



Smithsonian Institution  
Scholarly Press

SMITHSONIAN CONTRIBUTIONS TO ZOOLOGY • NUMBER 626

Catalog of Type Specimens  
of Recent Crocodylia and  
Testudines in the National  
Museum of Natural History,  
Smithsonian Institution

*Robert P. Reynolds,  
Steve W. Gotte, and  
Carl H. Ernst*

## **SERIES PUBLICATIONS OF THE SMITHSONIAN INSTITUTION**

Emphasis upon publication as a means of “diffusing knowledge” was expressed by the first Secretary of the Smithsonian. In his formal plan for the Institution, Joseph Henry outlined a program that included the following statement: “It is proposed to publish a series of reports, giving an account of the new discoveries in science, and of the changes made from year to year in all branches of knowledge.” This theme of basic research has been adhered to through the years by thousands of titles issued in series publications under the Smithsonian imprint, commencing with Smithsonian Contributions to Knowledge in 1848 and continuing with the following active series:

Smithsonian Contributions to Anthropology  
Smithsonian Contributions in History and Technology  
Smithsonian Contributions to the Marine Sciences  
Smithsonian Contributions to Paleobiology  
Smithsonian Contributions from the United States National Herbarium  
Smithsonian Contributions in Visual and Material Culture  
Smithsonian Contributions to Zoology

In these series, the Institution publishes small papers and full-scale monographs that report the research and collections of its various museums and bureaus. The Contributions Series are distributed by mailing lists to libraries, universities, and similar institutions throughout the world.

Manuscripts submitted for series publication are received by the Smithsonian Institution Scholarly Press from authors with direct affiliation with the various Smithsonian museums or bureaus and are subject to peer review and review for compliance with manuscript preparation guidelines. General requirements for manuscript preparation are on the inside back cover of printed volumes. For detailed submissions requirements and to review the “Manuscript Preparation and Style Guide for Authors,” visit the Submissions page at [www.scholarlypress.si.edu](http://www.scholarlypress.si.edu).

Catalog of Type Specimens  
of Recent Crocodylia and  
Testudines in the National  
Museum of Natural History,  
Smithsonian Institution

*Robert P. Reynolds, Steve W. Gotte,  
and Carl H. Ernst*



Smithsonian Institution  
Scholarly Press  
WASHINGTON, D.C.  
2007

#### ABSTRACT

Reynolds, Robert P., Steve W. Gotte, and Carl H. Ernst. Catalog of Type Specimens of Recent Crocodylia and Testudines in the National Museum of Natural History, Smithsonian Institution. *Smithsonian Contributions to Zoology*, number 626, 49 pages, 1 table, 2007.—The known type specimens of Crocodylia and Testudines in the collection of the Division of Amphibians and Reptiles, National Museum of Natural History, Smithsonian Institution, published through 2006 represent 93 names of taxa. The catalog presents a list of 249 type-specimen records consisting of 39 holotypes, 52 syntypes, 3 lectotypes, 2 neotypes, 132 paratypes, and 21 paralectotypes. The list is arranged alphabetically by family within Crocodylia and Testudines, and alphabetically by genus and species, as described originally within family. Each entry provides both original and current genus and species names, author(s), date of publication, abbreviated type citation, page of original description, and accompanying figures and plates (if any), current type status, USNM catalog number, number of specimens, specimen measurement(s), locality, collector, and date collected. Also included for each taxon is the published type locality, type material at other institutions, an etymology, and remarks on corrections or additional data for original type records, changes in type status, and information pertaining to lost, exchanged, or destroyed specimens. An index of scientific names follows the catalog.

---

Published by Smithsonian Institution Scholarly Press

P.O. Box 37012  
MRC 957  
Washington, D.C. 20013-7012  
www.scholarlypress.si.edu

#### Library of Congress Cataloging-in-Publication Data

National Museum of Natural History (U.S.)

Catalog of type specimens of recent Crocodylia and Testudines in the National Museum of Natural History, Smithsonian Institution / Robert P. Reynolds, Steve W. Gotte, and Carl H. Ernst.

p. cm. — (Smithsonian contributions to zoology ; no. 626)

Includes bibliographical references and index.

1. Crocodylians—Type specimens—Catalogs and collections—Washington (D.C.) 2. Turtles—Type specimens—Catalogs and collections—Washington (D.C.) 3. National Museum of Natural History (U.S.)—Catalogs. I. Reynolds, Robert P. II. Gotte, Steve W. III. Ernst, Carl H. IV. Title.

QL666.C9N38 2007

597.98074'753—dc22

2007021149

∞ The paper used in this publication meets the minimum requirements of the American National Standard for Permanence of Paper for Printed Library Materials Z39.48-1992.

# Contents

---

INTRODUCTION	1
Approach	4
Museum Abbreviations	4
Acknowledgments	6
FORMAT	7
CATALOG OF TYPE SPECIMENS	8
REFERENCES	37
INDEX OF TAXA	45



# Catalog of Type Specimens of Recent Crocodylia and Testudines in the National Museum of Natural History, Smithsonian Institution

