ruins of Annyang. Bulletin of the Fan Memorial Institute of Biology 1(13):217–226.

Plieninger, T. 1847. Verzeichnis der Reptilien Württembergs. Jahreshefte des Vereins für Vaterländische Naturkunde, Württemberg 3:194–208.

Pope, C.H. 1934. A new emydid turtle of the genus *Geoclemys* from Kwangtung Province, China. American Museum Novitates 691:1–2.

Pope, C.H. 1935. The Reptiles of China. New York: American Museum of Natural History, Natural History of Central Asia, Vol. X, 604 pp.

Portis, A. 1890. I Rettili Pliocenici del Valdarno Superiore e di Alcune Altre Localitá Plioceniche di Toscana. Firenze: Le Monnier, 32 pp.

Poulakakis, N., Glaberman, S., Russello, M., Beheregaray, L.B., Ciofi, C., Powell, J.R., and Caccone, A. 2008. Historical DNA analysis reveals living descendants of an extinct species of Galápagos tortoise. Proceedings of the National Academy of Sciences, USA 105:15464–15469.

Poulakakis, N., Russello, M., Geist, D., and Caccone, A. 2012. Unravelling the peculiarities of island life: vicariance, dispersal, and the diversification of the extinct and extant giant Galápagos tortoises. Molecular Ecology 21:160–173.

Poulakakis, N., Edwards, D.L., Chiari, Y., Garrick, R.C., Russello, M.A., Benavides, E., Watkins-Colwell, G.J., Glaberman, S., Tapia, W., Gibbs, J.P., Cayot, L.J., and Caccone, A. 2015. Description of a new Galapagos giant tortoise species (*Chelonoidis*; Testudines: Testudinidae) from Cerro Fatal on Santa Cruz Island. PLoS ONE 10:e0138779; 18 pp.

Powell, R., Conant, R., and Collins, J.T. 2016. Peterson Field Guide to the Reptiles and Amphibians of the Eastern and Central North America. Fourth Edition. Boston, MA: Houghton Mifflin Harcourt, 494 pp.

Power, J.H. 1927. On the herpetological fauna of the Lobatsi-Linokana Area. Part I. Transactions of the Royal Society of South Africa 14:405–422.

Power, J.H. 1932. *Testudo verreauxii* Smith; a study in variation. South African Journal of Science 29:466–472.

Prasad, K.N. and Satsangi, P.P. 1967. On a new chelonian from the Siwalik beds of Himachal Pradesh. Records of the Geological Survey of India 95:533–536.

Praschag, P. and Gemel, R. 2002. Identity of the black softshell turtle *Aspideretes nigricans* (Anderson, 1875), with remarks on related species. Faunistische Abhandlungen Staatliches Museum für Tierkunde Dresden 23:87–116.

Praschag, P., Schmidt, C., Fritzsch, G., Müller, A., Gemel, R., and Fritz, U. 2006. *Geoemyda silvatica*, an enigmatic turtle of the Geoemydidae (Reptilia: Testudines), represents a distinct genus. Organisms, Diversity, and Evolution 6:151–162.

Praschag, P., Hundsdörfer, A.K., Reza, A.H.M.A., and Fritz, U. 2007a. Genetic evidence for wild-living *Aspideretes nigricans* and a molecular phylogeny of South Asian softshell turtles (Reptilia: Trionychidae: *Aspideretes, Nilssonia*). Zoologica Scripta 36(4):301–310.

Praschag, P., Hundsdörfer, A.K., and Fritz, U. 2007b. Phylogeny and taxonomy of endangered South and South-east Asian freshwater turtles elucidated by mtDNA sequence variation (Testudines: Geoemydidae: *Batagur, Callagur, Hardella, Kachuga, Pangshura*). Zoologica Scripta 36(5):429–442.

Praschag, P., Sommer, R.S., McCarthy, C., Gemel, R., and Fritz, U. 2008. Naming one of the world's rarest chelonians, the southern *Batagur*. Zootaxa 1758:61–68.

Praschag, P., Holloway, R., Georges, A., Päckert, M., Hundsdörfer, A.K., and Fritz, U. 2009a. A new subspecies of *Batagur affinis* (Cantor, 1847), one of the world's most critically endangered chelonians (Testudines: Geoemydidae). Zootaxa 2233:57–68.

Praschag, P., Hundsdörfer, A.K., and Fritz, U. 2009b. Further specimens and phylogenetic position of the recently described leaf turtle species *Cyclemys gemeli* (Testudines: Geoemydidae). Zootaxa 2008:29–37.

Praschag, P., Stuckas, H., Päckert, M., Maran, J., and Fritz, U. 2011. Mitochondrial DNA sequences suggest a revised taxonomy of Asian flapshell turtles (*Lissemys* Smith, 1931) and the validity of previously unrecognized taxa (Testudines: Trionychidae). Vertebrate Zoology 61(1):147–160.

Praschag, P., Ihlow, F., Flecks, M., Vamberger, M., and Fritz, U. 2017. Diversity of North American map and sawback turtles (Testudines: Emydidae: *Graptemys*). Zoologica Scripta 2017(00):1–8.; doi: 10.1111/zsc.12249.

Pritchard, P.C.H. 1967. Living Turtles of the World. Jersey City: TFH Publ., 288 pp.

Pritchard, P.C.H. 1971a. A further report on Galapagos tortoises. Herpetological Review 3(1):25.

Pritchard, P.C.H. 1971b. Galapagos tortoises, 1971. Herpetological Review 3(3):49–51.

Pritchard, P.C.H. 1979. Encyclopedia of Turtles. Neptune, NJ: TFH Publications, 895 pp.

Pritchard, P.C.H. 1984. Piscivory in turtles, and evolution of the long-necked Chelidae. In: Ferguson, M.W. (Ed.). The Structure, Development and Evolution of Reptiles. Symposia of the Zoological Society of London 52:87–110.

Pritchard, P.C.H. 1990. Turtles of the world (book review). Copeia 1990: 62–67.

Pritchard, P.C.H. 1996. The Galápagos Tortoises: Nomenclatural and Survival Status. Chelonian Research Monographs No. 1, 85 pp.

Pritchard, P.C.H. 2000. *Indotestudo travancorica*...a valid species of tortoise? Reptile and Amphibian Hobbyist 5(6):18–28.

Pritchard, P.C.H. and McCord, W.P. 1991. A new emydid turtle from China. Herpetologica 47(2):139–147.

Pritchard, P.C.H. and Trebbau, P. 1984. The Turtles of Venezuela. Society for the Study of Amphibians and Reptiles, Contributions in Herpetology No. 2, 403 pp.

Protiva, T., Gunalen, D., Bauerová, A., Palupčíková, K., Somerová, B., Frýdlová, P., Jančúchová-Lásková, J., Šimková, O., Frynta, D., and Rehák, I. 2016. Shell shape and genetic variability of Southeast Asian Box Turtles (*Cuora amboinensis*) from Borneo and Sumatra. Vertebrate Zoology 66:387–396.

Pupins, M. and Pupina, A. 2011. First records of 5 allochthonous species and subspecies of turtles (*Trachemys scripta troostii, Mauremys caspica, Mauremys rivulata, Pelodiscus sinensis, Testudo horsfieldii*) and new records of subspecies *Trachemys scripta elegans* in Latvia. Management of Biological Invasions 2:69–81.

Qin, J.-Q. 1992 ["1991"]. A new species of genus *Clemmys*: *C. guangxiensis*. In: Qian, Y.M., Zhao, E.M., and Zhao, K.T. (Eds.). Animal Science Research. A volume issued to celebrate the 90th birthday of Mangven L.Y. Chang. China Forestry Press, Beijing (12)2:60–62.

Quoy, J.-R.-C. and Gaimard, J.-P. 1824a. Description d'une nouvelle espèce de tortue et de trois espèces nouvelles de scinques. Bulletin des Sciences Naturelles et de Géologie, Paris 1:90–91.

Quoy, J.-R.-C. and Gaimard, J.-P. 1824b. Sous-genre Tortue de Terre–*Testudo* Brongn. Tortue Noire–*Testudo nigra* N. In: Freycinet, M.L. de. Voyage Autour du Monde, Entrepris par le Ministère et conformément aux instructions de s. exc. M. le Vicomte du Bouchage, Secrétaire d'Etat au Département de la Marine, Exécuté sur les corvettes de S.M. l'Uranie et la Physicienne, pendant les années 1817–1820. Zoologie. Paris: Pillet Aîné, pp. 174–175.

Raemy, M., Fritz, U., Cheylan, M., and Ursenbacher, S. 2017. Hybridisation between turtle subspecies: a case study with the European pond turtle (*Emys orbicularis*). Conservation Genetics 18:287–296.

Rafinesque, C.S. 1814. Prodromo di erpetologia Siciliana. Specchio delle Scienze, Palermo 2(9):65–67, 102–104. [in Italian]

Rafinesque, C.S. 1815. Analyse de la Nature ou Tableau de l'Univers et des Corps Organisés. Palermo: 223 pp.

Rafinesque, C.S. 1817. Tracts of C.S. Rafinesque. In: Rafinesque, C.S. Florula Ludoviciana; or a Flora of the State of Louisiana. New York: C. Wiley and Co., pp. 166–172.

Rafinesque, C.S. 1822. On the turtles of the United States. Kentucky Gazette (n.s.1)36(no.21, May 23):3.

Rafinesque, C.S. 1832. Description of two new genera of soft shell turtles of North America. Atlantic Journal and Friend of Knowledge 1:64–65.

Rahman, S.C. 2012. Keeled box turtle. The Daily Star, Dhaka: January 3, 2012, http://archive.thedailystar.net/newDesign/news-details.php?nid=216819.

Ramsay, E.P. 1886. On a new genus and species of fresh water tortoise from the Fly River, New Guinea. Proceedings of the Linnaean Society of New South Wales (2)1:158–162.

Ranzani, C. 1832. De testudine coriacea marina. Bononiae [Bologna]: Tiocchi, 11 pp.

Reid, B.N., Le, M., McCord, W.P., Iverson J.B., Georges, A., Bergmann, T., Amato, G., Desalle, R., and Naro-Maciel, E. 2011. Comparing and combining distance-based and character-based approaches for barcoding turtles. Molecular Ecology Resources 11:956–967.

Reimann, M. 1979. [*Geoemyda trijuga wiroti, Testudo nutapundi*]. In: Nutaphand, W. The Turtles of Thailand. Bangkok: Siamfarm Zoological Garden, pp. 177–178, 193–195.

Retzius, A.J. 1792. [*Testudo tricarinata, Testudo scabra*]. In: Schoepff, J.D. 1792. Historia Testudinum Iconibus Illustrata. Erlangae: Ioannis Iacobi Palm, 136 pp. [pp. 9–16].

Rhodin, A.G.J. 1994a. Chelid turtles of the Australasian Archipelago: I. A new species of *Chelodina* from southeastern Papua New Guinea. Breviora 497:1–36.

Rhodin, A.G.J. 1994b. Chelid turtles of the Australasian Archipelago: II. A new species of *Chelodina* from Roti Island, Indonesia. Breviora 498:1–31.

Rhodin, A.G.J. and Carr, J.L. 2009. A quarter millenium of uses and misuses of the turtle name *Testudo scabra*: identification of the type specimens of *T. scabra* Linnaeus 1758 (= *Rhinoclemmys punctularia*) and *T. scripta* Thunberg *in* Schoepff 1792 (= *Trachemys scripta scripta*). Zootaxa 2226:1–18.

Rhodin, A.G.J. and Genorupa, V.R. 2000. Conservation status of freshwater turtles in Papua New Guinea. In: van Dijk, P.P., Stuart, B.L., and Rhodin, A.G.J. (Eds.). Asian Turtle Trade: Proceedings of a Workshop on Conservation and Trade of Freshwater Turtles and Tortoises in Asia. Chelonian Research Monographs No. 2, pp. 129–136.

Rhodin, A.G.J. and Mittermeier, R.A. 1976. *Chelodina parkeri*, a new species of chelid turtle from New Guinea, with a discussion of *Chelodina siebenrocki* Werner, 1901. Bulletin of the Museum of Comparative Zoology 147(11):465–488.

Rhodin, A.G.J. and Mittermeier, R.A. 1983. Description of *Phrynops williamsi*, a new species of chelid turtle of the South American *P. geoffroanus* complex. In: Rhodin, A.G.J. and Miyata, K. (Eds.). Advances in Herpetology and Evolutionary Biology. Essays in Honor of Ernest E. Williams. Cambridge, MA: Museum of Comparative Zoology, pp. 58–73.

Rhodin, A.G.J., Mittermeier, R.A., and Rocha e Silva, R.D. 1982. Distribution and taxonomic status of *Phrynops hogei*, a rare chelid turtle from southeastern Brazil. Copeia 1982(1):179–181.

Rhodin, A.G.J., Mittermeier, R.A., and McMorris, J.R. 1984a. *Platemys macrocephala*, a new species of chelid turtle from central Bolivia and the Pantanal region of Brazil. Herpetologica 40(1):38–46.

Rhodin, A.G.J., Rocha e Silva, R.D., and Mittermeier, R.A. 1984b. Distribution of the South American chelid turtles *Platemys radiolata* and *P. spixii*. Copeia 1984(3):780–786.

Rhodin, A.G.J., van Dijk, P.P., and Parham, J.F. 2008. Turtles of the world: annotated checklist of taxonomy and synonymy. In: Rhodin, A.G.J., Pritchard, P.C.H., van Dijk, P.P., Saumure, R.A., Buhlmann, K.A., and Iverson, J.B. (Eds.). Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group. Chelonian Research Monographs No. 5, pp. 000.1–000.38.

Rhodin, A.G.J., Kaiser, H., van Dijk, P.P., Wüster, W., O'Shea, M., Archer, M., Auliya, M., Boitani, L., Bour, R., Clausnitzer, V., Contreras-Macbeath, T., Crother, B.I., Daza, J.M., Driscoll, C.A., Flores-Villela, O., Frazier, J., Fritz, U., Gardner, A., Gascon, C., Georges, A., Glaw, F., Grazziotin, F.G., Groves, C.P., Haszprunar, G., Havaš, P., Hero, J.M., Hoffmann, M., Hoogmoed, M.S., Horne, B.D., Iverson, J.B., Jäch, M., Jenkins, C.L., Jenkins, R.K.B., Kiester, A.R., Keogh, J.S., Lacher, T.E., Jr., Lovich, J.E., Luiselli, L., Mahler, D.L., Mallon, D., Mast, R., Mcdiarmid, R.W., Measey, J., Mittermeier, R.A., Molur, S., Mossbrugger, V., Murphy, R., Naish, D., Niekisch, M., Ota, H., Parham, J.F., Parr, M.J., Pilcher, N.J., Pine, R.H., Rylands, A.B., Sanderson, J.G., Savage, J., Schleip, W., Scrocchi, G.J., Shaffer, H.B., Smith, E.N., Sprackland, R., Stuart, S.N., Vetter, H., Vitt, L.J., Waller, T., Webb, G., Wilson, E.O., Zaher, H., and Thomson, S. 2015. Comment on *Spracklandus* Hoser, 2009 (Reptilia, Serpentes, ELAPIDAE): request for confirmation of the availability of the generic name and for the nomenclatural validation of the journal in which it was published. Bulletin of Zoological Nomenclature 72(1):65–78.

Rhymer, J.M. and Simberloff, D. 1996. Extinction by hybridization and introgression. Annual Review of Ecology and Systematics 27:83–109.

Riabinin, A.N. 1918. [Sur les tortues des dépôts méotiens de Bessarabie]. Trudy Geol. Min. Muz. Petra Velikago Imper. Akad. Nauk 1(1915–1918):1–16. [in Russian]

Riche, M. 1801. [*Testudo amboinensis*]. In: Daudin, F.M. Histoire Naturelle, Générale et Particulière, des Reptiles. Tome Second. Paris: Dufart, 432 pp. [pp. 309–312].

Ritgen, F.A. 1828. Versuch einer Natürlichen Eintheilung der Amphibien. Nova Acta Physico-Medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum 14:245–284.

Rivas, G.A., Barros, T.R., Molina, F.D.B., Trebbau, P., and Pritchard, P.C.H. 2015. The presence of *Mesoclemmys raniceps* and *Mesoclemmys nasuta* in Venezuela and comments on the Type Locality of *Hydraspis maculata* (Chelidae). Chelonian Conservation and Biology 14(1):104–107.

Rivers, J.J. 1889. Description of a new turtle from the Sacramento River, belonging to the family of Trionychidae. Proceedings of the California Academy of Sciences (2)2:333–336.

Rochebrune, A.T. de. 1884. Faune de la Sénégambie. Reptiles. Paris: O. Dom, 221 pp.

Rodrigues, J.F.M, Coelho, M.T.P, and Diniz-Filho, J.A.F. 2016. Exploring intraspecific climatic niche conservatism to better understand species invasion: the case of *Trachemys dorbigni* (Testudines, Emydidae). Hybrobiologia 779:127–134.

Rogner, M. 1996. Schildkröten 2. Hürtgenwald: Heidi-Rogner-Verlag, 265 pp.

Rogner, M., Iverson, J.B., Berry, J.F., Seidel, M.E., and Rhodin, A.G.J. 2013. Case 3625. *Kinosternon chimalhuaca* Berry, Seidel, & Iverson *in* Rogner, 1996 (Reptilia, Testudines): proposed confirmation of the publication date. Bulletin of Zoological Nomenclature 70(3):190–192.

Rohilla, M.S., Rao, R.J., and Tiwari, P.K. 2009. Enzyme polymorphism in Indian freshwater soft shell turtle *Lissemys punctata*. Acta Herpetologica 4(1):15–28.