---

## INTRODUCTION

The collection of type specimens in the Division of Amphibians and Reptiles, National Museum of Natural History (NMNH), Smithsonian Institution, is among the largest in the world and includes specimens from all continents except Antarctica. The type collection is particularly important for its early descriptions of North, Central, and South American taxa. The first comprehensive list of type specimens of amphibians and reptiles in the NMNH was compiled by Doris Cochran (1961), a curator in the then United States National Museum (USNM). That treatment identified 1,742 names of taxa. Since 1961 many new taxa have been described and added to the National Collection of Amphibians and Reptiles, and new information has been uncovered on older type specimens. Approximately 3,000 names of taxa and more than 13,100 specimens are currently in the amphibian and reptile type collection. Each year researchers within the museum and from other institutions describe new species and deposit types in the collection. The large number of type specimens in the national collection and the diversity and geographic range of taxa represented make it unwieldy to produce a comprehensive tabulation of all type specimens along the lines of Cochran's (1961) list. Rather, type catalogs for subunits (e.g., Orders) of the collection are deemed to be more manageable, an approach adopted by the Division of Fishes at the NMNH (Vari and Howe, 1991). Here we present an annotated catalog of the type specimens of extant crocodylians and turtles. Whereas Cochran's catalog covered 63 crocodylian and turtle taxa, this catalog documents 93 such taxa, as represented by 249 type-specimen records. It includes information on 96 primary types (39 holotypes, 52 syntypes, 3 lectotypes, and 2 neotypes) of 63 taxa, along with records for type specimens lost, missing, or currently in the collection. In contrast, Cochran (1961) included records for only USNM type specimens that were present in the collection at the time of publication. In addition, we supplement the type records from the Division of Amphibians and Reptiles with information on the types of *Kinosternon arizonense* Gilmore, 1923, an extant taxon originally described from fossil material cataloged in the Department of Vertebrate Paleontology at the NMNH. See Table 1 for a comparison of the type-specimen records in this catalog versus those of Cochran (1961).

---

Robert P. Reynolds and Steve W. Gotte, U.S. Geological Survey, Patuxent Wildlife Research Center, National Museum of Natural History, Washington, D.C. 20013-7012. Carl H. Ernst, Department of Vertebrate Zoology, National Museum of Natural History, Washington, D.C. 20013-7012. Manuscript received 9 January 2007; accepted 23 April 2007.

TABLE 1. Comparison of taxa included in present catalog versus Cochran (1961). (A dash indicates taxon not included or was published in 1961 or before.)

Taxa	Present catalog	Cochran (1961)	Published after 1961
CROCODILIA			
ALLIGATORIDAE			
<i>Caiman sclerops apaporiensis</i>	X	X	–
CROCODILIDAE			
<i>Crocodylus floridanus</i>	X	–	–
TESTUDINES			
CHELIDAE			
<i>Batrachemys heliostemma</i>	X	–	X
<i>Chelodina reimanni</i>	X	–	X
<i>Platemys platycephala melanonota</i>	X	–	X
CHELONIIDAE			
<i>Caretta remivaga</i> <sup>a</sup>	X	X	–
<i>Caretta rostrata</i> <sup>a</sup>	X	X	–
<i>Chelonia formosa</i> <sup>a</sup>	X	X	–
<i>Chelonia tenuis</i> <sup>a</sup>	X	X	–
<i>Thalassochelys corticata</i>	X	X	–
CHELYDRIDAE			
<i>Chelydra osceola</i>	X	X	–
DERMATEMYIDAE			
<i>Dermatemys abnormis</i>	X	–	–
EMYDIDAE			
<i>Chrysemys dorsalis</i>	X	X	–
<i>Chrysemys treleasei</i>	X	X	–
<i>Cistudo ornata</i> <sup>a</sup>	X	X	–
<i>Cistudo triunguis</i>	X	X	–
<i>Clemmys nuchalis</i>	X	X	–
<i>Deirochelys reticularia miaria</i>	X	X	–
<i>Emys marmorata</i>	X	X	–
<i>Emys nigra</i>	X	–	–
<i>Graptemys ernsti</i>	X	–	X
<i>Graptemys pseudogeographica ouachitensis</i>	X	X	–
<i>Graptemys pseudogeographica sabinensis</i>	X	X	–
<i>Graptemys pseudogeographica versa</i>	X	X	–
<i>Graptemys pulchra</i> <sup>a</sup>	X	X	–
<i>Malaclemmys littoralis</i> <sup>a</sup>	X	X	–
<i>Malaclemmys macrospilota</i> <sup>a</sup>	X	X	–
<i>Malaclemmys terrapin tequesta</i>	X	X	–
<i>Malacoclemmys oculifera</i> <sup>a</sup>	X	X	–
<i>Pseudemys alabamensis</i>	X	X	–
<i>Pseudemys concinna gorzugi</i>	X	–	X
<i>Pseudemys concinna metteri</i>	X	–	X
<i>Pseudemys decorata</i>	X	X	–
<i>Pseudemys elonae</i> <sup>a</sup>	X	X	–
<i>Pseudemys felis</i>	X	X	–
<i>Pseudemys floridana peninsularis</i>	X	X	–
<i>Pseudemys scripta gaigeae</i>	X	X	–
<i>Pseudemys stejnegeri</i>	X	X	–
<i>Pseudemys texana</i>	X	X	–
<i>Pseudemys vioscana</i> <sup>a</sup>	X	X	–
<i>Ptychemys hoyi</i>	X	X	–
<i>Terrapene bauri</i>	X	X	–
<i>Terrapene goldmani</i>	X	X	–
<i>Terrapene nelsoni</i>	X	X	–
<i>Trachemys adiutrix</i>	X	–	X

TABLE 1. (continued)