Roman, J., Santhuff, S.D., Moler, P.E., and Bowen, B.W. 1999. Population structure and cryptic evolutionary units in the alligator snapping turtle. Conservation Biology 13(1):135–142.

Rook, L., Croitor, R., Delfino, M., Ferretti, M.P., Gallai, G., and Pavia, M. 2013. The Upper Valdarno Plio-Pleistocene vertebrate record: an historical overview, with notes on palaeobiology and stratigraphic significance of some important taxa. Italian Journal of Geosciences 132:104–125.

Ross, W. and Macartney, J. 1802. Lectures on Comparative Anatomy, translated from the French of G. Cuvier. Volume 1. London, Oriental Press, 710 pp.

Rostal, D.C., McCoy, E.D., and Mushinsky, H.R. (Eds.). 2014. Biology and Conservation of North American Tortoises. Baltimore, Maryland: Johns Hopkins University Press, 182 pp.

Rothschild, W. 1901. On a new land-tortoise from the Galapagos Islands. Novitates Zoologicae 8:372.

Rothschild, W. 1902. Description of a new species of gigantic land-tortoise from the Galapagos Islands. Novitates Zoologicae 9:619.

Rothschild, W. 1903. Description of a new species of gigantic land tortoise from Indefatigable Island. Novitates Zoologicae 10:119.

Rothschild, W. 1906. A new species of giant tortoise. Novitates Zoologicae 13:753–754.

Rothschild, W. 1915. On the gigantic land tortoises of the Seychelles and Aldabra-Madagascar group with some notes on certain forms of the Mascarene group. Novitates Zoologicae 22:418–442.

Rueda-Almonacid, J.V., Carr, J.L., Mittermeier, R.A., Rodríguez-Mahecha, J.V., Mast, R.B., Vogt, R.C., Rhodin, A.G.J., de la Ossa-Velásquez, J., Rueda, J.N., and Mittermeier, C.G. 2007. Las tortugas y los cocodrilianos de los países andinos del trópico. Bogotá, Colombia: Editorial Panamericana, Formas e Impresos, Serie de guías tropicales de campo No. 6, Conservación Internacional, 538 pp.

Ruiz de Xelva, M. 1801. [*Testudo bispinosa*]. In: Daudin, F.M. Histoire Naturelle, Generale et Particuliere, des Reptiles. Tome Second. Paris: Dufart, 432 pp. [pp. 94–97].

Rummler, H.-J. and Fritz, U. 1991. Geographische Variabilität der Amboina-Scharnierschildkröte *Cuora amboinensis* (Daudin, 1802), mit Beschreibung einer neuen Unterart, *C. a. kamaroma* subsp. nov. Salamandra 27(1):17–45.

Rüppell, E. 1835. Neue Wirbelthiere zu der Fauna von Abyssinien gehörig. Amphibien. Frankfurt: Siegmund Schmerber, 18 pp.

Rüppell, E. 1845. Beschreibung und Abbildung einer neuen Art von Landschildkröten, zur Gattung *Kinyxis* gehörig. Museum Senckenbergianum 3:223–228.

Russello, M.A., Glaberman, S., Gibbs, J.P., Marquez, C., Powell, J.R., and Caccone, A. 2005. A cryptic taxon of Galápagos tortoise in conservation peril. Biological Letters 1:287–290.

Russello, M.A., Beheregaray, L.B., Gibbs, J.P., Fritts, T., Havill, N., Powell, J.R., and Caccone, A. 2007. Lonesome George is not alone among Galápagos tortoises. Current Biology 17(9):R317–R318.

Rust, H.T., Mertens, R., and Müller, L. 1934. Systematische Liste der Lebenden Schildkröten. Blätter für Aquarien- und Terrarien-Kunde 45:42–45, 59–67.

Salvator, L. 1897. Die Balearen, geschildert in Wort und Bild. Zweiter Band. Würzburg and Leipzig: Hofbuchhandlung Leo Woerl, 452 pp.

Sánchez, J., Alcalde, L., and Bolzán, A.D. 2015. First evidence of chromosomal variation within *Chelonoidis chilensis* (Testudines: Testudinidae). Herpetological Journal 25:83–89.

Santos, R.C.d., Viana, M.d.N.S., Monjeló, L.A.d.S., Andrade, P.C.M., Pantoja-Lima, J., Oliveira, P.H.G., Vogt, R.C., Pezzuti, J.C.B., Sites, J.W., Jr., Hrbek, T., and Farias, I.P. 2016. Testing the effects of barriers on the genetic connectivity in *Podocnemis erythrocephala* (Red-Headed Amazon River Turtle): implications for management and conservation. Chelonian Conservation and Biology 15:12–22.

Sauzier, T. 1892. Tortue de terre gigantesque à l'île Maurice. La Nature, Revue des Sciences et de leurs Applications aux Arts et à l'Industrie, Paris 20:395–398.

Sauzier, T. 1899. Notes sur l'origine de la Tortue terrestre geante *T. hololissa*, Gunther. Bulletin de la Société Zoologique de France 24:138–142.

Sawyer, F.C. 1953. The dates of issue of J.E. Gray's "Illustrations of Indian Zoology" (London, 1830-1835). Journal of the Society of Bibliography of Natural History 3(1):48–55.

Say, T. 1825. On the fresh water and land tortoises of the United States. Journal of the Academy of Natural Sciences, Philadelphia 4(2):203–219, 412 [errata].

Schinz, H.R. 1833. Naturgeschichte und Abbildungen der Reptilien. Leipzig: Weidmann, 240 pp.

Schlegel, H. 1844. Abbildungen neuer oder unvollständig bekannter Amphibien, nach der Natur oder dem Leben entworfen, herausgegeben und mit einem erläuternden Texte begleitet. Düsseldorf: Arnz, 141 pp.

Schlegel, H. and Müller, S. 1840. Over de Schildpadden van den Indischen Archipel, en beschrijving eener nieuwe soort van Sumatra. In: Temminck, C.J. (Ed.). Verhandelingen over de Natuurlijke Geschiedenis der Nederlandsche Overzeesche Bezittingen, 1839–44. Part 3. Zoologie, Schildpadden. Leiden: Luchtmans and van der Hoek, plate 4. [in Dutch] [published 24 April 1840; see Husson and Holthuis 1955]

Schlegel, H. and Müller, S. 1845 ["1844"]. Over de Schildpadden van den Indischen Archipel, en beschrijving eener nieuwe soort van Sumatra. In: Temminck, C.J. (Ed.). Verhandelingen over de Natuurlijke Geschiedenis der Nederlandsche Overzeesche Bezittingen, 1839–44. Part 3. Zoologie, Schildpadden. Leiden: Luchtmans and van der Hoek, pp. 29–36. [in Dutch] [published 26 June 1845; see Husson and Holthuis 1955]

Schleich, H.-H. 1982. Vorlaufige mitteilung zur herpetofauna der Kapverden. Courier Forschunginstitut Senckenberg 52:245–248.

Schleich, H.-H. 1987. Herpetofauna Caboverdiana. Spixiana (München), Supplement 12:1–75.

Schleich, H.-H. 1996a. Beitrag zur Systematik des Formenkreises von *Mauremys leprosa* (Schweigger) in Marokko. Teil I. Spixiana Suppl. 22:29–59.

Schleich, H.-H. 1996b. Lista Vermelha para os Répteis (Reptilia). In: Leyens, T. and Lobin, W. (Eds.). Primeira Lista Vermelha de Cabo Verde. Frankfurt: Courier Forschungsinstitut Senckenberg, pp. 122–125.

Schleich, H.-H. and Gruber, U. 1984. Eine neue Grosskopfschildkröte, *Platysternon megacephalum tristernalis* nov. ssp., aus Yünnan, China. Spixiana 7:67–73.

Schleich, H.-H. and Kästle, W. (Eds.). 2002. Amphibians and Reptiles of Nepal. Biology, Systematics, Field Guide. Koenigstein: Koeltz Scientific Books, pp. 1201.

Schmid, K. 1819. Naturhistorische Beschreibung der Amphibien. Systematisch bearbeitet zum gemeinnützigen Gebrauche. München: Kunst-Anstalt bey der Feyertags-Schule, 95 pp.

Schmidt, K.P. 1925. New reptiles and a new salamander from China. American Museum Novitates 157:1–5.

Schmidt, K.P. 1928. Amphibians and land reptiles of Porto Rico, with a list of those reported from the Virgin Islands. In: Scientific Survey of Porto Rico and the Virgin Islands. New York Academy of Science, Vol. 10, 160 pp.

Schmidt, K.P. 1941. The amphibians and reptiles of British Honduras. Zoological Series of the Field Museum of Natural History 22(8):473–510.

Schmidt, K.P. 1946. Turtles collected by the Smithsonian Biological Survey of the Panamá Canal Zone. Smithsonian Miscellaneous Collections 106(8):1–9.

Schmidt, K.P. 1947. A new kinosternid turtle from Colombia. Fieldiana Zoology 31(13):109–112.

Schmidt, K.P. 1953. A Check List of North American Amphibians and Reptiles. Sixth edition. Chicago: University of Chicago Press, 280 pp.

Schmidt, K.P. and Owens, D.W. 1944. Amphibians and reptiles of northern Coahuila, Mexico. Field Museum of Natural History Zoology 29:97–115.

Schnee, P. 1900. Uber eine Sammlung südbrasilianischer Reptilien und Amphibien, nebst Beschreibung einer neuen Schildkröte (*Platemys werneri*). Zoologischer Anzeiger 23(622):461–464.

Schneider, J.G. 1783. Allgemeine Naturgeschichte der Schildkröten, nebst einem systematischen Verzeichnisse der einzelnen Arten und zwey Kupfern. Leipzig: J.G. Müller, 364 pp.

Schneider, J.G. 1784. Sammlung vermischter Abhandlungen zur Aufklärung der Zoologie und der Handlungsgeschichte. IV. Beiträge zu der Naturgeschichte der Schildkröten. Berlin: J.F. Unger, pp. 304–317.

Schneider, J.G. 1787. Erster Beitrag zur Naturgeschichte der Schildkröten. Leipzig: J.G. Müller, 16 pp.

Schneider, J.G. 1792. Beschreibung und Abbildung einer neuen Art von

Wasserschildkröte nebst Bestimmungen einiger bisher wenig bekannten fremden Arten. Schriften der Gesellschaft Naturforschender Freunde zu Berlin 10:259–284.

Schneider, L., Iverson, J.B., and Vogt, R.C. 2012. *Podocnemis unifilis*. Catalogue of American Amphibians and Reptiles 890.1–33.

Schoepff, I.D. [J.D.]. 1792. Historia Testudinum Iconibus Illustrata. Erlangae: Ioannis Iacobi Palm, 136 pp. [Fascicles I and II, pp. 1–32, pls. 1–10].

Schoepff, I.D. [J.D]. 1793. Historia Testudinum Iconibus Illustrata. Erlangae: Ioannis Iacobi Palm, 136 pp. [Fascicles III and IV, pp. 33–80, pls. 11–16, 17B–20].

Schoepff, I.D. [J.D]. 1795. Historia Testudinum Iconibus Illustrata. Erlangae: Ioannis Iacobi Palm, 136 pp. [Fascicle V, pp. 81–112, pls. 17, 21–25].

Schoepff, I.D. [J.D]. 1801. Historia Testudinum Iconibus Illustrata. Erlangae: Ioannis Iacobi Palm, 136 pp. [Fascicle VI, pp. 113–136, pls. 26–31].

Schreiber, E. 1875. Herpetologia Europaea: eine systematische Bearbeitung der Amphibien und Reptilien welche bisher in Europa aufgefunden sind. Braunschweig: F. Vieweg und Sohn, 639 pp.

Schreiber, E. 1912. Herpetologia Europaea: eine systematische Bearbeitung der Amphibien und Reptilien welche bisher in Europa aufgefunden sind. Jena: Gustav Fischer, 960 pp.

Schwartz, A. 1955. The diamondback terrapins (*Malaclemys terrapin*) of peninsular Florida. Proceedings of the Biological Society of Washington 68:157–164.

Schwartz, A. 1956a. Geographic variation in the chicken turtle *Deirochelys reticularia* Latreille. Fieldiana Zoology 34:461–503.

Schwartz, A. 1956b. The relationships and nomenclature of the soft-shelled turtles (genus *Trionyx*) of the southeastern United States. Charleston Museum Leaflets 26:1–21.

Schweigger, A.F. 1812. Prodromus monographiae Cheloniorum. Königsberger Archiv für Naturwissenschaft und Mathematik 1:271–368, 406–462.

Sclater, P.L. 1858. Bibliographical notice. Contributions to the Natural History of the United States of America. By Louis Agassiz. Annals and Magazine of Natural History (3)1:289–294.

Sclater, P.L. 1870. Remarks on the animals lately described by Dr. Gray as *Testudo chilensis* and *Ateles bartlettii*. Annals and Magazine of Natural History (4)6:470–473.

Scott, P.A. and Rissler, L.J. 2015. Integrating dynamic occupancy modeling and genetics to infer the status of the imperiled flattened musk turtle. Biological Conservation 192:294–303.

Seba, A. 1734. Locupletissimi Rerum Naturalium Thesauri Accurata Descriptio, et Iconibus Artificiosissimis Expressio, per Universam Physices Historiam. Tomus I. Amstelaedami [Amsterdam]: J. Wetstenium, Gul. Smith, and Janssonio Waesbergios, 178 pp.

Seddon, J., Georges, A., Baverstock, P., and McCord, W. 1997. Phylogenetic relationships of chelid turtles (Pleurodira: Chelidae) based on mitochondrial 12S rRNA gene sequence variation. Molecular Phylogenetics and Evolution 7:55–61.

Seeliger, L.M. 1945. Variation in the Pacific mud turtle. Copeia 1945(3):150–159.

Seidel, M.E. 1988. Revision of the West Indian emydid turtles (Testudines). American Museum Novitates 2918:1–41.

Seidel, M.E. 1994. Morphometric analysis and taxonomy of cooter and red-bellied turtles in the North American genus *Pseudemys* (Emydidae). Chelonian Conservation and Biology 1(2):117–130.

Seidel, M.E. 1995. How many species of cooter turtles and where is the scientific evidence? – A reply to Jackson. Chelonian Conservation and Biology 1(4):333–336.

Seidel, M.E. 2002. Taxonomic observations on extant species and subspecies of slider turtles, genus *Trachemys*. Journal of Herpetology 36:285–292.

Seidel, M.E. and Ernst, C.H. 2017. A systematic review of the turtle family Emydidae. Vertebrate Zoology 67(1):1–122.

Seidel, M.E., Iverson, J.B., and Adkins, M.D. 1986. Biochemical comparisons and phylogenetic relationships in the family Kinosternidae (Testudines). Copeia 1986(2):285–294.

Selman, W. 2017. Diagnostic trait variability in the imperiled freshwater turtle, *Graptemys flavimaculata*. Herpetologica 73(2):105–112.

Selman, W., Kreiser, B., and Qualls, C. 2013. Conservation genetics of the yellow-blotched sawback *Graptemys flavimaculata* (Testudines: Emydidae). Conservation Genetics 14:1193–1203.

Seminoff, J.A., Allen, C.D., Balazs, G.H., Dutton, P.H., Eguchi, T., Haas, H.L., Hargrove, S.A., Jensen, M.P., Klemm, D.L., Lauritsen, A.M., MacPherson, S.L., Opay, P., Possardt, E.E., Pultz, S.L., Seney, E.E., Van Houtan, K.S., and Waples, R.S. 2015. Status review of the Green Turtle (*Chelonia mydas*) under the U.S. Endangered Species Act. NOAA Technical Memorandum, NOAA NMFS-SWFSC-539, 571 pp.

Serb, J.M., Phillips, C.A., and Iverson, J.B. 2001. Molecular phylogeny and biogeography of *Kinosternon flavescens* based on complete mitochondrial control region sequences. Molecular Phylogenetics and Evolution 18:149–162.

Sethuraman, A., McGaugh, S.E., Becker, M.L., Chandler, C.H., Christiansen, J.L., Hayden, S., LeClere, A., Monson-Miller, J., Myers, E.M., Paitz, R.T., Refsnider, J.M., VanDeWalle, T.J., and Janzen, F.J. 2014. Population genetics of Blanding's turtle (*Emys blandingii*) in the midwestern United States. Conservation Genetics 15:61–73.

Shaffer, H.B., Meylan, P., and McKnight, M.L. 1997. Test of turtle phylogeny: molecular, morphological, and paleontological approaches. Systematic Biology 46:235–268.

Shaffer, H.B., Starkey, D.E., and Fujita, M.K. 2008. Molecular insights into the systematics of the snapping turtles (Chelydridae). In: Steyermark, A.C., Finkler, M.S., and Brooks, R.J. (Eds.). Biology of the Snapping Turtle (*Chelydra serpentina*). Baltimore: Johns Hopkins University Press, pp. 44–49.

Shamblin, B.M., Bjorndal, K.A., Bolten, A.B., Hillis-Starr, Z.M., Lundgren, I., Naro-Maciel, E., and Nairn, C.J. 2012. Mitogenomic sequences better resolve stock structure of southern Greater Caribbean green turtle rookeries. Molecular Ecology 21:2330–2340.

Shamblin, B.M, Bolten, A.B., Abreu-Grobois, F.A., Bjorndal, K.A., Cardona, L., Carreras, C., Clusa, M., Monzón-Argüello, C., Nairn, C.J., Nielsen, J.T., Nel, R., Soares, L.S., Stewart, K.R., Vilaça, S.T., Türkozan, O., Yilmaz, C., and Dutton, P.H. 2014. Geographic patterns of genetic variation in a broadly distributed marine vertebrate: new insights into the Loggerhead Turtle stock structure from expanded mitochondrial DNA sequences. PLoS One 9:e85956.