Taxa	Present catalog	Cochran (1961)	Published after 1961
GEOEMYDIDAE			
<i>Chelopus funereus</i>	X	X	–
<i>Chelopus gabbii</i>	X	X	–
<i>Chelopus rubidus</i>	X	X	–
<i>Cuora amboinensis lineata</i>	X	–	X
<i>Cuora chriskaramarum</i>	X	–	X
<i>Cuora evelynae</i>	X	–	X
<i>Cuora galbinifrons serrata</i>	X	–	X
<i>Cuora mccordi</i>	X	–	X
<i>Cyclemys atripons</i>	X	–	X
<i>Kachuga smithii pallidipes</i>	X	–	X
<i>Mauremys mutica kami</i>	X	–	X
KINOSTERNIDAE			
<i>Cinosternum berendtianum</i> <sup>a</sup>	X	X	–
<i>Cinosternum brevigulare</i> <sup>a</sup>	X	X	–
<i>Cinosternum postinguinale</i> <sup>a</sup>	X	X	–
<i>Claudius angustatus</i>	X	X	–
<i>Claudius severus</i>	X	X	–
<i>Goniochelys minor</i>	X	X	–
<i>Goniochelys triquetra</i>	X	–	–
<i>Kinosternon abaxillare</i> <sup>a</sup>	X	X	–
<i>Kinosternon arizonense</i>	X	–	–
<i>Kinosternon bauri palmarum</i> <sup>a</sup>	X	X	–
<i>Kinosternon cruentatum consors</i>	X	X	–
<i>Kinosternon flavescens spooneri</i>	X	X	–
<i>Kinosternon herrerae</i>	X	X	–
<i>Kinosternon louisianae</i>	X	X	–
<i>Kinosternon murrayi</i>	X	X	–
<i>Kinosternon panamensis</i>	X	X	–
<i>Kinosternon sonoriense longifemorale</i>	X	–	X
<i>Ozotheca tristycha</i> <sup>a</sup>	X	X	–
<i>Platythyra flavescens</i> <sup>a</sup>	X	X	–
PELOMEDUSIDAE			
<i>Pelusios subniger parietalis</i>	X	–	X
PLATYSTERNIDAE			
<i>Platysternon megacephalum shiui</i>	X	–	X
TESTUDINIDAE			
<i>Geochelone donosobarrosi</i>	X	–	X
<i>Geochelone petersi</i>	X	–	X
<i>Gopherus flavomarginatus</i>	X	X	–
<i>Testudo gigantea</i>	X	–	X
<i>Testudo graeca cyrenaica</i>	X	–	X
<i>Testudo graeca lamberti</i>	X	–	X
<i>Testudo kleinmanni</i>	X	X	–
<i>Testudo mauritanica</i>	X	X	–
<i>Testudo perses</i>	X	–	X
<i>Xerobates agassizii</i>	X	X	–
<i>Xerobates berlandieri</i> <sup>a</sup>	X	X	–
TRIONYCHIDAE			
<i>Amyda spinifera bartwegi</i>	X	X	–
<i>Aspidonectes asper</i> <sup>a</sup>	X	X	–
<i>Aspidonectes emoryi</i> <sup>a</sup>	X	X	–
<i>Platypeltis agassizii</i> <sup>b</sup>	–	X	–
<i>Trionyx muticus calvatus</i>	X	–	–
<i>Trionyx spinifer guadalupensis</i>	X	–	X

<sup>a</sup> This catalog differs from Cochran (1961) as to catalog number(s) for the type(s) or the number of type specimens for a taxon.

<sup>b</sup> Although Cochran (1961) listed USNM 92584 (formerly MCZ 1601) as a paratype of *Platypeltis agassizii*, we do not consider it to be a paratype of this taxon. See discussion in Stejneger (1944:73).

## APPROACH

We examined all available types listed by Cochran (1961), determined which were actually types, and verified their taxonomic status and identity. All original citations were reviewed to confirm actual publication dates. Type descriptions were checked and any controversial or contradictory data about particular specimens are presented in the individual accounts. We also include available information pertaining to lost or destroyed type specimens, as well as status and museum numbers for USNM type specimens that were exchanged to other institutions. Descriptions of certain older species were based on turtles housed in the National Museum before 1856, when specimens were not individually tagged. As a result, these specimens often required a significant amount of research to confirm or dispute their status.

Type specimens of crocodylians and turtles currently in the NMNH were measured, sexed, and digitally photographed for this project. In addition to documenting taxonomic vouchers, the photographs provide a visual record of specimen condition and are useful for future evaluation of specimen conservation practices. Eventually the digital images will be linked to specimen records in the NMNH electronic catalog database and will be available on the Internet.

## MUSEUM ABBREVIATIONS

Abbreviations for museum collections used in this catalog are largely those recommended by Leviton et al. (1985) and Leviton and Gibbs (1988), except where abbreviations have changed or were not provided by these authors. We use the abbreviations cited in the type description. In those instances where institutional abbreviations have changed (e.g., CNHM is now FMNH), we provide cross-reference to the current abbreviation. In some instances specimens originally cataloged in the NMNH have been exchanged to other repositories. Likewise, some specimens originally cataloged at other institutions were exchanged to the NMNH and are now identified with USNM catalog numbers. These various changes are noted with the appropriate collection abbreviation in the accounts for each species. Note that the correct abbreviation for the museum's cataloged holdings remains USNM although the official title of the museum was changed in 1969 (Yochelson, 1985), from United States National Museum to National Museum of Natural History. The abbreviation NMNH refers to the museum and it is not used as a prefix for catalog numbers. The location of type material not in the NMNH is indicated under "Other Type Material" as follows:

AMNH	American Museum of Natural History, New York, New York, USA.
ANSP	Academy of Natural Sciences, Philadelphia, Pennsylvania, USA.
BCBC	Bryce C. Brown Collection, Baylor University, Waco, Texas (now SMBU), USA.
BMNH	British Museum (Natural History), London (now the Natural History Museum, London), UK.
BYU	Brigham Young University, Provo, Utah, USA.
CAS	California Academy of Sciences, San Francisco, California, USA.
CAS-SU	California Academy of Sciences, San Francisco, California (former SU, Stanford University collections, co-located with CAS), USA.
CHM	Charleston Museum, Charleston, South Carolina, USA.
CM	Carnegie Museum, Pittsburgh, Pennsylvania, USA.
CHAS	Chicago Academy of Sciences, Chicago, Illinois, USA.
CNHM	Chicago Natural History Museum, Chicago, Illinois (now FMNH), USA.
EBD	Estación Biológica de Doñana, Sevilla, Spain.
FMNH	Field Museum of Natural History, Chicago, Illinois (previously CNHM), USA.
FSM	Florida State Museum, Gainesville, Florida (now UF), USA.
ILPLA	Museo de La Plata, La Plata, Argentina.
INHS	Illinois Natural History Survey, Champaign, Illinois, USA.
IINM	Instituto de Iologia, Instituto Nacional Microbiologia, Argentina (defunct, collection transferred to MACN, Buenos Aires, Argentina).
KU	University of Kansas, Lawrence, Kansas, USA.
KUZ	Department of Zoology, Kyoto University, Kyoto, Japan.
LACM	Natural History Museum of Los Angeles County, Los Angeles, California, USA.
MACN	Museo Argentino de Ciencias Naturales, Buenos Aires, Argentina.
MCZ	Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, USA.
MG	Musée Guimet, Lyon, France.

MNHN	Muséum National d'Histoire Naturelle, Paris, France.	USNM	National Museum of Natural History (formerly the United States National Museum), Washington, D.C., USA.
MTD	Staatliches Museum für Tierkunde, Dresden, Germany (now MTKD).	UTA	University of Texas, Arlington, Texas, USA.
MTKD	Staatliches Museum für Tierkunde, Dresden, Germany (previously MTD).	UTACV	University of Texas, Arlington, Texas (now UTA), USA.
MVZ	Museum of Vertebrate Zoology, University of California, Berkeley, California, USA.	UU	University of Utah, Salt Lake City, Utah, USA.
MZUF	Museo Zoologico de la Specola Università di Firenze, Firenze, Italy.	ZIN	Academy of Sciences, Zoological Institute, Leningrad Center, Leningrad, Russia.
MZUSP	Museu de Zoologia da Universidade de São Paulo, São Paulo, Brazil.	ZMA	Universiteit van Amsterdam Zoologisch Museum, Amsterdam, The Netherlands.
NCSM	North Carolina State Museum, Raleigh, North Carolina, USA.	ZMB	Universität Humboldt Museum für Naturkunde, Berlin, Germany.
NSMT	National Science Museum Tokyo, Tokyo, Japan.	ZSM	Zoologische Sammlung des Bayerischen Staates, Bayern, Germany.
OMNH	Osaka Museum of Natural History, Osaka (y Shibota), Japan.		
RMNH	National Museum of Natural History, Leiden, The Netherlands (previously Rijksmuseum van Natuurlijke Historie).		
SMBU	Strecker Museum, Baylor University, Waco, Texas, USA.		
SMF	Natur-Museum und Forschungs-Institut Senckenberg, Senckenberg, Frankfurt, Germany.		
SU	Stanford University, Stanford, California (now CAS-SU, San Francisco, California), USA.		
TCWC	Texas Cooperative Wildlife Collection, College Station, Texas, USA.		
TMP	Transvaal Museum, Pretoria, South Africa.		
TNHC	Texas Natural History Collection, Texas Memorial Museum, Austin, Texas, USA.		
TTU	Texas Tech University, Lubbock, Texas, USA.		
TU	Tulane University, New Orleans, Louisiana, USA.		
UAZ	University of Arizona, Tucson, Arizona, USA.		
UCMP	University of California Museum of Paleontology, Berkeley, California, USA.		
UIMNH	University of Illinois Museum of Natural History, Urbana, Illinois, USA.		
UF	University of Florida, Florida Museum of Natural History, Gainesville, Florida (previously FSM), USA.		
UMMZ	University of Michigan, Museum of Zoology, Ann Arbor, Michigan, USA.		

Early in the history of the Smithsonian Institution, osteological specimens and wet-preserved specimens were cataloged separately, under different numbering systems. Upon Spencer F. Baird's arrival at the Smithsonian in 1853, most osteological specimens of vertebrates were recorded into his personal catalog, titled "Catalogue of Osteological Specimens." These Smithsonian osteological specimens were recorded in Baird's original numbering system beginning at about number 1,100 in April 1853. Over time, that osteological catalog was renamed "Osteological Specimens" and then "Bone Catalogue" and expanded into a number of volumes. About 1910, one of these volumes was divided in two and rebound. The part pertaining to "reptiles" (which included amphibians) was transferred to the Division of Amphibians and Reptiles (*In Litt.*, F. W. True to L. Stejneger, 20 Jan 1910, archive, NMNH Registrar). That catalog contains the numbers 29001–29621. Amphibian and reptile osteological specimens preceding 29001 were recorded in volumes now stored in the Division of Mammals and labeled "Mammal Bones." This is the catalog series maintained by the Division of Comparative Anatomy as discussed by Cochran (1961:xi). She prefixed the Division of Comparative Anatomy numbers with an "O" to distinguish them from the USNM amphibians and reptile catalog numbers. We use "USNM Osteo" to indicate these numbers as well as all other osteological specimen records not cataloged in the current Division of Amphibians and Reptiles number series. Many of the amphibian and reptile specimens originally cataloged with USNM Osteo numbers have been recataloged with numbers from the current catalog system. Any USNM Osteo-numbered specimen that was lost, exchanged, or discarded, and therefore not available for recataloging is still referred

to by its original USNM Osteo number. Since 24 April 1914, when Leonhard Stejneger discontinued the use of the osteological catalog in the Division of Amphibians and Reptiles, all specimens of amphibians and reptiles, regardless of preparation type, have been continuously cataloged under a single numbering system.

The type status of some turtles loaned to Louis Agassiz for his study of North American Testudinata (Agassiz, 1857) by Spencer Baird, then assistant secretary of the Smithsonian, remains uncertain. According to their correspondence (Herber, 1963), Baird provided Agassiz with a large number of turtles, both alive and preserved, from as early as 1853 to at least May 1856. Many of the specimens were collected locally by fishermen, purchased from a Washington, D.C., market, or sent to Baird by collectors from throughout the New World. Agassiz returned some of these specimens to the Smithsonian but kept the others, which eventually became part of the MCZ herpetology collection. Except for USNM 47–88 and at least 10 turtle skeletons entered in the USNM Mammal Bones catalog (Herber, 1963), the turtle specimens from Baird were not cataloged at the Smithsonian. Correspondence from Agassiz to Baird in 1856 (Herber, 1963) specifically stated that some of these specimens were new species, whereas others were not. Unfortunately, Agassiz (1857) was vague about which specimens were used in his descriptions of new taxa; therefore it is difficult to confidently determine which specimens are types. Apparently he did indicate that some of the specimens he returned to the Smithsonian represented types, and they are annotated as such in the original catalog record. For some of the earlier uncataloged material returned by Agassiz, we have had to ascertain which USNM specimens were likely available to him and match them with information in his species descriptions; such specimens represent probable syntypes. In addition, the status of USNM specimens used in the description of *Aspidonectes nuchalis* Agassiz, 1857, is uncertain. Agassiz remarks that he saw “a number of young ones, which I owe to the kindness of Prof. Baird . . . in the head waters of the Tennessee River.” Presumably Agassiz received these specimens from Baird, but specimens from that locality are not recorded in the USNM collection, and their present fate is unknown. Webb (1973:1) considered *Aspidonectes nuchalis* a synonym of *Trionyx spiniferus spiniferus*.