Shaw, G. 1793. Naturalist's Miscellany. Vol. 4. London: Frederick P. Nodder, 156 pp.

Shaw, G. 1794. Zoology of New Holland. Vol. I. London: J. Davis, 33 pp.

Shaw, G. 1802. General Zoology, or Systematic Natural History. Volume III, Part I, Amphibia. London: G. Kearsley, 312 pp.

Sherborn, C.D. and Woodward, A.S. 1901. Dates of publication of the zoological and botanical portions of some French voyages. Annals and Magazine of Natural History (7)8:161–164, 333–336.

Shi, H., Fong, J.J., Parham, J.F., Pang, J., Wang, J., Hong, M., and Zhang, Y.-P. 2008. Mitochondrial variation of the "eyed" turtles (*Sacalia*) based on known-locality and trade specimens. Molecular Phylogenetics and Evolution 49:1025–1029.

Shufeldt, R.W. 1919. Observation on the chelonians of North America. IV. Aquatic Life 1919["1918(September)"]:155–157.

Siebenrock, F. 1901. Beschreibung einer neuen Schildkrötengattung aus der Familie Chelydidae von Australien: *Pseudemydura*. Anzeiger der Kaiserlichen Akademie der Wissenschaften in Wien (Mathemathisch-Naturwissenschaftliche Klasse) 38(22):248–250.

Siebenrock, F. 1902a. Eine neue Schildkröte aus Madagascar (nach Gerrard). Zoologischer Anzeiger 25(1901)[1902]:6–8.

Siebenrock, F. 1902b. Uber zwei seltene Schildkröten der herpetologischen Sammlung des Wiener Museums. Anzeiger der Kaiserlichen Akademie der Wissenschaften in Wien (Mathemathisch-Naturwissenschaftliche Klasse) 1902(2):11–13.

Siebenrock, F. 1902c. Zur Systematik der Schildkrötenfamilie Trionychidae Bell, nebst der Beschreibung einer neuen *Cyclanorbis* Art. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften in Wien (Mathemathisch-Naturwissenschaftliche Klasse) 91:807–846.

Siebenrock, F. 1903a. Schildkröten des östlichen Hinterindien. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften in Wien (Mathemathisch-Naturwissenschaftliche Klasse) 112:333–353.

Siebenrock, F. 1903b. Über zwei seltene und eine neue Schildkröte des Berliner Museums. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften in Wien (Mathemathisch-Naturwissenschaftliche Klasse) 112:439–445.

Siebenrock, F. 1904a. Eine neue *Testudo*-Art der *geometrica*-Gruppe aus Süd-Afrika. Anzeiger der Kaiserlichen Akademie der Wissenschaften in Wien (Mathemathisch-Naturwissenschaftliche Klasse) 41:194–195.

Siebenrock, F. 1904b. Schildkröten von Brasilien. Denkschriften der Kaiserlichen Akademie der Wissenschaften in Wien (Mathemathisch-Naturwissenschaftliche Klasse) 76:1–28.

Siebenrock, F. 1906a. Zur Kenntnis der Schildkrötenfauna der Insel Hainan. Zoologischer Anzeiger 30:578–586.

Siebenrock, F. 1906b. Eine neue *Cinosternum*-Art aus Florida. Zoologischer

Anzeiger 30:727–728.

Siebenrock, F. 1906c. Schildkröten von Ostafrika und Madagaskar. In: Voeltzkow, A. Reise in Ost-Afrika in den Jahren 1903–1905 mit Mitteln der Hermann und Elise geb. Heckmann-Wentzel-Stiftung. Wissenschaftliche Ergebnisse, Systematischen Arbeiten, Stuttgart 2:1–40.

Siebenrock, F. 1907. Die Schildkrötenfamilie Cinosternidae m. Monographisch bearbeitet. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften in Wien (Mathemathisch-Naturwissenschaftliche Klasse) (1)116:527–599.

Siebenrock, F. 1909a. Synopsis der rezenten Schildkröten, mit Berücksichtigung der in historischer Zeit ausgestorbenen Arten. Zoologische Jahrbücher Supplement 10(3):427–618.

Siebenrock, F. 1909b. Über die Berechtigung der Selbständigkeit von *Sternotherus nigricans seychellensis* Siebenrock. Zoologischer Anzeiger 34:359–362.

Siebenrock, F. 1914. Eine neue *Chelodina* Art aus Westaustralien. Anzeiger der Kaiserlichen Akademie der Wissenschaften in Wien (Mathemathisch-Naturwissenschaftliche Klasse) 51(17):386–387.

Silva, A., Rocha, S., Gerlach, J., Rocamora, G., Dufrenne, A., and Harris, D.J. 2010. Assessment of mtDNA genetic diversity within the terrapins *Pelusios subniger* and *Pelusios castanoides* across the Seychelles islands. Amphibia-Reptilia 31:583–588.

Simison, W.B., Sellas, A.B., Feldheim, K.A., and Parham, J.F. 2013. Isolation and characterization of microsatellite markers for identifying hybridization and genetic pollution associated with red-eared slider turtles (*Trachemys scripta elegans*). Conservation Genetics Resources 5(4):1139–1140.

Široký, P. and Fritz, U. 2007. Is *Testudo werneri* a distinct species? Biologia (Bratislava) Section Zoology 62(2):1–4.

Smith, A. 1838. Illustrations of the Zoology of South Africa; consisting chiefly of Figures and Descriptions of the Objects of Natural History collected during an Expedition into the Interior of South Africa, in the years 1834, 1835, and 1836. Part No. 1. London: Smith, Elder and Co., 23 pp., 10 pls. [Reptilia, plate 1].

Smith, A. 1839a. Illustrations of the Zoology of South Africa; consisting chiefly of Figures and Descriptions of the Objects of Natural History collected during an Expedition into the Interior of South Africa, in the years 1834, 1835, and 1836. Part No. 6. London: Smith, Elder and Co., 23 pp., 10 pls. [Reptilia, plate 6].

Smith, A. 1839b. Illustrations of the Zoology of South Africa; consisting chiefly of Figures and Descriptions of the Objects of Natural History collected during an Expedition into the Interior of South Africa, in the years 1834, 1835, and 1836. Part No. 8. London: Smith, Elder and Co., 23 pp., 10 pls. [Reptilia, plate 8].

Smith, H.M. and Brandon, R.A. 1968. Data nova herpetologica Mexicana. Transactions of the Kansas Academy of Science 71:49–61.

Smith, H.M. and Chiszar, D. 2006. Dilemma of name-recognition: why and when to use new combinations of scientific names. Herpetological Conservation and Biology 1(1):6–8.

Smith, H.M. and Glass, B.P. 1947. A new musk turtle from southeastern United States. Journal of the Washington Academy of Sciences 37:22–24.

Smith, H.M. and Ramsey, L.W. 1952. A new turtle from Texas. Wasmann Journal of Biology 10(1):45–54.

Smith, H.M. and Rhodin, A.G.J. 1986. Authorship of the scientific name of the leatherback sea turtle. Journal of Herpetology 20(3):450–451.

Smith, H.M. and Smith, R.B. 1980 ["1979"]. Synopsis of the Herpetofauna of Mexico, Vol. VI. Guide to Mexican Turtles. North Bennington, Vermont: Johnson, 367 pp.

Smith, H.M. and Taylor, E.H. 1950a. Type localities of Mexican reptiles and amphibians. University of Kansas Science Bulletin 33(8):313–380.

Smith, H.M. and Taylor, E.H. 1950b. An annotated checklist and key to the reptiles of Mexico exclusive of the snakes. United States National Museum Bulletin 199:1–253.

Smith, H.M., Humphrey, R., and Chiszar, D. 1996. A range extension for the box turtle *Terrapene yucatana*. Bulletin Maryland Herpetological Society 32:14–15.

Smith, M.A. 1916. A list of the crocodiles, tortoises, turtles and lizards at present known to inhabit Siam. Journal of the Natural History Society of Siam 2(1):48–57.

Smith, M.A. 1931. The Fauna of British India, including Ceylon and Burma. Reptilia and Amphibia. Vol. I. Loricata, Testudines. London: Taylor and Francis, 185 pp.

Smith, P.W. 1951. A new frog and a new turtle from the western Illinois sand prairies. Bulletin of the Chicago Academy of Sciences 9(10):189–199.

Somerová, B., Rehák, I., Velensky, P., Palupcíkova, K., Protiva, T., and Frynta, D. 2015. Haplotype variation in founders of the *Mauremys annamensis* population kept in European zoos. Acta Herpetologica 10:7–15.

Song, M.-T. 1984. [A new species of the turtle genus *Cuora* (Testudoformes: Testudinidae)]. Acta Zootaxonomica Sinica 9(3):330–332. [in Chinese]

Sonnini, C.S. and Latreille, P.A. 1801. Histoire Naturelle des Reptiles, avec figures dessinées d'après nature. Tome Premier. Première Partie. Quadrupèdes et Bipèdes Ovipares. Paris: Deterville, 280 pp.

Spencer, R.J., Georges, A., Lim, D., Welsh, M., Reid, A.M. 2014. The risk of inter-specific competition in Australian short-necked turtles. Ecological Research 29(4):767–777.

Spinks, P.Q. and Shaffer, H.B. 2005. Range-wide molecular analysis of the western pond turtle (*Emys marmorata*): cryptic variation, isolation by distance, and their conservation implications. Molecular Ecology 14:2047–2064.

Spinks, P.Q. and Shaffer, H.B. 2007. Conservation phylogenetics of the Asian box turtles (Geoemydidae, *Cuora*): mitochondrial introgression, numts, and inferences from multiple nuclear loci. Conservation Genetics 8:641–657.

Spinks, P.Q. and Shaffer, H.B. 2009. Conflicting mitochondrial and nuclear phylogenies for the widely disjunct *Emys* (Testudines: Emydidae) species complex, and what they tell us about biogeography and hybridization. Systematic Biology 58(1):1–20.

Spinks, P.Q., Shaffer, H.B., Iverson, J.B., and McCord, W.P. 2004. Phylogenetic hypotheses for the turtle family Geoemydidae. Molecular Phylogenetics and Evolution 32:164–182.

Spinks, P.Q., Thomson, R.C., and Shaffer, H.B. 2009a. A reassessment of *Cuora cyclornata* Blanck, McCord and Le, 2006 (Testudines, Geoemydidae) and a plea for taxonomic stability. Zootaxa 2018:58–68.

Spinks, P.Q., Thomson, R.C., Lovely, G.A., and Shaffer, H.B. 2009b. Assessing what is needed to resolve a molecular phylogeny: simulations and empirical data from emydid turtles. BMC Evolutionary Biology 9:56.

Spinks, P.Q., Thomson, R.C., and Shaffer, H.B. 2010. Nuclear gene phylogeography reveals the historical legacy of an ancient inland sea on lineages of the western pond turtle, in California. Molecular Ecology 19:542–556.

Spinks, P.Q., Thomson, R.C., Zhang, Y., Che, J., Wu, Y., and Shaffer, H.B. 2012a. Species boundaries and phylogenetic relationships in the critically endangered Asian box turtle genus *Cuora*. Molecular Phylogenetics and Evolution 63(3):656–667.

Spinks, P.Q., Thomson, R.C., Hughes, B., Moxley, B., Brown, R., Diesmos, A., and Shaffer, H.B. 2012b. Cryptic variation and the tragedy of unrecognized taxa: the case of international trade in the spiny turtle *Heosemys spinosa* (Testudines: Geoemydidae). Zoological Journal of the Linnean Society 164:811–824.

Spinks, P.Q., Thomson, R.C., Pauly, G.B., Newman, C.E., Mount, G., and Shaffer, H.B. 2013. Misleading phylogenetic inferences based on single-exemplar sampling in the turtle genus *Pseudemys*. Molecular Phylogenetics and Evolution 68:269–281.

Spinks, P.Q., Thomson, R.C., and Shaffer, H.B. 2014a. The advantages of going large: genome-wide SNPs clarify the complex population history and systematics of the threatened western pond turtle. Molecular Ecology 23:2228–2241.

Spinks, P.Q., Thomson, R.C., Gidis, M., and Shaffer, H.B. 2014b. Multilocus phylogeny of the New-World mud turtles (Kinosternidae) supports the traditional classification of the group. Molecular Phylogenetics and Evolution 76:254–260.

Spinks, P.Q., Georges, A., and Shaffer, H.B. 2015. Phylogenetic uncertainty and taxonomic re-revisions: an example from the Australian Short-necked Turtles (Testudines: Chelidae). Copeia 103(3):536–540.

Spinks, P.Q., Thomson, R.C., McCartney-Melstad, E., and Shaffer, H.B. 2016. Phylogeny and temporal diversification of the New World pond turtles (Emydidae). Molecular Phylogenetics and Evolution 103:85–97.

Spix, J.B. 1824. Animalia Nova sive Species Novae Testudinum et Ranarum. Monachii: 53 pp.

Starkey, D.E., Shaffer, H.B., Burke, R.L., Forstner, M.R.J., Iverson, J.B., Janzen, F.J., Rhodin, A.G.J., and Ultsch, G.R. 2003. Molecular systematics, phylogeography, and the effects of Pleistocene glaciation in the painted turtle (*Chrysemys picta*) complex. Evolution 57(1):119–128.

Stejneger, L. 1902. Some generic names of turtles. Proceedings of the Biological Society of Washington 15:235–238.

Stejneger, L. 1907. Herpetology of Japan and adjacent territory. Smithsonian Institution United States National Museum Bulletin 58:1–577.

Stejneger, L. 1909. Generic names of some Chelyid turtles. Proceedings of the Biological Society of Washington 22:125–127.

Stejneger, L. 1918. Description of a new lizard and a new snapping turtle from Florida. Proceedings of the Biological Society of Washington 31:89–92.

Stejneger, L. 1925. New species and subspecies of American turtles. Journal of the Washington Academy of Science 15:462–463.

Stejneger, L. 1933. Description of a new box turtle from Mexico. Proceedings of the Biological Society of Washington 46:119–120.

Stejneger, L. 1941. Notes on Mexican turtles of the genus *Kinosternon*. Proceedings of the United States National Museum 90:457–459.

Stejneger, L. 1944. Notes on the American soft-shelled turtles with special reference to *Amyda agassizii*. Bulletin of the Museum of Comparative Zoology 94(1):1–75.

Stejneger, L. and Barbour, T. 1917. A Checklist of North American Amphibians and Reptiles. Cambridge: Harvard University Press, 125 pp.

Stephens, P.R. 1998. Variation in the cranial osteological morphology of turtles in the genus *Graptemys* (Reptilia; Anapsida; Testudines; Cryptodira; Emydidae; Deirochelyinae). M.S. Thesis, University of South Alabama, Mobile.

Stephens, P.R. and Wiens, J.J. 2003. Ecological diversification and phylogeny of emydid turtles. Biological Journal of the Linnean Society 79:577–610.

Storr, G. 1978. Taxonomic notes on the reptiles of the Shark Bay Region, Western Australia. Records of the Western Australia Museum. 6(3):303–318.

Strain, W.S. 1966. Blancan mammalian fauna and Pleistocene formations, Hudspeth County, Texas. Bulletin of the Texas Memorial Museum 10:1–55.

Strauch, A. 1862. Chelonologische studien, mit besonderer Beziehung auf die Schildkrötensammlung der kaiserlichen Akademie der Wissenschaften zu St. Petersburg. Mémoires de l'Académie Impériale des Sciences de St.-Pétersbourg (7)5(7):1–196.

Strauch, A. 1865. Die Vertheilung der Schildkröten über den Erdball. Ein zoogeographischer Versuch. Mémoires de l'Académie Impériale des Sciences de St.-Pétersbourg (7)8(13):1–207.

Strauch, A. 1890. Bemerkungen über die Schildkrötensammlung im Zoologischen Museum der kaiserlichen Akademie der Wissenschaften zu St. Petersburg. Mémoires de l'Académie Impériale des Sciences de St.-Pétersbourg (7)38(2):1–127.

Stuart, B.L. and Fritz, U. 2008. Historical DNA from museum type specimens clarifies diversity of Asian leaf turtles (*Cyclemys*). Biological Journal of the Linnaean Society 94:131–141.

Stuart, B.L. and Parham, J.F. 2004. Molecular phylogeny of the critically endangered Indochinese box turtle (*Cuora galbinifrons*). Molecular Phylogenetics and Evolution 31:164–177.

Stuart, B.L. and Parham, J.F. 2007. Recent hybrid origin of three rare Chinese turtles. Conservation Genetics 8:169–175.

Stuart, B.L., Hallam, C.D., Sayavong, S., Nanthavong, C., Sayaleng, S., Vongsa, O., and Robichaud, W.G. 2011. Two additions to the turtle fauna of Laos. Chelonian Conservation and Biology 10(1):113–116.

Stuckas, H. and Fritz, U. 2011. Identity of *Pelodiscus sinensis* revealed by DNA sequences of an approximately 180-year-old type specimen and a taxonomic reappraisal of *Pelodiscus* species (Testudines: Trionychidae). Journal of Zoological Systematics and Evolutionary Research 49:335–339.

Stuckas, H., Gemel, R., and Fritz, U. 2013. One extinct turtle species less: *Pelusios seychellensis* is not extinct, it never existed. PLoS ONE 8(4):e57116.

Stuckas, H., Velo-Antón, G., Fahd, S., Kalboussi, M., Rouag, R., Arculeo, M., Marrone, F., Sacco, F., Vamberger, M., and Fritz, U. 2014. Where are you from, stranger? The enigmatic biogeography of North African pond turtles (*Emys orbicularis*). Organisms, Diversity and Evolution 14:295–306.