An unknown number of USNM specimens of amphibians and reptiles, including primary and secondary types, were given to Wesleyan University in Middletown, Connecticut, in 1878, or shortly thereafter (Cochran, 1951, *In Litt.* to Dr. H. B. Goodrich, 20 Dec 1951, archive, NMNH Registrar). The exact number cannot be determined be-

cause the transaction was not documented in the specimen catalogs and no original correspondence about this gift could be located at either the USNM or at Wesleyan University (Cochran, 1951, *In Litt.* to Dr. H. B. Goodrich, 20 Dec 1951, archive, NMNH Registrar; Goodrich, 1952, *In Litt.* to D. M. Cochran, 9 Jan 1952, archive, NMNH Registrar). Just over 500 specimens were received from Wesleyan University in 1951 and cataloged in the Division of Amphibians and Reptiles. Of these, 188 have been identified as USNM specimens from the original gift to Wesleyan University in 1878. The entire collection was cataloged even though some of the specimens had been previously cataloged at the USNM. This was done because in many cases the original label, which was parchment with the writing in carbon ink, had become partly or completely illegible (Cochran, 1951, *In Litt.* to Dr. H. B. Goodrich, 20 Dec 1951, archive, NMNH Registrar). To date, 17 of the returned USNM specimens have been identified as types, 4 of which are turtles and are included in this catalog.

#### ACKNOWLEDGMENTS

This publication builds on an earlier effort by the staff of the Division of Amphibians and Reptiles to develop a computerized list of both the type records in Cochran (1961) and all subsequent putative records. That work marked the first attempt to electronically capture all type records in the Division of Amphibians and Reptiles and to cross-check those records with the catalogs, the specimens, and the associated specimen data housed in the division.

For deliberations on type catalog content, style, and format, as well as information on type records, help with the literature, and support in many other ways, we thank the current and past staff of the Division of Amphibians and Reptiles: Elyse J. Beldon (deceased), Frank S. Blasdale, Ronald I. Crombie, Kevin de Queiroz, Traci D. Hartsell, W. Ronald Heyer, Roy W. McDiarmid, James A. Poin-dexter II, Kenneth A. Tighe, Robert G. Tuck, Robert V. Wilson, Addison H. Wynn, and George R. Zug. We thank Alfred L. Gardner of the USGS Patuxent Wildlife Research Center, Division of Mammals, NMNH, for his help in deciphering some difficult taxonomic issues and for guidance in interpreting various provisions of the International Code of Zoological Nomenclature. Special thanks are extended to Leslie Overstreet and Daria Wingreen-Mason of the Special Collections Department, Smithsonian Institution Libraries, for their help in locating rare or obscure literature and in providing citations for reports of early government surveys. In addition, Adriana Kulczak, USGS Patuxent Wildlife Research Center, NMNH, assisted

greatly with foreign language translations and diacritical marks, and with final formatting of the text. We especially thank W. Ronald Heyer, John B. Iverson (Earlham College, Richmond, Indiana), Roy W. McDiarmid, and George R. Zug for their valuable comments, insights, and suggestions for improving the manuscript.

We are also grateful to the following colleagues at other museums for their help in tracking down and providing information on type specimens in their care: Henry Bart (TU), Jeff Beane (NCSM), Roger Bour (MNHN), Steve Busack (NCSM), Christopher Conroy (MVZ), Harold Dundee (TU), Uwe Fritz (MTKD), Ned Gilmore (ANSP), Rainer Günther (ZMB), Gunther Köhler (SMF), Michelle Koo (CAS), Alan Leviton (CAS), Colin McCarthy (BMNH), Jim McGuire (MVZ), Christopher Phillips (INHS), Alan Resetar (FMNH), Jose Rosado (MCZ), John Simmons (KU), Steve Sullivan (CHAS), Miguel Vences (ZMA), Jens Vindum (CAS), and David Wake (MVZ). Robert Webb, University of Texas, El Paso, kindly shared the results of his investigations on the nomenclatural history of *Platypeltis agassizii*. John Legler, University of Utah, Salt Lake City, provided his photographic negatives of the now lost holotype of *Kinosternon abaxillare*. Esteban Lavilla, Fundación Miguel Lillo, Tucumán, Argentina, helped to secure catalog information for the paratype of *Geochelone donosobarrosi* at the Museo Argentino de Ciencias Naturales.

## FORMAT

The entries are alphabetized by family within Crocodylia and Testudines and by species within each family. Each species bears the precise name that appeared in its original description, except that diacritical marks have been deleted, as recommended by the International Commission on Zoological Nomenclature (1999), article 27.

Each entry in the catalog of types is formatted as follows, with USNM type-specimen catalog numbers in boldface on their first mention:

Original Name: *Genus species subspecies* Author, year.

Current Name: [= *Genus species subspecies* Author, year; *fide*, authority, year: page]

Abbreviated Type Citation: Author(s), year, serial or book title abbreviation, volume, number, pagination, specific page or pages on which name appears, illustration, plate, or figure.

Primary Type(s): USNM catalog number, nature of specimen, age category, sex, measurement, collector(s), date collected.

Type Locality: Exact locality as given in original description or lectotype designation, and published restrictions.

Secondary Types: This section will precede type locality when there are no USNM primary types.

Other Pertinent Types: All known type specimens of taxon at other institutions.