Suckow, G.A. 1798. Anfangsgründe der theoretischen und angewandten Naturgeschichte der Thiere. Dritter Theil. Von den Amphibien. Leipzig: Weidmannischen Buchhandlung, 298 pp.

Sumontha, M., Brophy, T.R., Kunya, K., Wiboonatthapol, S., and Pauwels, O.S.G. 2016. A new snail-eating turtle of the genus *Malayemys* Lindholm, 1931 (Geoemydidae) from Thailand and Laos. Taprobanica 8(1):1–9.

Suzuki, D. and Hikida, T. 2014. Taxonomic status of the soft-shell turtles populations in Japan: a molecular approach. Current Herpetology 33:171–179.

Suzuki, D., Ota, H., Oh, H.S., and Hikida, T. 2011. Origin of Japanese populations of Reeves' Pond Turtle, *Mauremys reevesii* (Reptilia: Geoemydidae), as inferred by a molecular approach. Chelonian Conservation and Biology 10(2):237–249.

Suzuki, D., Yabe, T., and Hikida, T. 2014. Hybridization between *Mauremys japonica* and *Mauremys reevesii* inferred by nuclear and mitochondrial DNA analyses. Journal of Herpetology 48:445–454.

Swainson, W. 1839. On the natural history and classification of fishes, amphibians, and reptiles. Vol. II. In: Lardner, D. (Ed.). The Cabinet Cyclopaedia. Natural History. London: Longman, 452 pp.

Takahashi, A., Hirayama, R., Alcala, A.C., Carretero, M.A., Danilov, I.G., Ernst, C.H., Honegger, R., Lovich, J.E., Malonza, P.K., Moravec, J., Penny, M., Praschag, P., Široký, P., Spinks, P.Q., Griffiths, C., Hansen, D., Bauerfeld, K., Glaw, F., Fong, J.F., Fritz, U., Kraus, O., Hailey, A., Vences, M., Wanless, R.M., Williams, E.H., Jr., Nieves-Rivera, A.M., Bunkley-Williams, L., Grimm, U., Iverson, J.B., Mortimer, J.A., Buskirk, J., Morgan, J., Schmidt, F., and Miller, J. 2009. Comments on the proposed conservation of usage of *Testudo gigantea* Schweigger, 1812 (currently *Geochelone (Aldabrachelys) gigantea*; Reptilia, Testudines) (Case 3463; see BZN 66: 34–50, 80–87, 169–186). Bulletin of Zoological Nomenclature 66(3):274–290.

Tamayo, J. 1962. Geografia General de Mexico. Tomo III. Geografia Biologica y Humana. Mexico: Instituto Mexicano de Investigaciones Económicas, 633 pp.

Tang, Y. 1997. [Research on a new species of *Pelodiscus*, Trionychidae in China]. Zoological Research, Kunming 18(1):13–17. [in Chinese]

Tao, H.-J. 1985. New fossil turtles, *Chinemys pani* n. sp. (Testudinidae) from the Chi-Ting Formation (Pleistocene), Tainan District, Taiwan Island. Journal of the Taiwan Museum 38(1):43–52.

Tao, H.-J. 1986. Report of a new fossil soft-shelled turtle, *Trionyx liupani* from Taiwan, with comparative study to the living species, *Trionyx sinensis* (Wiegmann). Journal of the Taiwan Museum 39(2):21–41.

Tao, H.-J. 1988. New fossil turtle, *Ocadia sinensis changwui* n. subsp., from Late Pleistocene, Taiwan Strait. Acta Zoologica Taiwanica 2:229–240.

Taylor, E.H. 1920. Philippine turtles. Philippine Journal of Science, Manila 16(2):111–144.

Taylor, E.H. 1943. An extinct turtle of the genus *Emys* from the Pleistocene of Kansas. University of Kansas Science Bulletin 29(II)(3):249–254.

Taylor, W.E. 1895. The box turtles of North America. Proceedings of the United States National Museum 17:573–588.

Temminck, C.J. and Schlegel, H. 1834. Reptilia. I. Les Chéloniens. In: Siebold, P.F. de. Fauna Japonica, sive Descriptio animalium, quae in itinere per Japoniam, jussu et auspiciis superiorum, qui summum in India Batava Imperium tenent, suscepto, annis 1823-1830 colleget, notis observationibus et adumbrationibus illustravit. Vol. III. Lugduni Batavorum [Leiden]: J.G. La Lau, pp. 1–80, pls. 1–9.

Temminck, C.J. and Schlegel, H. 1838. Reptilia. III. Explication des planches de sauriens et de batraciens. In: Siebold, P.F. de. Fauna Japonica, sive Descriptio animalium, quae in itinere per Japoniam, jussu et auspiciis superiorum, qui summum in India Batava Imperium tenent, suscepto, annis 1823-1830 colleget, notis observationibus et adumbrationibus illustravit. Vol. III. Lugduni Batavorum [Leiden]: J.G. La Lau, pp. 136–140.

Tewari, B.S. and Badam, G.L. 1969. A new species of fossil turtle from the Upper Siwaliks of Pinjore, India. Palaeontologica 12(4):555–558.

TEWG. (see Turtle Extinctions Working Group).

Theobald, W., Jr. 1856. Another rich collection of sundries, from Mergui and the valley of the Tenasserim river. Journal of the Asiatic Society of Bengal 24(1855):711–721.

Theobald, W., Jr. 1860. On the Tertiary and alluvial deposits of the central portion of the Nerbudda Valley. Memoirs of the Geological Survey of India 2:279–298.

Theobald, W., Jr. 1868a. Catalogue of Reptiles in the Museum of the Asiatic Society of Bengal. Journal of the Asiatic Society, Extra Number, 88 pp.

Theobald, W., Jr. 1868b. Catalogue of the reptiles of British Birma, embracing the provinces of Pegu, Martaban, and Tenasserim; with descriptions of new or little-known species. Journal of the Linnean Society of Zoology 10:4–67.

Theobald, W., Jr. 1874. Observations on some Indian and Burmese species of *Trionyx*. Proceedings of the Asiatic Society of Bengal 1874:75–86.

Theobald, W., Jr. 1875. Observations on some Indian and Burmese species of *Trionyx*, with a rectification of their synonymy and a description of two new species. Proceedings of the Asiatic Society of Bengal 1875:170–180.

Theobald, W., Jr. 1876. Descriptive Catalogue of the Reptiles of British India. Calcutta: Thacher, Spink and Co., 238 pp.

Theobald, W., Jr. 1877. Description of a new Emydine from the upper Tertiaries of the northern Punjab. Records of the Geological Survey of India 10:43–45.

Thomas, T.M., Granatosky, M.C., Bourque, J.R., Krysko, K.L., Moler, P.E., Gamble, T., Suarez, E., Leone, E., Enge, K.M., and Roman, J. 2014. Taxonomic assessment of Alligator Snapping Turtles (Chelydridae: *Macrochelys*), with the description of two new species from the southeastern United States. Zootaxa 3786(2):141–165.

Thomson, S. 2000. On the identification of the holotype of *Chelodina oblonga* (Testudinata: Chelidae) with a discussion of the taxonomic implications. Chelonian Conservation and Biology 3:745–749.

Thomson, S. 2006. ICZN Case 3351. *Chelodina rugosa* Ogilby, 1890 (currently *Macrochelodina rugosa*; Reptilia, Testudines): proposed precedence over *Chelodina oblonga* Gray, 1841. Bulletin of Zoological Nomenclature

63(3):187–193.

Thomson, S. 2007. Comment on the proposed precedence of *Chelodina rugosa* Ogilby, 1890 (currently *Macrochelodina rugosa*; Reptilia, Testudines) over *Chelodina oblonga* Gray, 1841. Bulletin of Zoological Nomenclature 64:127–128.

Thomson, S. and Georges, A. 2009. *Myuchelys* gen. nov.—a new genus for *Elseya latisternum* and related forms of Australian freshwater turtle (Testudines: Pleurodira: Chelidae). Zootaxa 2053:32–42.

Thomson, S. and Georges, A. 2016. A new species of freshwater turtle of the genus *Elseya* (Testudinata: Pleurodira: Chelidae) from the Northern Territory of Australia. Zootaxa 4061(1):18–28.

Thomson, S.A. and Lambertz, M. 2017. On the nomenclatural status of the recently described Snail-Eating Turtle from Southeast Asia (Testudines, Geoemydidae): *Malayemys khoratensis* Ihlow et al., 2016 vs. *Malayemys isan* Sumontha et al., 2016. Chelonian Conservation and Biology, in press.

Thomson, S., Kennett, R., and Georges, A. 2000. A new species of long-necked turtle (Testudines: Chelidae) from the Arnhem Land Plateau, Northern Territory, Australia. Chelonian Conservation and Biology 3(4):675–685.

Thomson, S., Georges, A., and Limpus, C.J. 2006. A new species of freshwater turtle in the genus *Elseya* (Testudines: Chelidae) from central coastal Queensland, Australia. Chelonian Conservation and Biology 5(1):74–86.

Thomson, S., Amepou, Y., Anamiato, J., and Georges, A. 2015. A new species and subgenus of *Elseya* (Testudines: Pleurodira: Chelidae) from New Guinea. Zootaxa 4006(1):59–82.

Thunberg, C.P. 1787. Beskrifning på trenne sköld-paddor. [Description of three turtles]. Kongliga Vetenskaps Academiens Nya Handlingar, Stockholm (2)8:178–180. [in Swedish]

Thunberg, C.P. 1788. Resa uti Europa, Africa, Asia, förrättad Åren 1770-1779. Första Delen, innehållande Resan til Södra Europa och Goda Hoppets Udde i Africa, Åren 1770, 1771, 1772, 1773. Upsala: Joh. Edman, 389 pp. [in Swedish]

Thunberg, C.P. 1792. [*Testudo scripta*]. In: Schoepff, J.D. Historia Testudinum Iconibus Illustrata. Erlangae: Ioannis Iacobi Palm, 136 pp. [pp. 16–17].

Thunberg, C.P. 1812. [*Testudo discolor*]. In: Schweigger, A.F. Prodromus monographiae Cheloniorum. Königsberger Archiv für Naturwissenschaftliche und Mathematik 1:271–368, 406–458. [p. 302].

Tinkle, D.W. and Webb, R.G. 1955. A new species of *Sternotherus* with a discussion of the *Sternotherus carinatus* complex. Tulane Studies in Zoology 3(3):53–67.

Tirant, G. 1884. Notes sur les reptiles de la Cochinchine et du Cambodge. Excursions et Reconnaissances 8(19):147–168.

Todd, E.V., Blair, D., and Jerry, D.R. 2014. Influence of drainage divides versus arid corridors on genetic structure and demography of a widespread freshwater turtle, *Emydura macquarii krefftii*, from Australia. Ecology and Evolution 4:606–622.

Troost, G. 1835. [*Chelonura temminckii*]. In: Harlan, R. Genera of North American Reptilia, and a synopsis of the species. In: Harlan, R. Medical and Physical Researches; or Original Memoirs in Medicine, Surgery, Physiology, Geology, Zoology, and Comparative Anatomy. Philadelphia: Bailey, 653 pp. [pp. 157–158].

Troschel, F.H. 1848. Amphibien. In: Schomburgk, R. Reisen in Britisch-Guiana in den Jahren 1840–1844. Dritter Theil. Versuch einer Fauna und Flora von Britisch-Guiana. Leipzig: Verlagsbuchhandlung J.J. Weber, pp. 645–661.

True, F.W. 1882. On the North American land tortoises of the genus *Xerobates*. Proceedings of the United States National Museum 1881(1882):434–449.

Tschudi, J.J. von. 1846. Untersuchungen über die Fauna Peruana. Herpetologie. St. Gallen: Scheitlin and Zollikofer, 80 pp.

TTWG. (see Turtle Taxonomy Working Group).

Tuberville, T.D., Buhlmann, K.A., Bjorkland, R.K., and Booher, D. 2005. Ecology of the Jamaican Slider Turtle (*Trachemys terrapen*), with implications for conservation and management. Chelonian Conservation and Biology 4(4):908–915.

Türkozan, O., Kiremit, F., Parham, J.F., Olgun, K., and Taskavak, E. 2010. A quantitative reassessment of morphology-based taxonomic schemes for Turkish tortoises (*Testudo graeca*). Amphibia-Reptilia 31:69–83.

Turnbull, L.A., Ozgul, A., Accouche, W., Baxter, R., ChongSeng, L., Currie, J.C., Doak, N., Hansen, D.M., Pistorius, P., Richards, H., van de Crommenacker, J., von Brandis, R., Fleischer-Dogley, F., and Bunbury, N. 2015. Persistence of distinctive morphotypes in the native range of the CITES-listed Aldabra giant tortoise. Ecology and Evolution 5:5499–5508.

Turtle Conservation Coalition [Rhodin, A.G.J., Walde, A.D., Horne, B.D., van Dijk, P.P., Blanck, T., and Hudson, R. (Eds.)]. 2011. Turtles in Trouble: The World's 25+ Most Endangered Tortoises and Freshwater Turtles—2011. Lunenburg, MA: IUCN/SSC Tortoise and Freshwater Turtle Specialist Group, Turtle Conservation Fund, Turtle Survival Alliance, Turtle Conservancy, Chelonian Research Foundation, Conservation International, Wildlife Conservation Society, and San Diego Zoo Global, 54 pp.

Turtle Conservation Fund [Buhlmann, K.A., Hudson, R., and Rhodin, A.G.J.]. 2002. A Global Action Plan for Conservation of Tortoises and Freshwater Turtles. Strategy and Funding Prospectus 2002-2007. Washington, DC: Conservation International and Chelonian Research Foundation, 30 pp.

Turtle Extinctions Working Group [Rhodin, A.G.J., Thomson, S., Georgalis, G.L., Karl, H.-V., Danilov, I.G., Takahashi, A., de la Fuente, M.S., Bourque, J.R., Delfino, M., Bour, R., Iverson, J.B., Shaffer, H.B., and van Dijk, P.P.]. 2015. Turtles and tortoises of the world during the rise and global spread of humanity: first checklist and review of extinct Pleistocene and Holocene chelonians. Chelonian Research Monographs 5(8):000e.1–66.

Turtle Taxonomy Working Group [Bickham, J.W., Parham, J.F., Philippen, H.D., Rhodin, A.G.J., Shaffer, H.B., Spinks, P.Q., and van Dijk, P.P.]. 2007a. Turtle taxonomy: methodology, recommendations, and guidelines. In: Shaffer, H.B., FitzSimmons, N.N., Georges, A., and Rhodin, A.G.J. (Eds.). Defining Turtle Diversity: Proceedings of a Workshop on Genetics, Ethics, and Taxonomy of Freshwater Turtles and Tortoises. Chelonian Research Monographs No. 4, pp. 73–84.

Turtle Taxonomy Working Group [Bickham, J.W., Iverson, J.B., Parham, J.F., Philippen, H.D., Rhodin, A.G.J., Shaffer, H.B., Spinks, P.Q., and van Dijk, P.P.]. 2007b. An annotated list of modern turtle terminal taxa with comments on areas of taxonomic instability and recent change. In: Shaffer, H.B., FitzSimmons, N.N., Georges, A., and Rhodin, A.G.J. (Eds.). Defining Turtle Diversity: Proceedings of a Workshop on Genetics, Ethics, and Taxonomy of Freshwater Turtles and Tortoises. Chelonian Research Monographs No. 4, pp. 173–199.

Turtle Taxonomy Working Group [Rhodin, A.G.J., Parham, J.F., van Dijk, P.P., and Iverson, J.B.]. 2009. Turtles of the world: annotated checklist of taxonomy and synonymy, 2009 update, with conservation status summary. Chelonian Research Monographs 5(2):000.39–84.

Turtle Taxonomy Working Group [Rhodin, A.G.J., van Dijk, P.P., Iverson, J.B., and Shaffer, H.B.]. 2010. Turtles of the world, 2010 update: annotated checklist of taxonomy, synonymy, distribution, and conservation status. Chelonian Research Monographs 5(3):000.85–164.

Turtle Taxonomy Working Group [van Dijk, P.P., Iverson, J.B., Shaffer, H.B., Bour, R., and Rhodin, A.G.J.]. 2011. Turtles of the world, 2011 update: annotated checklist of taxonomy, synonymy, distribution, and conservation status. Chelonian Research Monographs 5(4):000.165–242.

Turtle Taxonomy Working Group [van Dijk, P.P., Iverson, J.B., Shaffer, H.B., Bour, R., and Rhodin, A.G.J.]. 2012. Turtles of the world, 2012 update: annotated checklist of taxonomy, synonymy, distribution, and conservation status. Chelonian Research Monographs 5(5):000.243–328.

Turtle Taxonomy Working Group [van Dijk, P.P., Iverson, J.B., Rhodin, A.G.J., Shaffer, H.B., and Bour, R.]. 2014. Turtles of the world, 7th edition: annotated checklist of taxonomy, synonymy, distribution with maps, and conservation status. Chelonian Research Monographs 5(7):000.329–479.

UNEP-WCMC. 2017. Report on species/country combinations selected for review by the Animals Committee following CoP16. Annex 1 to CITES document AC29 Doc.13.2. https://cites.org/sites/default/files/eng/com/ac/29/E-AC29-13-02-A1.pdf.

Ureña-Aranda, C.A. and Espinosa de los Monteros, A. 2012. The genetic crisis of the Mexican Bolson Tortoise (*Gopherus flavomarginatus*: Testudinidae). Amphibia-Reptilia 33:45–53.