Etymology:

Remarks:

Each taxon is entered under the name provided by the original author(s), followed by the author's name, and the year of publication. The currently recognized genus or species group name follows the original name in brackets. The next line is an abbreviated type citation. The actual year of publication is provided for each citation. Where the actual year does not coincide with the year stated on the publication, we cite the actual year followed by the year stated on the publication enclosed in brackets. This convention is followed throughout the text and the "References." A list of the type material in the NMNH collection appears below the citation. The USNM specimens are in the museum's collection at present unless otherwise indicated. Their type designation accords with the original description and subsequent literature designations. The categories for primary and secondary types used are holotype, syntype(s), lectotype, neotype, paratype(s), and paralectotype(s) as defined by the International Commission on Zoological Nomenclature (1999), articles 73, 74, and 75. The USNM catalog number is followed, when possible, by nature and description of specimen (alcoholic, stuffed, dry skin, skeletal), age (adult, subadult, juvenile), sex (if known), collector(s), and other collection data. Measurements enclosed in quotations are from type descriptions. All other specimen measurements (CL = straight-line carapace length; CBL = condylobasal length; PL = plastron length) were determined by the authors, and the values are presented in millimeters (mm). The exact locality given in the original description is enclosed in quotations. This may be followed by additional explanatory locality information enclosed in brackets. The section "Other Type Material" lists all known type specimens at other institutions. The etymology provided for each scientific name is based on either the original description or our interpretation of how the name was derived. Remarks may include contradictory data about particular specimens; lectotype or neotype designations; corrections of originally cited USNM catalog numbers; correction of and/or additional data on locality, collector, and date collected; and information pertaining to lost or destroyed type specimens.

**CATALOG OF TYPE SPECIMENS**

(arranged alphabetically by order, family,  
genus, species, and subspecies)

**ORDER CROCODILIA****FAMILY ALLIGATORIDAE*****Caiman sclerops apaporiensis* Medem, 1955**

[*Caiman crocodilus crocodilus* (Linnaeus, 1758); *fide*, Busack and Pandya, 2001:306–307 (based on conclusions of Ayarzagüena, 1984, and Gorzula, 1994), and Brazaitis, 2002[2001]:31 (based on morphological and molecular data in Brazaitis et al., 1997)]

Medem, 1955, *Fieldiana, Zool.* 37(11):340, figs. 75–76.

Paratype: USNM 134499 (adult female, skull, CBL 228 mm, “Body length 88 cm”), Laguna del Capitan Mario, Río Apaporis, Intendencia Amazonas, Colombia; collected by Fred Medem, Jan 1952.

Type Locality: “From upper Río Apaporis, Comisariato Amazonas, Colombia, South America.”

Other Type Material: Holotype: FMNH 69812. Paratypes: BMNH 1957.1.11.39; FMNH 69813–14, 69816–21, 69823–28, 69830–32; SMF 43953–55, 48085–86; UCMP 42842–44; and ZMB 37253 (see “Remarks”).

Etymology: The name *apaporiensis* refers to the Río Apaporis, Colombia.

Remarks: USNM 134499 was originally CNHM 69822 and so listed in the original description. Medem (1955:343) also referred to two other paratypes that we have been unable to verify: “two adults, with six eggs containing embryos” located in Bogotá.

**FAMILY CROCODILIDAE*****Crocodylus floridanus* Hornaday, 1875**

[= *Crocodylus acutus* (Cuvier, 1807); *fide*, Wermuth and Mertens, 1961:359, Ernst et al., 1999:700.1]

Hornaday, 1875, *Am. Nat.* 9(9):504, figs. 211–214.

Syntype: USNM 211273 (formerly USNM Osteo 14874), adult female mounted skeleton, “10 feet 8 inches” [= 3.25 m]; Arch Creek, Miami-Dade County, Florida; collected by William T. Hornaday, 22 Jan 1875, recataloged Sep 1979.

Type Locality: “A narrow, very deep and crooked stream known as Arch Creek, flowing from the Everglades into the head of Biscayne Bay . . . bank of Arch Creek . . . Indian Creek, on the east side of the bay, quite near the seashore . . . at the mouth of the Miami

River, ten miles farther down the bay . . . Lake Worth, Florida, ninety miles north of Biscayne Bay” [Miami-Dade County, Florida; and Palm Beach County, Florida for the Lake Worth syntype].

Other Type Material: See “Remarks.”

Etymology: The name *floridanus* refers to the state of Florida, where the type series was collected.

Remarks: Hornaday (1875) mentioned six syntypes. The location of the other five is unknown. The missing syntypes were probably in the private museum of Professor Ward, Rochester, New York, and consisted of a “fourteen feet” [= 4.27 m] adult male collected at the same locality as USNM 211273 by Hornaday on 21 Jan 1875, a “fifteen inches” [= 38 cm] skull salvaged by Hornaday on the bank of Arch Creek, a “seven and one-half inches” [= 19 cm] skull collected at Indian River, Florida by Hornaday, a “fourteen and one-half inches” [= 37 cm] stuffed juvenile collected at the mouth of the Miami River, Florida, 26 Sept 1874, and the skin and skeleton of a “nine feet ten inches” [= 3.0 m] specimen killed at Lake Worth, Florida.

**ORDER TESTUDINES****FAMILY CHELIDAE*****Batrachemys heliostemma* McCord, Joseph-Ouni, and Lamar, 2001**

[= *Batrachemys heliostemma* McCord, Joseph-Ouni, and Lamar, 2001]

McCord, Joseph-Ouni, and Lamar, 2001, *Rev. Biol. Trop.* 49(2):734, figs. 3, 4, 6, 8B, issue cover.

Holotype: USNM 541895 (alcoholic juvenile, CL “71.3 mm”), captured by Sergeant Carlos Padilla, a meteorologist with the Venezuelan air force, ca. Mar 1984.

Type Locality: “From the base of Pico da Neblina (situated on the Venezuela/Brazil border) on the left bank of Río Baria (= Río Mawarinuma) [4°95'N, 66°10'W], a tributary of the Rio Negro, Amazonas, Venezuela.”

Other Type Material: Paratypes: RMNH 31998–99, BMNH 1904.7.26.1, FMNH 218500.