USFWS [U.S. Fish and Wildlife Service]. 1987. Endangered and threatened wildlife and plants; determination of threatened status for the gopher tortoise (*Gopherus polyphemus*). Federal Register 52:25376–25380.

Vaillant, L. 1885a. Sur une tortue terrestre d'espèce nouvelle, rapportée par M. Humbolt au Muséum d'Histoire Naturelle. Comptes Rendus de l'Academie des Sciences de Paris 101(6):440–441.

Vaillant, L. 1885b. Remarques complémentaires sur les tortues gigantesque de Madagascar. Comptes Rendus hebdomadaires des Séances de l'Académie des Sciences, Paris 100:874–877.

Vaillant, L. 1894. Nouvelle espèce du genre *Geoemyda* trouvée au Tonkin par S.A. le Prince Henri d'Orléans. Bulletin de la Société Philomatique de Paris (8)6:68–69.

Vaillant, L. 1898. Dessins inédits de chéloniens tirés des manuscrits de

Commerson. Bulletin du Musée National d'Histoire Naturelle, Paris 4:133–139.

Vaillant, L. 1911. Chéloniens et batracien urodèle, recueillis par M. le Dr. Rivet. In: Mission du Service Géographique de l'Armée pour la mesure d'un Arc de Méridien Équatorial en Amérique du Sud sous le contrôle Scientifique de l'Académie des Sciences, 1899-1906. Tome 9. Zoologie. Fascicule 2. Reptiles – Poissons – Batraciens. Paris: Ministère de l'Instruction Publique, pp. 45–60.

Vaillant, L. and Grandidier, G. 1910. Histoire naturelle des Reptiles. Première partie: Crocodiles et Tortues. In: Grandidier, A. and Grandidier, G. (Eds.). Histoire Physique, Naturelle et Politique de Madagascar. Vol. 17. Paris: Hachette, 86 pp.

Valenciennes, A. 1833. [*Chelonia pelasgorum, Emys hellenica, Emys iberica, Emys rivulata*]. In: Bory de Saint-Vincent, J.B. (Ed.). Expédition Scientifique de Morée. Travaux de la Section des Sciences Physiques. Zoologie. Paris: F.G. Levrault, planches, troisième série, pls. 6–17.

Valenzuela, A., Cau, M.A., and Alcover, J.A. 2016. Archaeological evidence for the introduction of *Emys orbicularis* (Testudines: Emydidae) in the Balearic Islands. Amphibia-Reptilia 37:229–236.

Vamberger, M., Corti, C., Stuckas, H., and Fritz, U. 2011. Is the imperilled spur-thighed tortoise (*Testudo graeca*) native in Sardinia? Implications from population genetics and for conservation. Amphibia-Reptilia 32:9–25.

Vamberger, M., Stuckas, H., Ayaz, D., Graciá, E., Aloufi, A.A., Els, J., Mazanaeva, L.F., Kami, H.G., and Fritz, U. 2013. Conservation genetics and phylogeography of the poorly known Middle Eastern terrapin *Mauremys caspica* (Testudines: Geoemydidae). Organisms Diversity & Evolution 13(1):77–85.

Vamberger, M., Stuckas, H., Ayaz, D., Lymberakis, P., Široký, P., and Fritz, U. 2014. Massive transoceanic gene flow in a freshwater turtle (Testudines: Geoemydidae: *Mauremys rivulata*). Zoologica Scripta 43:313–322.

Vamberger, M., Stuckas, H., Sacco, F., D'Angelo, S., Arculeo, M., Cheylan, M., Corti, C., Lo Valvo, M., Marrone, F., Wink, M., and Fritz, U. 2015. Differences in gene flow in twofold secondary contact zone of pond turtles in southern Italy (Testudines: Emydidae: *Emys orbicularis galloitalica, E. o. hellenica, E. trinacris*). Zoologica Scripta 44:233–249.

Vamberger, M., Stuckas, H., Vargas-Ramírez, M., Kehlmaier, C., Ayaz, D., Aloufi, A.A., Lymberakis, P., Široký, P., and Fritz, U. 2017a. Unexpected hybridization patterns in Near Eastern terrapins (*Mauremys caspica, M. rivulata*) indicate ancient gene flow across the Fertile Crescent. Zoologica Scripta 46:401–413.

Vamberger, M., Durkin, L., Kim, C., Handschuh, M., Seng, R., and Fritz, U. 2017b. The leaf turtle population of Phnom Kulen National Park (northwestern Cambodia) has genetic and morphological signatures of hybridization. Journal of Zoological Systematics and Evolutionary Research 55:167–174.

Van Denburgh, J. 1895. A review of the herpetology of lower California. Part I – Reptiles. Proceedings of the California Academy of Sciences (2)5:77–162.

Van Denburgh, J. 1907. Expedition of the California Academy of Sciences to the Galapagos Islands, 1905–1906. I. Preliminary descriptions of four new races of gigantic land tortoises from the Galapagos Islands. Proceedings of the California Academy of Sciences (4)1:1–6.

Van Denburgh, J. 1914. Expedition of the California Academy of Sciences to the Galapagos Islands, 1905–1906. X. The gigantic land tortoises of the Galapagos Archipelago. Proceedings of the California Academy of Sciences (4)2(1):203–374.

van der Kuyl, A.C., Ballasina, D.L.P., Dekker, J.T., Maas, J., Willemsen, R.E., and Goudsmit, J. 2002. Phylogenetic relationships among the species of the genus *Testudo* (Testudines: Testudinidae) inferred from mitochondrial 12S rRNA gene sequences. Molecular Phylogenetics and Evolution 22: 174–183.

van der Kuyl, A.C., Ballasina, D.L.P., and Zorgdrager, F. 2005. Mitochondrial haplotype diversity in the tortoise species *Testudo graeca* from North Africa and the Middle East. BMC Evolutionary Biology 5:1–8.

Van-Ernest, H. 1801. [*Testudo rugosa*, *Testudo melanocephala*]. In: Daudin, F.M. Histoire Naturelle, Générale et Particulière des Reptiles. Tome Second. Paris: Dufart, 432 pp. [pp. 37–38, 128].

Vandelli, D. 1761. Epistola de Holothurio, et Testudine Coriacea ad Celeberrimum Carolum Linnaeum. Patavii [Padova]: Conzatti, 12 pp.

Vanzolini, P.E. 1995. A new species of turtle, genus *Trachemys*, from the State of Maranhão, Brazil (Testudines, Emydidae). Revista Brasileira de Biologia 55(1):111–125.

Vargas-Ramírez, M., Castaño-Mora, O.V., and Fritz, U. 2008. Molecular phylogeny and divergence times of ancient South American and Malagasy river turtles (Testudines: Pleurodira: Podocnemididae). Organisms, Diversity and Evolution 8:388–398.

Vargas-Ramírez, M., Maran, J., and Fritz, U. 2010a. Red- and yellow-footed tortoises, *Chelonoidis carbonaria* and *C. denticulata* (Reptilia: Testudines: Testudinidae), in South American savannahs and forests: do their phylogeographies reflect distinct habitats? Organisms, Diversity and Evolution 10:161–172.

Vargas-Ramírez, M., Vences, M., Branch, W.R., Daniels, S.R., Glaw, F., Hofmeyr, M.D., Kuchling, G., Maran, J., Papenfuss, T.J., Široky, P., Vieites, D.R., and Fritz, U. 2010b. Deep genealogical lineages in the widely distributed African helmeted terrapin: evidence from mitochondrial and nuclear DNA (Testudines: Pelomedusidae: *Pelomedusa subrufa*). Molecular Phylogenetics and Evolution 56(1):428–440.

Vargas-Ramírez, M., Michels, J., Castaño-Mora, O.V., Cárdenas-Arevalo, G., Gallego-García, N., and Fritz, U. 2012a. Weak genetic divergence between the two South American toad-headed turtles *Mesoclemmys dahli* and *M. zuliae* (Testudines: Pleurodira: Chelidae). Amphibia-Reptilia 33:373–385.

Vargas-Ramírez, M., Stuckas, H., Castaño-Mora, O.V., and Fritz, U. 2012b. Extremely low genetic diversity and weak population differentiation in the endangered Colombian river turtle *Podocnemis lewyana* (Testudines: Podocnemididae). Conservation Genetics 13:65–77.

Vargas-Ramírez, M., Carr, J.L., and Fritz, U. 2013. Complex phylogeography in *Rhinoclemmys melanosterna*: conflicting mitochondrial and nuclear evidence suggests past hybridization (Testudines: Geoemydidae). Zootaxa 3670(2):238–254.

Vasconcelos, R., Brito, J.C., Carranza, S., and Harris, D.J. 2013. Review of the distribution and conservation status of the terrestrial reptiles of the Cape Verde Islands. Oryx 47(1):77–87.

Vasilyev, V.A., Bondarenko, D.A., Peregontsev, E.A., Voronov, A.S., Ryskov, A.P., and Semenova, S.K. 2008. Polymorphism of the 12S rRNA gene and phylogeography of the Central Asian tortoises *Agrionemys horsfieldii* Gray, 1844. Russian Journal of Genetics 44:682–685.

Vasilyev, V.A., Korsunenko, A.V., Pereshkolnik, S.L., Mazanaeva, L.F., Bannikova, A.A., Bondarenko, D.A., Peregontsev, E.A., and Semyenova, S.K. 2014. Differentiation of tortoises of the genera *Testudo* and *Agrionemys* (Testudinidae) based on the polymorphism of nuclear and mitochondrial markers. Russian Journal of Genetics 50:1060–1074.

Velo-Antón, G., García-París, M., and Cordero Rivera, A. 2008. Patterns of nuclear and mitochondrial DNA variation in Iberian populations of *Emys orbicularis* (Emydidae): conservation implications. Conservation Genetics 9:1263–1274.

Velo-Antón, G., Wink, M., Schneeweiss, N., and Fritz, U. 2011. Native or not? Tracing the origin of wild-caught and captive freshwater turtles in a threatened and widely distributed species (*Emys orbicularis*). Conservation Genetics 12:583–588.

Venzmer, G. 1920. Beobachtungen an der iberischen und an der kaspischen Schildkröte in Cilicien. Zoologischer Anzeiger 51:285–302.

Veríssimo, J., Znari, M., Stuckas, H., Fritz, U., Pereira, P., Teixeira, J., Arculeo, M., Marrone, F., Sacco, F., Naimi, M., Kehlmaier, C., and Velo-Antón, G. 2016. Pleistocene diversification in Morocco and recent demographic expansion in the Mediterranean Pond Turtle *Mauremys leprosa*. Biological Journal of the Linnean Society 119:943–959.

Vetter, H. and van Dijk, P.P. 2006. Turtles of the World, Vol. 4: East and South Asia. Frankfurt: Edition Chimaira, 160 pp.

Vilaça, S.T., Vargas, S.M., Lara-Ruiz, P., Molfetti, E., Reis, E.C., Lôbo-Hajdu, G., Soares, L.S., and Santos, F.R. 2012. Nuclear markers reveal a complex introgression pattern among marine turtle species on the Brazilian coast. Molecular Ecology 21(17):4300–4312.

Vilaró, J. 1867a. Notas. In: Poey, F. Repertorio Fisico-Natural de la Isla de Cuba 2(5):119–122.

Vilaró, J. 1867b. Nota sobre las jicoteas cubanas. In: Poey, F. Repertorio Fisico-Natural de la Isla de Cuba 2(9):204.

Vinke, S., Vetter, H., Vinke, T., and Vetter, S. 2008. South American Tortoises – *Chelonoidis carbonaria, C. denticulata* and *C. chilensis*. Frankfurt am Main: Chimaira Verlag, Chelonian Library 3; 360 pp.

Vinke, T., Vinke, S., and Köhler, G. 2013. What is known about *Mesoclemmys vanderhaegei* (Bour, 1973): a systematic review of the available literature. Paraquaria Natural 1(2):21–31.

Vlachos, E. 2015. Forming taxon names from Greek words. Bionomina 9: 1–26.

Vogt, R.C. 1980. Natural history of the map turtles *Graptemys pseudogeographica* and *Graptemys ouachitensis* in Wisconsin. Tulane Studies in Zoology and

Botany 22:17–48.

Vogt, R.C., Thomson, S.A., Rhodin, A.G.J., Pritchard, P.C.H., Mittermeier, R.A., and Baggi, N. 2013. Case 3587. *Podocnemis unifilis* Troschel, 1848 (Reptilia,Testudines): proposed precedence over *Emys cayennensis* Schweigger, 1812. Bulletin of Zoological Nomenclature 70(1):33–39.

Vogt, T. 1911. Reptilien und Amphibien aus Neu-Guinea. Sitzungsberichte der Gesellschaft der Naturforschender Freunde, Berlin 9:410–414.

Vuillemin, S. 1972a. Note sur *Testudo morondavaensis* n. sp. Annales de l'Université de Madagascar, Série Sciences de la Nature et Mathématiques 9:127–134.

Vuillemin, S. 1972b. Note sur *Madakinixys domerguei* n. gen. n. sp. (Testudinidae). Annales de l'Université de Madagascar, Série Sciences de la Nature et Mathématiques 9:169–182.

Vuillemin, S. and Domergue, C. 1972. Contribution à la faune de Madagascar: description de *Pyxoides brygooi* gen. et sp. nov. (Testudinidae). Annales de l'Université de Madagascar, Série Sciences de la Nature et Mathématiques 9:193–200.

Wagler, J.G. 1821. Die Amphibien (Lieferung 1). Nürnberg: J.B. Geyer, 12 pp., 6 plates.

Wagler, J.G. 1828. Vorläufige Uebersicht des Gerüstes, so wie Ankündigung seines Systema Amphibiorum. Isis von Oken 21(8):859–863.

Wagler, J.G. 1830a. Descriptiones et Icones Amphibiorum. Tres partes cum XXXVI tabulis. Part II. Monachii [München]: J.G. Cottae, pls. XIII-XXIV.

Wagler, J.G. 1830b. Natürliches System der Amphibien, mit vorangehender Classification der Säugthiere und Vögel. Ein Beitrag zur vergleichenden Zoologie. München: J.G. Cotta'schen Buchhandlung, 354 pp., pls. 1–2.

Wagler, J.G. 1830c. Natürliches System der Amphibien, mit vorangehender Classification der Säugthiere und Vögel. Tafeln. München: J.G. Cotta'schen Buchhandlung. Erstes Heft, pls. I–VII.

Walbaum, J.J. 1782. Chelonographia oder Beschreibung einiger Schildkröten. Lubeck: J.F. Gleditsch, 132 pp.

Walbaum, J.J. 1785. Beschreibung der Spenglerischen Schildkröte. Schriften der Berliner Gesellschaft Naturforschender Freunde 6:122–131.

Walker, D. and Avise, J.C. 1998. Principles of phylogeography as illustrated by freshwater and terrestrial turtles in the southeastern United States. Annual Review of Ecology and Systematics 29:23–58.

Walker, D., Burke, V.J., Barak, I., and Avise, J.C. 1995. A comparison of mtDNA restriction sites vs. control region sequences on phylogeographic assessment of the musk turtle (Sternotherus minor). Molecular Ecology 4:365–373.

Walker, D., Orti, G., and Avise, J.C. 1998. Phylogenetic distinctiveness of a threatened aquatic turtle (*Sternotherus depressus*). Conservation Biology 12:639–645.

Wang, J., Shi, H.-T., Wen, C., and Han, L.-X. 2013. Habitat selection and conservation suggestions for the Yangtze Giant Softshell Turtle (*Rafetus swinhoei*) in the Upper Red River, China. Chelonian Conservation and Biology 12(1):177–184.

Wang, L., Zhou, X., Nie, L., Xia, X., Liu, L., Jiang, Y., Huang, Z., and Jing, W. 2012. The complete mitochondrial genome sequences of *Chelodina rugosa* and *Chelus fimbriata* (Pleurodira: Chelidae): implications of a common absence of initiation sites (OL) in pleurodiran turtles. Molecular Biology Reports 39(3):2097–2107.

Wangyal, J.T., Wangchuk, D., and Das, I. 2012. First report of turtles from the Himalayan Kingdom of Bhutan. Chelonian Conservation and Biology 11(2):268–272.

Ward, J.P. 1980. Comparative cranial morphology of the freshwater turtle subfamily Emydinae: an analysis of the feeding mechanisms and systematics. Ph.D. Thesis, North Carolina State University, Raleigh.

Ward, J.P. 1984. Relationships of chrysemyd turtles of North America (Testudines: Emydinae). Special Publications of the Museum of Texas Tech University 21:1–50.

Ward, R., Babitzke, J.B., and Killebrew, F.C. 2013. Genetic population structure of Cagle's Map Turtle (*Graptemys caglei*) in the Guadalupe and San Marcos Rivers of Texas – a landscape perspective. Copeia 2013:723–728.

Webb, R.G. 1959. Description of a new softshell turtle from the southeastern United States. University of Kansas Publications, Museum of Natural History 11(9):517–525.

Webb, R.G. 1962. North American Recent soft-shelled turtles (family Trionychidae). University of Kansas Publications, Museum of Natural History 13:429–611.

Webb, R.G. 1975. Types of two names of African softshell turtles of the genus *Cyclanorbis* (Testudines: Trionychidae). Herpetologica 31(3):348–350.

Webb, R.G. 1980a. The identity of *Testudo punctata* Lacepède, 1788 (Testudines, Trionychidae). Bulletin du Musée National d'Histoire Naturelle, Paris (4):2A:547–557.

Webb, R.G. 1980b. Gray, Hardwicke, Buchanan-Hamilton, and drawings of Indian softshell turtles (family Trionychidae). Amphibia-Reptilia 1:61–74.

Webb, R.G. 1982. Taxonomic notes concerning the trionychid turtle *Lissemys punctata* (Lacépède). Amphibia-Reptilia 3(2/3):179–184.

Webb, R.G. 1995a. Redescription and neotype designation of *Pelochelys bibroni* from southern New Guinea (Testudines: Trionychidae). Chelonian Conservation and Biology 1(4):301–310.

Webb, R.G. 1995b. The date of publication of Gray's Catalogue of Shield Reptiles. Chelonian Conservation and Biology 1(4):322–323.

Webb, R.G. 2003. Observations on the giant softshell turtle, *Pelochelys cantorii*, with description of a new species. Hamadryad 27(1)(2002)[2003]:99–107.

Webb, R.G. and Legler, J.M. 1960. A new softshell turtle (genus *Trionyx*) from Coahuila, Mexico. University of Kansas Science Bulletin 40(2):21–30.

Weisrock, D.W. and Janzen, F.J. 2000. Comparative molecular phylogeography of North American softshell turtles (*Apalone*): implications for regional and wide-scale historical evolutionary forces. Molecular Phylogenetics and Evolution 14:152–164.

Weissinger, H. 1987. *Testudo graeca anamurensis* ssp. nov. aus Kleinasien. ÖGH-Nachrichten, Wien 10/11:14–18.

Wells, R.W. 2002a. A new subspecies of *Carettochelys* (Reptilia: Carettochelydidae) from northern Australia – *Carettochelys insculpta canni* ssp. nov. Australian Biodiversity Record 2002(1):1–7.

Wells, R.W. 2002b. Taxonomic notes on some Australian freshwater turtles of the genera *Chelodina* and *Elseya* (Reptilia: Chelidae). Australian Biodiversity Record 2002(2):1–30.

Wells, R.W. 2007a. Some taxonomic and nomenclatural considerations on the Class Reptilia in Australia. Notes on the recently described freshwater turtle *Chelodina canni* McCord and Thomson, 2002 and a redescription of *Chelodina rankini* Wells and Wellington, 1985. Australian Biodiversity Record 2007(1):1–5.

Wells, R.W. 2007b. Some taxonomic and nomenclatural considerations on the Class Reptilia in Australia. Some comments on the *Elseya dentata* (Gray, 1863) complex with redescriptions of the Johnstone River snapping turtle, *Elseya stirlingi* Wells and Wellington, 1985 and the Alligator Rivers snapping turtle, *Elseya jukesi* Wells 2002. Australian Biodiversity Record 2007(2):1–12.

Wells, R.W. 2007c. Some taxonomic and nomenclatural considerations on the Class Reptilia in Australia. A new genus of the family Chelidae from eastern Australia. Australian Biodiversity Record 2007(3):1–13.

Wells, R.W. 2009. Some taxonomic and nomenclatural considerations on the Class Reptilia in Australia. A new species of freshwater turtle in the Genus *Wollumbinia* Wells 2007 (Reptilia: Chelidae) from eastern Australia. Australian Biodiversity Record 2009(1):1–12.

Wells, R.W. and Wellington, C.R. 1985. A classification of the Amphibia and Reptilia of Australia. Australian Journal of Herpetology, Supp. Ser. 1:1–61.

Wermuth, H. 1952. *Testudo hermanni robertmertensi* n. subsp. und ihr Vorkommen in Spanien. Senckenbergiana 33:157–164.

Wermuth, H. 1956. Versuch der Deutung einiger bisher übersehener Schildkröten-Namen. Zoologische Beiträge, Berlin (N.F.) 2(2-3):399–423.

Wermuth, H. 1965. Zum Status von *Testudo hypselonota* Bourret. Israel Journal of Zoology 14:277–285.

Wermuth, H. 1969. Eine neue Grosskopfschildkröte, *Platysternon megacephalum vogeli* n. ssp. Aquarien und Terrarien Zeitschrift 22(12):372–374.

Wermuth, H. and Mertens, R. 1961. Schildkröten. Krokodile. Brückenechsen. Jena: Gustav Fischer Verlag, 422 pp.

Wermuth, H. and Mertens, R. 1977. Liste der rezenten Amphibien und Reptilien: Testudines, Crocodylia, Rhynchocephalia. Tierreich 100:1–174.

Werner, F. 1897. Die Reptilien und Amphibien Oesterreich-Ungarns und der Occupationsländer. Wien: A. Pichler's Witwe und Sohn, 160 pp.

Werner, F. 1899. Beitrage zur Kenntniss der Reptilien- und Batrachier fauna der Balkanhalbinsel. Wissenschaften und Mitteilungen aus Bosnien und der Hercegovina 6:817–841.

Werner, F. 1901a. Ueber Reptilien und Batrachier aus Ecuador und Neu-Guinea. Verhandlungen der Zoologisch-Botanischen Gesellschaft, Wien 51:593–603.

Werner, F. 1901b. Neue Reptilien des Königsberger zoologischen Museums. Zoologischer Anzeiger 24:297–301.

Werner, Y.L., Korolker, N., Sion, G., and Göçmen, B. 2016. Bergmann's and Rensch's rules and the spur-thighed tortoise (*Testudo graeca*). Biological Journal of the Linnean Society 117(4):796–811.

White, A.W. and Archer, M. 1994. *Emydura lavarackorum*, a new Pleistocene turtle (Pleurodira: Chelidae) from fluviatile deposits at Riversleigh, northwestern Queensland. Records of the South Australian Museum 27(2):159–167.

White, A.W., Worthy, T.H., Hawkins, S., Bedford, S., and Spriggs, M. 2010. Megafaunal meiolaniid horned turtles survived until early human settlement in Vanuatu, Southwest Pacific. PNAS 107(41):15512–15516.

White, G. 1836. The Natural History and Antiquities of Selborne. Edited by E.T. Bennett. London: J. and A. Arch, 640 pp.

Wied, M. zu. 1839. Reise in das innere Nord-America in den Jahren 1832 bis 1834. Erster Band. Coblenz: J. Hoelscher, 653 pp.

Wied, M. zu. 1865. Verzeichniss der Reptilien, welche auf einer Reise im nördlichen America beobachtet wurden. Nova Acta Physico-Medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum 32:1–143.

Wiedemann, C.R.W. 1802. Anatomische Beschreibung der Schildkröten überhaupt und der getäfelten Schildkröte (*T. tessellata* Schneid. *T. tabulata* Walbaum) insbesondere. Archiv für Zoologie und Zootomie 2(2):177–210.

Wiegmann, A.F.A. 1828. Beyträge zur Amphibienkunde. Isis von Oken 21(3):364–383.

Wiegmann, A.F.A. 1834 ["1835"]. Beiträge zur Zoologie, gesammelt auf einer Reise um die Erde von Dr. F.J.F. Meyen. Siebente Abhandlung. Amphibien. Nova Acta Physico-Medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum 17:183–268.

Wieland, G.R. 1923. A new Parana pleurodiran. American Journal of Science (5)5:1–14.

Wiens, J.J., Kuczynski, C.A., and Stephens, P.A. 2010. Discordant mitochondrial and nuclear gene phylogenies in emydid turtles: implications for speciation and conservation. Biological Journal of the Linnean Society 99:445–461.

Williams, E.E. 1950. Variation and selection in the cervical central articulations of living turtles. Bulletin of the American Museum of Natural History 94:505–562.

Williams, E.E. 1952. A new fossil tortoise from Mona Island, West Indies, and a tentative arrangement of the tortoises of the world. Bulletin of the American Museum of Natural History 99:545–560.

Williams, E.E. 1954. A key and description of the living species of the genus *Podocnemis* (sensu Boulenger) (Testudines, Pelomedusidae). Bulletin of the Museum of Comparative Zoology 111(8):279–295.

Wilmé, L., Waeber, P.O., and Ganzhorn, J.U. 2017. Human translocation as an alternative hypothesis to explain the presence of giant tortoises on remote islands in the south-western Indian Ocean. Journal of Biogeography 44:1–7.

Wilson, S. and Swann, G. 2013. Complete Guide to the Reptiles of Australia. Chatswood, Australia: New Holland.

Wink, M., Guicking, D., and Fritz, U. 2001. Molecular evidence for hybrid origin of *Mauremys iversoni* Pritchard and McCord, 1991, and *Mauremys pritchardi* McCord, 1997 (Reptilia: Testudines: Bataguridae). Zoologische Abhandlungen, Staatliches Museum für Tierkunde, Dresden 51:41–49.

Wischuf, T. and Fritz, U. 1996. Eine neue Unterart der Bachschildkröte (*Mauremys caspica ventrimaculata* subsp. nov.) aus dem Iranischen Hochland. Salamandra 32(2):113–122.

Wischuf, T. and Fritz, U. 1997. [*Mauremys caspica siebenrocki*]. In: Fritz, U. and Wischuf, T. Zur Systematik westasiatisch–südosteuropäischer Bachschildkröten (Gattung *Mauremys*) (Reptilia: Testudines: Bataguridae). Zoologische Abhandlungen, Staatliches Museum für Tierkunde Dresden 49(13):223–260. [pp. 240–243].

Wong, R.A., Fong, J.J., and Papenfuss, T.J. 2010. Phylogeography of the African helmeted terrapin, *Pelomedusa subrufa*: genetic structure, dispersal, and human introduction. Proceedings of the California Academy of Sciences (4)61:575–585.

Wood, R.C. 1994. The distribution, status, ecology, and taxonomy of diamondback terrapins, *Malaclemys terrapin*, in the Florida Keys. In: Heinrich, G. (Ed.). A Symposium on the Status and Conservation of Florida Turtles. St. Petersburg: Eckerd College, 1 page [no pagination].

Worrell, E. 1970. Reptiles of Australia. Second Edition. Sydney: Angus and Robertson, 169 pp.

Wussow, W. 1916. Meine Erfahrungen mit *Testudo horsfieldi*. Wochenschrift für Aquarien- und Terrarienkunde 13:169–172.

Yang, P., Tang, Y., Ding, L., Guo, X., and Wang, Y. 2011. Validity of *Pelodiscus parviformis* (Testudines: Trionychidae) inferred from molecular and morphological analyses. Asian Herpetological Research 2(1):21–29.

Yasukawa, Y. and Ota, H. 1999. Geographic variation and biogeography of the geoemydine turtles (Testudines: Bataguridae) of the Ryukyu Archipelago, Japan. In: Ota, H. (Ed.). Tropical Island Herpetofauna: Origin, Current Diversity, and Conservation. Amsterdam: Elsevier, pp. 271–297.

Yasukawa, Y., Ota, H., and Hikida, T. 1992. Taxonomic re-evaluation of the two subspecies of *Geoemyda spengleri* (Gmelin, 1789) (Reptilia: Emydidae). Japanese Journal of Herpetology 14(3):143–159.

Yasukawa, Y., Ota, H., and Iverson, J.B. 1996. Geographic variation and sexual size dimorphism in *Mauremys mutica* (Cantor, 1842) (Reptilia: Bataguridae), with description of a new subspecies from the southern Ryukyus, Japan. Zoological Science (Japan) 13:303–317.

Yeh, H.-K. 1961. The first discovery of a box-turtle in China. Vertebrata Palasiatica 5:58–64.

Zangerl, R. 1958. Die oligozänen Meerschildkröten von Glarus. Schweizerische Paläontologische Abhandlungen 73:1–56.

Zangerl, R. and Medem, F. 1958. A new species of chelid turtle, *Phrynops (Batrachemys) dahli*, from Colombia. Bulletin of the Museum of Comparative Zoology 119:375–390.

Zangerl, R. and Turnbull, W.D. 1955. *Procolpochelys grandaeva* (Leidy), an early carettine sea turtle. Fieldiana Zoology 37:345–382.

Zenboudji, S., Cheylan, M., Arnal, V., Bertolero, A., Leblois, R., Astruc, G., Bertorelle, G., Pretus, J.L., Lo Valvo, M., Sotgiu, G., and Montgelard, C. 2016. Conservation of the endangered Mediterranean tortoise *Testudo hermanni hermanni*: the contribution of population genetics and historical demography. Biological Conservation 195:279–291.

Zhang, M. 1984. [A new species of *Pelochelys* from Zhejiang, with subfossil description]. Acta Herpetologica Sinica 3(4):71–76. [in Chinese]

Zhang, M., Zong, Y., and Ma, J. 1998. Fauna Sinica. Reptilia Vol. 1. General Accounts of Reptilia. Testudoformes and Crocodiliformes. Beijing: Science Press, 213 pp.

Zhang, X., Unmack, P.J., Kuchling, G., Wang, Y., and Georges, A. 2017. Resolution of the enigmatic phylogenetic relationship of the critically endangered Western Swamp Tortoise *Pseudemydura umbrina* (Pleurodira: Chelidae) using a complete mitochondrial genome. Molecular Phylogenetics and Evolution; doi: 10.1016/j.ympev.2017.07.019.

Zhao, E. 1990. [*Cuora zhoui*]. In: Zhao, E., Zhou, T., and Ye, P. [A new Chinese box turtle (Testudinata: Emydidae)–*Cuora zhoui*]. In: Zhao, E. (Ed.). From Water Onto Land. Chinese Society for the Study of Amphibians and Reptiles, Beijing, pp. 213–216. [p. 213]. [in Chinese]

Zhao, E., Zhou, J., and Zhou, T. (Eds.) 1997. Chinese Chelonian Research. Chinese Society for the Study of Amphibians and Reptiles, Herpetological Series No. 9, Sichuan Journal of Zoology 15 (Supplement), 159 pp.

Zhao, J., Li, W., Zhang, D., Wen, P., and Zhu, X. 2016a. The mitochondrial genomes of three lineages of Asian yellow pond turtle *Mauremys mutica*. Mitochondrial DNA Part A: DNA Mapping, Sequencing, and Analysis 27:2466–2467.

Zhao, J., Li, W., Wen, P., Zhang, D., and Zhu, X. 2016b. Genetic diversity and relationship of *Mauremys mutica* and *M. annamensis* assessed by DNA barcoding sequences. Mitochondrial DNA Part A: DNA Mapping, Sequencing, and Analysis 27:3507–3510.

Zheng, C., Nie, L., Wang, J., Zhou, H., Hou, H., Wang, H., and Liu, J. 2013. Recombination and evolution of duplicate control regions in the mitochondrial genome of the Asian Big-headed Turtle, *Platysternon megacephalum*. PLoS ONE 8(12): e82854.

Zhou, G., Zhang, X., and Fang, Z. 1991. Bulletin of a new species *Trionyx*. Acta Scientiarum Naturalium Universitatis Normalis Hunanensis, Hunan Changsha 14(4):379–382. [in Chinese]

Zhou, H., Jiang, Y., Nie, L., Yin, H., Li, H., Dong, X., Zhao, F., Zhang, H., Pu, Y., Huang, Z., Song, J., and Sun, E. 2015. The historical speciation of *Mauremys* sensu lato: ancestral area reconstruction and interspecific gene flow level assessment provide new insights. PLoS One 10:e0144711.

Zhou, T. 2005. Discovery of a living male Yunnan box turtle, *Cuora yunnanensis* Boulenger, 1906. Sichuan Journal of Zoology 24(3):345–346.

Zhou, T. and Zhao, E. 2004. On the occurrence of living *Cuora yunnanensis* since fifty-eight years, and its description. Sichuan Journal of Zoology 23:325–327.

Zong, Y. and Pan, L. 1989. Studies on the genus *Cuora* of the Testudoformes. In: Matsui, M., Hikida, T. and Goris, R.C. (Eds.). Current Herpetology in East Asia. Proceedings of the second Japan-China Herpetological Symposium, Kyoto, July 1988. Herpetological Society of Japan 1989:198.

Zug, G.R. 1977. The Matamata (Testudines: Chelidae) is *Chelus* not *Chelys*!

Herpetologica 33:53–54.

Zug, G.R., Beaver, K., Bjorndal, K.A., Crumly, C.R., Das, I., Diamond, A.W., Hambler, C., Leuteritz, T., Shah, N.J., Murphy, J.B., Swingland, I.R., Bourn, D., Türkozan, O., Savage, J.M., Caccone, G., Parham, J.F., and Rhodin, A.G.J. 2009. Comments on the proposed conservation of usage of *Testudo gigantea* Schweigger, 1812 (currently *Geochelone (Aldabrachelys) gigantea*; Reptilia, Testudines) (Case 3463; see BZN 66: 34). Bulletin of Zoological Nomenclature 66(1):80–87.

Chelonian Research Monographs No. 5 – CBFTT Conservation Biology of Freshwater Turtles and Tortoises Published 2008–2017

All CBFTT publications (8 checklists and 100 accounts covering 130 taxa) are available online as hyperlinked open-access downloadable doi-designated pdf's

Rhodin, A.G.J., Pritchard, P.C.H., van Dijk, P.P., Saumure, R.A., Buhlmann, K.A., Iverson, J.B., and Mittermeier, R.A. (Eds.). 2008–2016. Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group. Chelonian Research Monographs, No. 5 (Installments 1–9a). Lunenburg, Massachusetts: Chelonian Research Foundation.

Rhodin, A.G.J., Iverson, J.B., van Dijk, P.P., Saumure, R.A., Buhlmann, K.A., Pritchard, P.C.H., and Mittermeier, R.A. (Eds.). 2016. Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group. Chelonian Research Monographs, No. 5 (Installment 9b). Lunenburg, Massachusetts: Chelonian Research Foundation.

Rhodin, A.G.J., Iverson, J.B., van Dijk, P.P., Saumure, R.A., Buhlmann, K.A., Pritchard, P.C.H., and Mittermeier, R.A. (Eds.). 2017. Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group. Chelonian Research Monographs, No. 7. In: Chelonian Research Monographs, No. 5 (Supplement No. 1). Lunenburg, Massachusetts: Chelonian Research Foundation and Turtle Conservancy.