Etymology: The name derives from the Greek *helios*, sun, and *stemma*, wreath, referring to the bright facial stripes of the juvenile type specimens.

Remarks: Sergeant Padilla kept the holotype alive for about two weeks before it was preserved on 17 Mar 1984.

***Chelodina reimanni* Philippen and Grossmann, 1990**

[= *Chelodina reimanni* Philippen and Grossmann, 1990]

Philippen and Grossmann, 1990, *Zool. Abh. Staatl. Mus. Tierkd. Dresden* 46(5):96, figs. 1–5.

Paratypes: USNM 292528 (alcoholic subadult, CL “154 mm”); USNM 292529 (alcoholic subadult, CL “139 mm”); USNM 292530 (alcoholic juvenile, CL “92 mm”); and USNM 292531 (alcoholic juvenile, CL “99 mm”). All specimens from the area of Merauke, Irian Jaya, New Guinea, Indonesia; collected by Frank Yuwano, Feb 1989.

Type Locality: “Merauke-River, West-Irian, Neuguinea” [Indonesia].

Other Type Material: Holotype: MTKD 29178. Paratypes: MTKD 29241–43.

Etymology: The name *reimanni* is a patronym honoring Michael Reimann, who first recognized the uniqueness of the taxon.

Remarks: USNM numbers in the original description are incorrect; USNM 292528 was listed as USNM 1170, USNM 292529 as USNM 1167, USNM 292530 as USNM 1168, and USNM 292531 as USNM 1169. The four-digit numbers 1167–1170 are laboratory tracking numbers, not USNM catalog numbers. Also, discrepancies occurred in the locality data presented (Merauke-River), date (1988), and spelling of the collector’s name (Yowono). Yuwano was a collector for the pet trade, so the locality data are suspect.

#### ***Platemys platycephala melanonota* Ernst, 1984**

[= *Platemys platycephala melanonota* Ernst, 1984; *fide*, Ernst, 1987:405.2]

Ernst, 1984 [1983], *J. Herpetol.* 17(4):352, fig. 2.

Holotype: USNM 224136 (alcoholic adult male, CL 165.7 mm), collected 1 Feb 1980 by Roy W. McDiarmid.

Type Locality: “Vicinity of Galilea, on the Río Santiago, Amazonas, Perú (4°1'S, 77°47'W).” Latitude and longitude more precisely specified by the collector as 4°00'55"S, 77°46'40"W.

Paratypes: USNM 224132 (alcoholic juvenile, CL 89 mm), on the Río Cenepa at Huampani, Perú (4°28'S, 78°10'W), 12 Jul 1977; USNM 224133 (alcoholic adult female, CL 146 mm), vicinity of San Antonio on the Río Cenepa, Perú (4°30'S, 78°10'W), 3 Aug 1977; USNM 224134 (alcoholic adult male, CL 165 mm), vicinity of Kumpin on the Río Najem (tributary of the Río Huampani, which is a tributary of the Río Cenepa), Perú (4°22'S, 78°05'W), 26 Aug 1977; USNM 224135 (alcoholic adult female, CL 167 mm), locality same as USNM 224134, 26 Aug 1977; all collected by Roy W. McDiarmid. USNM 224137 (alcoholic adult male, CL 156 mm), Caterpiza on the Río Caterpiza, a

tributary of the Río Santiago, Perú (3°55'S, 77°43'W), collected by Tom Justice, 10 Oct 1979; USNM 224138 (alcoholic adult male, CL 152 mm), vicinity of Yutupis on the Río Santiago, Perú (4°03'20"S, 77°45'25"W), collected by Camm C. Swift, 11 Mar 1980; USNM 224139 (alcoholic juvenile, CL 62 mm), collected at the type locality by Roy W. McDiarmid, 15 Mar 1980.

Other Type Material: Paratypes: LACM 134906–14; MVZ 158995, 175379.

Etymology: The name *melanonota* is from the Greek *melania*, blackness, and *notos*, pertaining to the back, referring to the dark pigmentation of the carapace.

### **FAMILY CHELONIIDAE**

#### ***Caretta remivaga* Hay, 1908**

[= *Lepidochelys olivacea* (Eschscholtz, 1829); *fide*, Schmidt, 1953:107, Zug et al., 1998:653.1]

Hay, 1908, *Proc. U.S. Natl. Mus.* 34(1605):194, pl. 10: figs. 1–3; pl. 11: fig. 5.

Holotype: USNM 243393 (formerly USNM Osteo 9973), adult skull and mandible, sex unknown, CBL 144 mm; collected by Francois Sumichrast, date unknown; recataloged Apr–Jun 1984 (see “Remarks”).

Type Locality: “Ventosa Bay, Mexico” [Bahia Ventosa in the Gulf of Tehuantepec, Oaxaca, Mexico].

Paratype: USNM 220820 (formerly USNM Osteo 29354) (adult skull, sex unknown, CBL 141 mm); locality, collector, and date unknown; originally cataloged 1 Dec 1893, recataloged May–June 1981.

Etymology: The name *remivaga* is from the Latin *remigus*, a rower, and *vago*, to wander, in reference to the wide range of this species.

Remarks: The holotype was received in 1870 and incorrectly numbered USNM Osteo 8073 by staff of the former Division of Comparative Anatomy; that number was originally assigned to a Brown-headed Cowbird (*Molothrus ater*) in 1868. Subsequently the specimen number was corrected to USNM Osteo 9973 in the former Division of Comparative Anatomy and so listed by Cochran (1961:227).

#### ***Caretta rostrata* Girard, 1858**

[= *Eretmochelys imbricata bissa* Rüppell, 1835; *fide*, Smith and Smith, 1980 [1979]:289]

Girard, 1858, *Herpetology, U.S. Explor. Exped.*, 20:446, pl. 30: figs. 8–13.

Syntypes: USNM 257185 (formerly USNM Osteo 12387) (dry adult shell, sex unknown, CL 712 mm), collector

unknown, 5 May–11 Aug 1840, recataloged 10 Apr 1986; USNM 257186 (formerly USNM Osteo 12388), dry adult shell, sex unknown, CL 684 mm, collector unknown, 5 May–11 Aug 1840, recataloged 10 Apr 1986.