TTWG, CBFTT, and TEWG Checklists (Chronological)

Turtle Taxonomy Working Group [Bickham, J.W., Iverson, J.B., Parham, J.F., Philippen, H.D., Rhodin, A.G.J., Shaffer, H.B., Spinks, P.Q., and van Dijk, P.P.]. 2007b. An annotated list of modern turtle terminal taxa with comments on areas of taxonomic instability and recent change. Chelonian Research Monographs 4:173–199.

Rhodin, A.G.J., van Dijk, P.P., and Parham, J.F. 2008. Turtles of the world: annotated checklist of taxonomy and synonymy. Chelonian Research Monographs 5(1):000.1–38.

Turtle Taxonomy Working Group [Rhodin, A.G.J., Parham, J.F., van Dijk, P.P., and Iverson, J.B.]. 2009. Turtles of the world: annotated checklist of taxonomy and synonymy, 2009 update, with conservation status summary. Chelonian Research Monographs 5(2):000.39–84.

Turtle Taxonomy Working Group [Rhodin, A.G.J., van Dijk, P.P., Iverson, J.B., and Shaffer, H.B.]. 2010. Turtles of the world, 2010 update: annotated checklist of taxonomy, synonymy, distribution, and conservation status. Chelonian Research Monographs 5(3):000.85–164.

Turtle Taxonomy Working Group [van Dijk, P.P., Iverson, J.B., Shaffer, H.B., Bour, R., and Rhodin, A.G.J.]. 2011. Turtles of the world, 2011 update: annotated checklist of taxonomy, synonymy, distribution, and conservation status. Chelonian Research Monographs 5(4):000.165–242.

Turtle Taxonomy Working Group [van Dijk, P.P., Iverson, J.B., Shaffer, H.B., Bour, R., and Rhodin, A.G.J.]. 2012. Turtles of the world, 2012 update: annotated checklist of taxonomy, synonymy, distribution, and conservation status. Chelonian Research Monographs 5(5):000.243–328.

Turtle Taxonomy Working Group [van Dijk, P.P., Iverson, J.B., Rhodin, A.G.J., Shaffer, H.B., and Bour, R.]. 2014. Turtles of the world, 7th edition: annotated checklist of taxonomy, synonymy, distribution with maps, and conservation status. Chelonian Research Monographs 5(7):000.329–479.

Turtle Extinctions Working Group [Rhodin, A.G.J., Thomson, S., Georgalis, G.L., Karl, H.-V., Danilov, I.G., Takahashi, A., de la Fuente, M.S., Bourque, J.R., Delfino, M., Bour, R., Iverson, J.B., Shaffer, H.B., and van Dijk, P.P.]. 2015. Turtles and tortoises of the world during the rise and global spread of humanity: first checklist and review of extinct Pleistocene and Holocene chelonians. Chelonian Research Monographs 5(8):000e.1–66.

Turtle Taxonomy Working Group [Rhodin, A.G.J., Iverson, J.B., Bour, R., Fritz, U., Georges, A., Shaffer, H.B., and van Dijk, P.P.]. 2017. Turtles of the World: Annotated Checklist and Atlas of Taxonomy, Synonymy, Distribution, and Conservation Status (8th Ed.). Chelonian Research Monographs 7:1–292.

CBFTT Species Accounts (Alphabetical by Author)

Anders, B. and Iverson, J.B. 2012. *Mauremys nigricans* (Gray 1834) – Red-necked Pond Turtle, Chinese Red-necked Turtle, Kwangtung River Turtle, Black-necked Pond Turtle. Chelonian Research Monographs 5(5):068.1–9.

Auliya, M., van Dijk, P.P., Moll, E.O., and Meylan, P.A. 2016. *Amyda cartilaginea* (Boddaert 1770) – Asiatic Softshell Turtle, Southeast Asian Softshell Turtle. Chelonian Research Monographs 5(9a):092.1–17.

Baker, P.J., Diagne, T., and Luiselli, L. 2015. *Cyclanorbis elegans* (Gray 1869) – Nubian Flapshell Turtle. Chelonian Research Monographs 5(8):089.1–7.

Berry, J.F. and Iverson, J.B. 2011. *Kinosternon scorpioides* (Linnaeus 1766) – Scorpion Mud Turtle. Chelonian Research Monographs 5(4):063.1–15.

Bertolero, A., Cheylan, M., Hailey, A., Livoreil, B., and Willemsen, R.E. 2011. *Testudo hermanni* (Gmelin 1789) – Hermann's Tortoise. Chelonian Research Monographs 5(4):059.1–20.

Bhupathy, S., Webb, R.G, and Praschag, P. 2014. *Lissemys punctata* (Bonnaterre 1789) – Indian Flapshell Turtle. Chelonian Research Monographs 5(7):076.1–12.

Blankenship, E.L., Butterfield, B.P., and Godwin, J.C. 2008. *Graptemys nigrinoda* Cagle 1954 – Black-knobbed Map Turtle, Black-knobbed Sawback. Chelonian Research Monographs 5(1):005.1–6.

Bock, B.C., Páez, V.P., and Daza, J.M. 2010. *Trachemys callirostris* (Gray 1856) – Colombian Slider, Jicotea, Hicotea, Galapago, Morrocoy de Agua. Chelonian Research Monographs 5(3):042.1–9.

Bour, R. 2008. *Pelusios adansonii* (Schweigger 1812) – Adanson's Mud Turtle. Chelonian Research Monographs 5(1):017.1–4.

Bour, R. and Gerlach, J. 2008. *Pelusios seychellensis* (Siebenrock 1906) – Seychelles Mud Turtle. Chelonian Research Monographs 5(1):018.1–3.

Bour, R., Luiselli, L., Petrozzi, F., Segniagbeto, G.H., and Chirio, L. 2016. *Pelusios castaneus* (Schweigger 1812) – West African Mud Turtle, Swamp Terrapin. Chelonian Research Monographs 5(9a):095.1–11.

Bower, D.S. and Hodges, K.M. 2014. *Chelodina expansa* Gray 1857 – Broad-Shelled Turtle, Giant Snake-Necked Turtle. Chelonian Research Monographs 5(7):071.1–8.

Boycott, R.C. and Bourquin, O. 2008. *Pelomedusa subrufa* (Lacepède 1788) – Helmeted Turtle, Helmeted Terrapin. Chelonian Research Monographs 5(1):007.1–6.

Broadley, D.G. and Boycott, R.C. 2008. *Pelusios rhodesianus* Hewitt 1927 – Variable Mud Turtle, Variable Hinged Terrapin. Chelonian Research Monographs 5(1):004.1–3.

Broadley, D.G. and Boycott, R.C. 2009. *Pelusios sinuatus* (Smith 1838) – Serrated Hinged Terrapin. Chelonian Research Monographs 5(2):036.1–5.

Broadley, D.G. and Sachsse, W. 2011. *Cycloderma frenatum* Peters 1854 – Zambezi Flapshell Turtle, Nkhasi. Chelonian Research Monographs 5(4):055.1–5.

Buhlmann, K.A., Gibbons, J.W., and Jackson, D.R. 2008. *Deirochelys reticularia* (Latreille 1801) – Chicken Turtle. Chelonian Research Monographs 5(1):014.1–6.

Bury, R.B. and Germano, D.J. 2008. *Actinemys marmorata* (Baird and Girard 1852) – Western Pond Turtle, Pacific Pond Turtle. Chelonian Research Monographs 5(1):001.1–9.

Buskirk, J.R. and Ponce-Campos, P. 2011. *Terrapene nelsoni* Stejneger 1925 – Spotted Box Turtle, Tortuga de Chispitas, Tortuga de Monte. Chelonian Research Monographs 5(4):060.1–9.

Cann, J., Spencer, R.-J., Welsh, M., and Georges, A. 2015. *Myuchelys georgesi* (Cann 1997) – Bellinger River Turtle. Chelonian Research Monographs 5(8):091.1–9.

Carr, J.L. and Giraldo, A. 2009. *Rhinoclemmys nasuta* (Boulenger 1902) – Large-nosed Wood Turtle, Chocoan River Turtle. Chelonian Research Monographs 5(2):034.1–6.

Cerdá-Ardura, A., Soberón-Mobarak, F., McGaugh, S.E., and Vogt, R.C. 2008. *Apalone spinifera atra* (Webb and Legler 1960) – Black Spiny Softshell Turtle, Cuatrociénegas Softshell, Tortuga Concha Blanda, Tortuga Negra de Cuatrociénegas. Chelonian Research Monographs 5(1):021.1–4.

Congdon, J.D., Graham, T.E., Herman, T.B., Lang, J.W., Pappas, M.J., and Brecke, B.J. 2008. *Emydoidea blandingii* (Holbrook 1838) – Blanding's Turtle. Chelonian Research Monographs 5(1):015.1–12.

Das, I. 2008. *Pelochelys cantorii* Gray 1864 – Asian Giant Softshell Turtle. Chelonian Research Monographs 5(1):011.1–6.

Das, I. 2009. *Melanochelys tricarinata* (Blyth 1856) – Tricarinate Hill Turtle, Three-keeled Land Turtle. Chelonian Research Monographs 5(2):025.1–5.

Das, I. 2010. *Morenia ocellata* (Duméril and Bibron 1835) – Burmese Eyed Turtle. Chelonian Research Monographs 5(3):044.1–5.

Das, I. and Bhupathy, S. 2009a. *Hardella thurjii* (Gray 1831) – Crowned River Turtle. Chelonian Research Monographs 5(2):023.1–6.

Das, I. and Bhupathy, S. 2009b. *Melanochelys trijuga* (Schweigger 1812) – Indian Black Turtle. Chelonian Research Monographs 5(2):038.1–9.

Das, I. and Bhupathy, S. 2010. *Geoclemys hamiltonii* (Gray 1830) – Spotted Pond Turtle, Black Pond Turtle. Chelonian Research Monographs 5(3):043.1–6.

Das, I. and Sengupta, S. 2010. *Morenia petersi* Anderson 1879 – Indian Eyed Turtle. Chelonian Research Monographs 5(3):045.1–5.

Das, I. and Singh, S. 2009. *Chitra indica* (Gray 1830) – Narrow-headed Softshell Turtle. Chelonian Research Monographs 5(2):027.1–7.

Das, I., Basu, D., and Singh, S. 2010. *Nilssonia hurum* (Gray 1830) – Indian Peacock Softshell Turtle. Chelonian Research Monographs 5(3):048.1–6.

Das, I., Sengupta, S., and Praschag, P. 2010. *Pangshura sylhetensis* Jerdon 1870 – Assam Roofed Turtle. Chelonian Research Monographs 5(3):046.1–6.

Das, I., Sirsi, S., Vasudevan, K., and Murthy, B.H.C.K. 2014. *Nilssonia leithii* (Gray 1872) – Leith's Softshell Turtle. Chelonian Research Monographs 5(7):075.1–5.

Das, I., McCormack, T.E.M., van Dijk, P.P., Hoang, H.V., and Struijk, R.P.J.H. 2016. *Cuora mouhotii* (Gray 1862) – Keeled Box Turtle. Chelonian Research Monographs 5(9b):099.1–12.

Deepak, V., Ramesh, M., Bhupathy, S., and Vasudevan, K. 2011. *Indotestudo travancorica* (Boulenger 1907) – Travancore Tortoise. Chelonian Research Monographs 5(4):054.1–6.

Deepak, V., Praschag, P., and Vasudevan, K. 2014. *Vijayachelys silvatica* (Henderson 1912) – Cochin Forest Cane Turtle. Chelonian Research Monographs 5(7):078.1–7.

Diesmos, A.C., Buskirk, J.R., Schoppe, S., Diesmos, M.L.L., Sy, E.Y., and Brown, R.M. 2012. *Siebenrockiella leytensis* (Taylor 1920) – Palawan Forest Turtle, Philippine Forest Turtle. Chelonian Research Monographs 5(5):066.1–9.

Dodd, C.K., Jr. 2008. *Sternotherus depressus* Tinkle and Webb 1955 – Flattened Musk Turtle. Chelonian Research Monographs 5(1):013.1–7.

Ennen, J.R., Lovich, J.E., and Jones, R.L. 2016. *Graptemys pearlensis* Ennen, Lovich, Kreiser, Selman, and Qualls 2010 – Pearl River Map Turtle. Chelonian Research Monographs 5(9a):094.1–8.

Fielder, D., Chessman, B., and Georges, A. 2015. *Myuchelys bellii* (Gray 1844) – Western Saw-shelled Turtle, Bell's Turtle. Chelonian Research Monographs 5(8):088.1–7.

Forero-Medina, G. and Castaño-Mora, O.V. 2011. *Kinosternon scorpioides albogulare* (Duméril and Bocourt 1870) – White-throated Mud Turtle, Swanka Turtle. Chelonian Research Monographs 5(4):064.1–5.

Forero-Medina, G., Castaño-Mora, O.V., Cárdenas-Arevalo, G., and Medina-Rangel, G.F. 2013. *Mesoclemmys dahli* (Zangerl and Medem 1958) – Dahl's Toad-Headed Turtle, Carranchina, Tortuga Montañera. Chelonian Research Monographs 5(6):069.1–8.

Freeman, A. and Cann, J. 2014. *Myuchelys latisternum* (Gray 1867) – Sawshelled Turtle, Saw-Shell Turtle. Chelonian Research Monographs 5(7):073.1–8.

Freeman, A., Thomson, S., and Cann, J. 2014. *Elseya lavarackorum* (White and Archer 1994) – Gulf Snapping Turtle, Gulf Snapper, Riversleigh Snapping Turtle, Lavarack's Turtle. Chelonian Research Monographs 5(7):082.1–10.

Georges, A., Doody, J.S., Eisemberg, C., Alacs, E.A., and Rose, M. 2008. *Carettochelys insculpta* Ramsay 1886 – Pig-nosed Turtle, Fly River Turtle. Chelonian Research Monographs 5(1):009.1–17.

Gerlach, J. 2008a. *Pelusios castanoides intergularis* Bour 1983 – Seychelles Yellow-bellied Mud Turtle, Seychelles Chestnut-bellied Terrapin. Chelonian Research Monographs 5(1):010.1–4.

Gerlach, J. 2008b. *Pelusios subniger parietalis* Bour 1983 – Seychelles Black Mud Turtle. Chelonian Research Monographs 5(1):016.1–4.

Gerlach, J. 2009. *Aldabrachelys arnoldi* (Bour 1982) – Arnold's Giant Tortoise. Chelonian Research Monographs 5(2):028.1–5.

Gerlach, J. 2011b. *Aldabrachelys hololissa* (Günther 1877) – Seychelles Giant Tortoise. Chelonian Research Monographs 5(4):061.1–5.

Hagen, C., Platt, S.G., and Innis, C.J. 2009. *Leucocephalon yuwonoi* (McCord, Iverson, and Boeadi 1995) – Sulawesi Forest Turtle, Kurakura Sulawesi. Chelonian Research Monographs 5(2):039.1–7.

Hofmeyr, M.D. 2009. *Chersina angulata* (Schweigger 1812) – Angulate Tortoise, South African Bowsprit Tortoise. Chelonian Research Monographs 5(2):030.1–6.

Howeth, J.G. and Brown, W.S. 2011. *Terrapene coahuila* Schmidt and Owens 1944 – Coahuilan Box Turtle. Chelonian Research Monographs 5(4):049.1–13.

Ihlow, F., Dawson, J.E., Hartmann, T., and Som, S. 2016. *Indotestudo elongata* (Blyth 1854) – Elongated Tortoise, Yellow-headed Tortoise, Yellow Tortoise. Chelonian Research Monographs 5(9a):096.1–14.

Iverson, J.B. and Vogt, R.C. 2011. *Kinosternon acutum* Gray 1831 – Tabasco Mud Turtle, Montera, Chechagua de Monte. Chelonian Research Monographs 5(4):062.1–6.

Iverson, J.B., Carr, J.L., Castaño-Mora, O.V., Galvis-Rizo, C.A., Rentería-Moreno, L.E., and Forero-Medina, G. 2012. *Kinosternon dunni* Schmidt 1947 – Dunn's Mud Turtle, Cabeza de Trozo. Chelonian Research Monographs 5(5):067.1–5.

Jackson, D.R. 2010. *Pseudemys nelsoni* Carr 1938 – Florida Red-bellied Turtle. Chelonian Research Monographs 5(3):041.1–8.

Jones, R.L. and Selman, W. 2009. *Graptemys oculifera* (Baur 1890) – Ringed Map Turtle, Ringed Sawback. Chelonian Research Monographs 5(2):033.1–8.

Kennett, R., Roe, J., Hodges, K., and Georges, A. 2009. *Chelodina longicollis* (Shaw 1784) – Eastern Long-necked Turtle, Common Long-necked Turtle, Common Snake-necked Turtle. Chelonian Research Monographs 5(2):031.1–8.

Kennett, R., Fordham, D.A., Alacs, E., Corey, B., and Georges, A. 2014. *Chelodina oblonga* Gray 1841 – Northern Snake-Necked Turtle. Chelonian Research Monographs 5(7):077.1–13.

Kiester, A.R. and Willey, L.L. 2015. *Terrapene carolina* (Linnaeus 1758) – Eastern Box Turtle, Common Box Turtle. Chelonian Research Monographs 5(8):085.1–25.

Leary, C.J., Dobie, J.L., Mann, T.M., Floyd, P.S., and Nelson, D.H. 2008. *Pseudemys alabamensis* Baur 1893 – Alabama Red-bellied Cooter, Alabama Red-bellied Turtle. Chelonian Research Monographs 5(1):019.1–9.

Lindeman, P.V. 2008. *Sternotherus carinatus* Gray 1856 – Razorback Musk Turtle, Razor-backed Musk Turtle. Chelonian Research Monographs 5(1):012.1–6.

Lindeman, P.V., Stuart, J.N., and Killebrew, F.C. 2016. *Graptemys versa* Stejneger 1925 – Texas Map Turtle. Chelonian Research Monographs 5(9a):093.1–10.

Lovich, J.E., Godwin, J.C., and McCoy, C.J. 2011. *Graptemys ernsti* Lovich and McCoy 1992 – Escambia Map Turtle. Chelonian Research Monographs 5(4):051.1–6.

Lovich, J.E., Godwin, J.C., and McCoy, C.J. 2014. *Graptemys pulchra* Baur 1893 – Alabama Map Turtle. Chelonian Research Monographs 5(7):072.1–6.

Lovich, J.E., Selman, W., and McCoy, C.J. 2009. *Graptemys gibbonsi* Lovich and McCoy 1992 – Pascagoula Map Turtle, Pearl River

Map Turtle, Gibbons' Map Turtle. Chelonian Research Monographs 5(2):029.1–8.

Lovich, J.E., Yasukawa, Y., and Ota, H. 2011. *Mauremys reevesii* (Gray 1831) – Reeves' Turtle, Chinese Three-keeled Pond Turtle. Chelonian Research Monographs 5(4):050.1–10.

Luiselli, L. and Diagne, T. 2013. *Kinixys homeana* Bell 1827 – Home's Hinge-Back Tortoise. Chelonian Research Monographs 5(6):070.1–10.

Luiselli, L. and Diagne, T. 2014. *Kinixys erosa* (Schweigger 1812) – Forest Hinge-back Tortoise, Serrated Hinge-back Tortoise, Serrated Hinged Tortoise. Chelonian Research Monographs 5(7):084.1–13.

Magnusson, W.E. and Vogt, R.C. 2014. *Rhinemys rufipes* (Spix 1824) – Red Side-necked Turtle, Red-footed Sideneck Turtle, Perema. Chelonian Research Monographs 5(7):079.1–7.

Mantziou, G. and Rifai, L. 2014. *Mauremys rivulata* (Valenciennes *in* Bory de Saint-Vincent 1833) – Western Caspian Turtle, Balkan Terrapin. Chelonian Research Monographs 5(7):080.1–9.

Marques, T.S., Böhm, S., Brito, E.S., Cabrera, M.R., and Verdade, L.M. 2014. *Mesoclemmys vanderhaegei* (Bour 1973) – Vanderhaege's Toad-headed Turtle, Karumbé-hy. Chelonian Research Monographs 5(7):083.1–8.

McCormack, T.E.M., Dawson, J.E., Hendrie, D.B., Ewert, M.A., Iverson, J.B., Hatcher, R.E., and Goode, J.M. 2014. *Mauremys annamensis* (Siebenrock 1903) – Vietnamese Pond Turtle, Annam Pond Turtle, Rùa Trung Bộ. Chelonian Research Monographs 5(7):081.1–14.

Mittermeier, R.A., Vogt, R.C., Bernhard, R., and Ferrara, C.R. 2015. *Podocnemis erythrocephala* (Spix 1824) – Red-headed Amazon River Turtle, Irapuca. Chelonian Research Monographs 5(8):087.1–10.

Moll, E.O., Platt, K., Platt, S.G., Praschag, P., and van Dijk, P.P. 2009. *Batagur baska* (Gray 1830) – Northern River Terrapin. Chelonian Research Monographs 5(2):037.1–10.

Moll, E.O., Platt, S.G., Chan, E.H., Horne, B.D., Platt, K., Praschag, P., Chen, P.N., and van Dijk, P.P. 2015. *Batagur affinis* (Cantor 1847) – Southern River Terrapin, Tuntong. Chelonian Research Monographs 5(8):090.1–17.

Ota, H., Yasukawa, Y., Fu, J., and Chen, T.H. 2009. *Cuora flavomarginata* (Gray 1863) – Yellow-margined Box Turtle. Chelonian Research Monographs 5(2):035.1–10.

Páez, V.P., Restrepo, A., Vargas-Ramirez, M., and Bock, B.C. 2009. *Podocnemis lewyana* (Duméril 1852) – Magdalena River Turtle. Chelonian Research Monographs 5(2):024.1–6.

Pierce, L.J.S., Stuart, J.N., Ward, J.P., and Painter, C.W. 2016. *Pseudemys gorzugi* Ward 1984 – Rio Grande Cooter, Western River Cooter, Tortuga de Oreja Amarilla, Jicotéa del Río Bravo. Chelonian Research Monographs 5(9b):100.1–12.

Platt, S.G., Thanda Swe, Win Ko Ko, Platt, K., Khin Myo Myo, Rainwater, T.R., and Emmett, D. 2011. *Geochelone platynota* (Blyth 1863) – Burmese Star Tortoise, Kye Leik. Chelonian Research Monographs 5(4):057.1–9.

Platt, S.G., Platt, K., Win Ko Ko, and Rainwater, T.R. 2014. *Chitra vandijki* McCord and Pritchard 2003 – Burmese Narrow-Headed Softshell Turtle. Chelonian Research Monographs 5(7):074.1–7.

Pritchard, P.C.H. 2008. *Chelus fimbriata* (Schneider 1783) – Matamata Turtle. Chelonian Research Monographs 5(1):020.1–10.

Rhodin, A.G.J., Ibarrondo, B.R., and Kuchling, G. 2008. *Chelodina mccordi* Rhodin 1994 – Roti Island Snake-necked Turtle, McCord's Snake-necked Turtle, Kura-kura Rote. Chelonian Research Monographs 5(1):008.1–8.

Rhodin, A.G.J., Métrailler, S., Vinke, T., Vinke, S., Artner, H., and Mittermeier, R.A. 2009. *Acanthochelys macrocephala* (Rhodin, Mittermeier, and McMorris 1984) – Big-headed Pantanal Swamp Turtle, Pantanal Swamp Turtle. Chelonian Research Monographs 5(2):040.1–8.

Santana, D.O., Marques, T.S., Vieira, G.H.C., Moura, G.J.B., Faria, R.G., and Mesquita, D.O. 2016. *Mesoclemmys tuberculata* (Luederwaldt 1926) – Tuberculate Toad-headed Turtle. Chelonian Research Monographs 5(9b):097.1–8.

Schoppe, S. and Das, I. 2011. *Cuora amboinensis* (Riche *in* Daudin 1801) – Southeast Asian Box Turtle. Chelonian Research Monographs 5(4):053.1–13.

Selman, W. and Jones, R.L. 2011. *Graptemys flavimaculata* Cagle 1954 – Yellow-blotched Sawback, Yellow-blotched Map Turtle. Chelonian Research Monographs 5(4):052.1–11.

Souza, F.L. and Martins, F.I. 2009. *Hydromedusa maximiliani* (Mikan 1825) – Maximilian's Snake-necked Turtle, Brazilian Snake-necked Turtle. Chelonian Research Monographs 5(2):026.1–6.

Stanford, C.B., Wanchai, P., Schaffer, C., Schaffer, R., and Thirakhupt, K. 2015. *Manouria emys* (Schlegel and Müller 1840) – Asian Giant Tortoise, Giant Asian Forest Tortoise. Chelonian Research Monographs 5(8):086.1–9.

Stuart, J.N. and Ward, J.P. 2009. *Trachemys gaigeae* (Hartweg 1939) – Big Bend Slider, Mexican Plateau Slider, Jicotea de la Meseta Mexicana. Chelonian Research Monographs 5(2):032.1–12.

Taskavak, E., Atatür, M.K., Ghaffari, H., and Meylan, P.A. 2016. *Rafetus euphraticus* (Daudin 1801) – Euphrates Softshell Turtle. Chelonian Research Monographs 5(9b):098.1–11.

Thomson, S., Kennett, R., Tucker, A., FitzSimmons, N.N., Featherston, P., Alacs, E.A., and Georges, A. 2011. *Chelodina burrungandjii* Thomson, Kennett, and Georges 2000 – Sandstone Snake-Necked Turtle. Chelonian Research Monographs 5(4):056.1–7.

Vinke, T., Vinke, S., Richard, E., Cabrera, M.R., Paszko, L., Marano, P., and Métrailler, S. 2011. *Acanthochelys pallidipectoris* (Freiberg 1945) – Chaco Side-necked Turtle. Chelonian Research Monographs 5(4):065.1–7.

Vogt, R.C., Platt, S.G., and Rainwater, T.R. 2009. *Rhinoclemmys areolata* (Duméril and Bibron 1851) – Furrowed Wood Turtle, Black-bellied Turtle, Mojena. Chelonian Research Monographs 5(2):022.1–7.

Vogt, R.C., Polisar, J.R., Moll, D., and Gonzalez-Porter, G. 2011. *Dermatemys mawii* Gray 1847 – Central American River Turtle, Tortuga Blanca, Hickatee. Chelonian Research Monographs 5(4):058.1–12.

Ward, J.P. and Jackson, D.R. 2008. *Pseudemys concinna* (Le Conte 1830) – River Cooter. Chelonian Research Monographs 5(1):006.1–7.

Yasukawa, Y. and Ota, H. 2008. *Geoemyda japonica* Fan 1931 – Ryukyu Black-breasted Leaf Turtle, Okinawa Black-breasted Leaf Turtle. Chelonian Research Monographs 5(1):002.1–6.

Yasukawa, Y. and Ota, H. 2010. *Geoemyda spengleri* (Gmelin 1789) – Black-breasted Leaf Turtle. Chelonian Research Monographs 5(3):047.1–6.

Yasukawa, Y., Yabe, T., and Ota, H. 2008. *Mauremys japonica* (Temminck and Schlegel 1835) – Japanese Pond Turtle. Chelonian Research Monographs 5(1):003.1–6.

Citation Format for this Publication:

Turtle Taxonomy Working Group [Rhodin, A.G.J., Iverson, J.B., Bour, R. Fritz, U., Georges, A., Shaffer, H.B., and van Dijk, P.P.]. 2017. Turtles of the World: Annotated Checklist and Atlas of Taxonomy, Synonymy, Distribution, and Conservation Status (8th Ed.). In: Rhodin, A.G.J., Iverson, J.B., van Dijk, P.P., Saumure, R.A., Buhlmann, K.A., Pritchard, P.C.H., and Mittermeier, R.A. (Eds.). Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group. Chelonian Research Monographs 7:1–292. doi: 10.3854/crm.7.checklist.atlas.v8.2017.


CHELONIAN RESEARCH FOUNDATION
C R F


TURTLE CONSERVANCY
TC


IUCN/SSC
TORTOISE AND FRESHWATER TURTLE SPECIALIST GROUP


TURTLE CONSERVATION FUND
TCF


GLOBAL
WILDLIFE
CONSERVATION


CONSERVATION
INTERNATIONAL

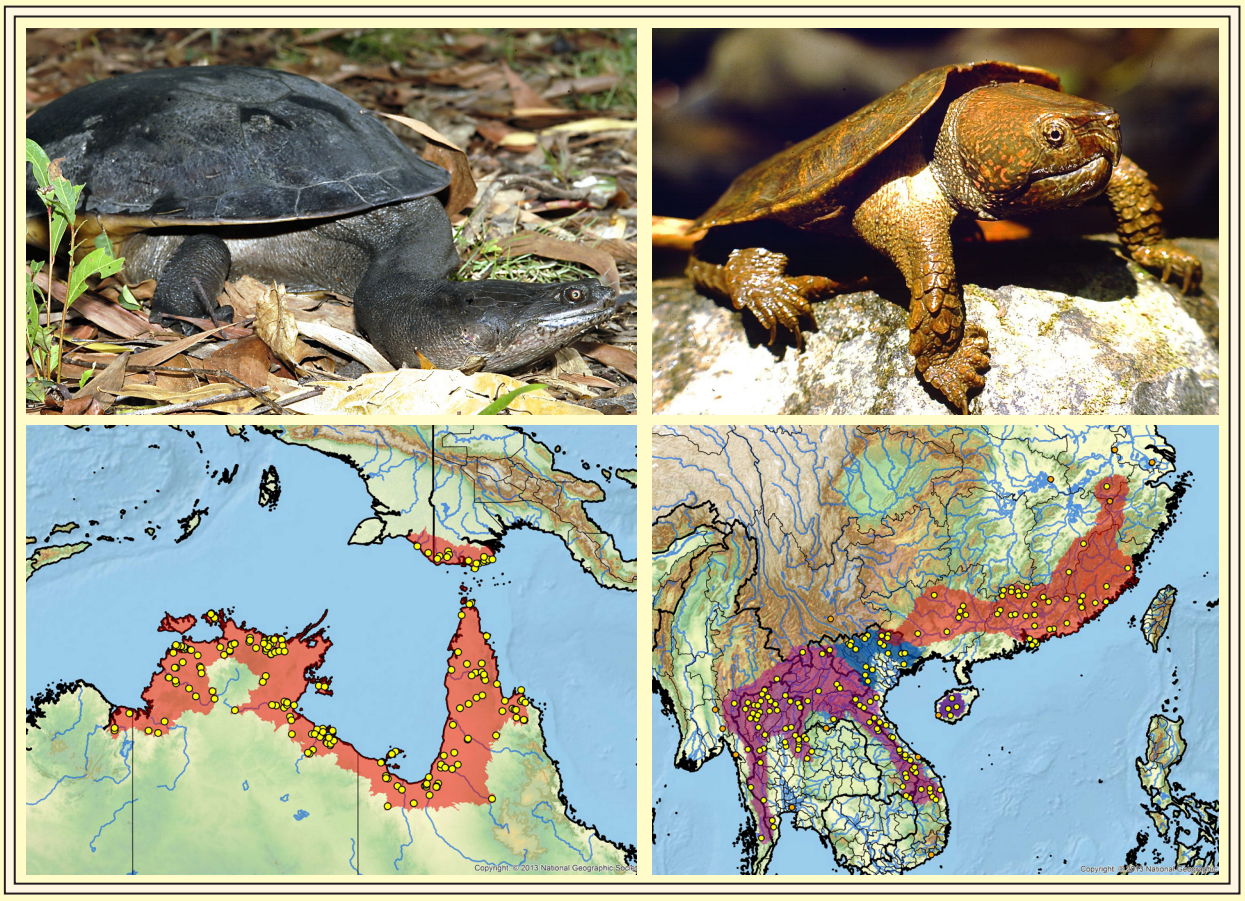

IUCN

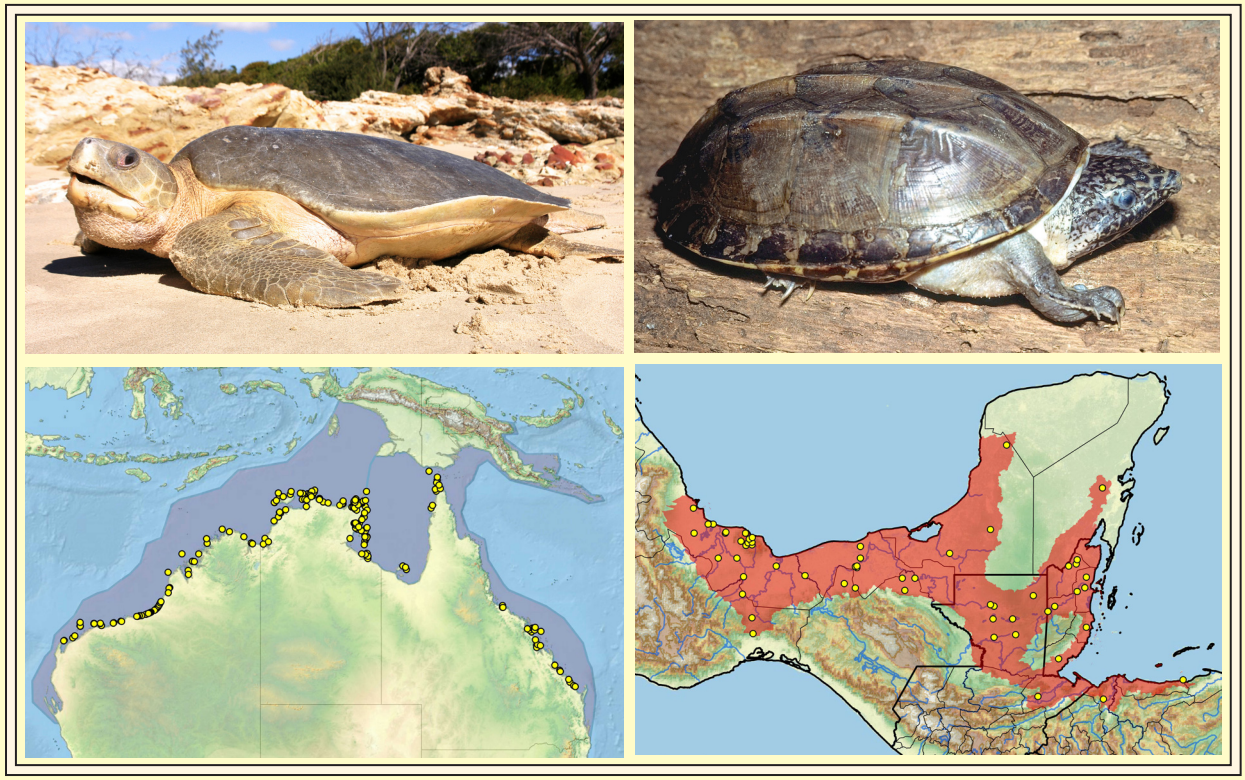

SSC
Species Survival Commission

(ISSN 1088-7105)

Chelonian Research Monographs

Number 7 – August 2017





ISBN: 978-1-5323-5026-9 (online)