Type Locality: “Feejee Islands” [Fiji Islands].

Etymology: The name *rostrata* is derived from the Latin *rostrus*, beaked, and refers to the bill-like upper jaw of the taxon.

Remarks: Cochran (1961) and Smith and Smith (1980 [1979]) considered these specimens collected during the U.S. Exploring Expedition of 1838–1842 to be syntypes. Cochran (1961:228) equated this taxon with *Eretmochelys imbricata squamata* Agassiz, 1857:382, but Smith and Smith (1980 [1979]) placed it in the synonymy of *E. i. bisssa* Rüppell, 1835:4. These specimens are listed in Cochran (1961:228) by their USNM Osteo numbers. The Exploring Expedition operated in Fiji during 5 May–11 Aug 1840 (Viola and Margolis, 1985:261).

### ***Chelonia formosa* Girard, 1858**

[= *Chelonia mydas* (Linnaeus, 1758); *fide*, Boulenger, 1889:182, Hirth, 1980:249.1]

Girard, 1858. *Herpetology, U.S. Explor. Exped.*, 20:456, pl. 31: figs. 1–4.

Holotype: USNM 257183 (formerly USNM Osteo 12386) (dry adult carapace, sex unknown, CL 792 mm), collector unknown, 5 May–11 Aug 1840, recataloged 10 April 1986.

Type Locality: “Feejee Islands,” [Fiji, Islands].

Etymology: The name *formosa* is from the Latin *formosus*, finely formed or beautiful, referring to the carapace pattern.

Remarks: The holotype was listed in Cochran (1961:228) by its USNM Osteo number. The Exploring Expedition operated in Fiji during 5 May–11 Aug 1840 (Viola and Margolis, 1985:261).

### ***Chelonia tenuis* Girard, 1858**

[= *Chelonia mydas* (Linnaeus, 1758); *fide*, Boulenger, 1889:182, Hirth, 1980:249.1]

Girard, 1858. *Herpetology, U.S. Explor. Exped.*, 20:459, pl. 31: fig. 8.

Holotype: USNM 257184 (formerly USNM Osteo 12390) (juvenile male carapace, CL 646 mm), collector unknown, collected 7 Oct 1839, recataloged 10 Apr 1986.

Type Locality: “Rosa Island” [Rose Island, Rose Atoll, American Samoa] (see “Remarks”).

Etymology: The Latin *tenuis* means narrow, slender, or thin, referring to the elongated carapace, which is “narrower across the pectoral region than across the pelvis.”

Remarks: Cochran (1961:228) erroneously placed this taxon in the synonymy of *Eretmochelys imbricata bisssa* Rüppell, 1835:4 (Hirth, 1980:1). Girard (1858:461) listed localities where the species was observed as “Honden Island, Paumotu Group; Tahiti and Eimeo; Rosa Island.” From the original account (Girard, 1858:460), it is clear that Rose Island is the locality for the holotype. The Exploring Expedition visited Rose Island on 7 Oct 1839 (Viola and Margolis, 1985:259).

### ***Thalassochelys corticata* Girard, 1858**

[= *Caretta caretta* (Linnaeus, 1758); *fide*, Boulenger, 1889:185; Stejneger, 1904:716, Dodd, 1990:483.1]

Girard, 1858. *Herpetology, U.S. Explor. Exped.*, 20:431, pl. 29: figs. 1–4.

Holotype: USNM 7778 (dry stuffed juvenile, CL 230 mm), collector unknown, 16–25 Sept 1838.

Type Locality: “Madeira” [Funchal, Canary Islands] (see “Remarks”).

Etymology: The name *corticata* is from the Latin *corticatus*, covered with bark, and refers to the appearance of the carapace scutes.

Remarks: The specimen was “collected at Madeira, in 1838, on the passage out of the Expedition” (Girard, 1858:434). The Exploring Expedition operated in Madeira during 16–25 Sept 1838 (Viola and Margolis, 1985:257).

## **FAMILY CHELYDRIDAE**

### ***Chelydra osceola* Stejneger, 1918**

[= *Chelydra serpentina osceola* Stejneger, 1918; *fide*, Babcock, 1933[1932]:874, Feuer, 1971:380, Gibbons et al., 1988:400.2]

Stejneger, 1918, *Proc. Biol. Soc. Washington* 31(26):89.

Holotype: USNM 10369 (alcoholic adult male, CL “231 mm”), collected by S. T. Walker, Sept 1879.

Type Locality: “Clearwater, Pinellas County, Florida.”

Paratypes: USNM 28761 (juvenile shell and partial skeleton, sex unknown, CL 149 mm), Kissimmee River, Florida, collected by Edgar A. Mearns, 3 Mar 1901; USNM 29208 (alcoholic juvenile, CL 121 mm), Alligator Bluff, Kissimmee River, Osceola County, Florida, collected by Edgar A. Mearns, 24 Apr 1901; USNM 30013 (dry, stuffed adult female, CL 314 mm), same locality and collector data as USNM 29208, collection

date unknown, cataloged 21 Apr 1902; USNM 55317 (adult shell, sex unknown, CL 241 mm), Vero Beach, Indian River County, Florida, collected by Isaac M. Weills, 14 Mar 1915; USNM 60545 (dry, stuffed adult male and partial postcranial skeleton with alcoholic tail, CL 204 mm), Auburndale, Polk County, Florida, collected by Nelson R. Wood, 1918; USNM 60546 (dry, stuffed adult female and partial postcranial skeleton with alcoholic tail, CL 204 mm), same locality and collection data as USNM 60545; USNM 60557 (alcoholic adult female, CL 168 mm), same locality and collector data as USNM 60545, Mar 1918.

**Etymology:** The name *osceola* is for Osceola County, Florida.

**Remarks:** According to the catalog annotation, USNM 29208 was an “ad. female with clutch of 26 spherical eggs averaging 28.7 mm diam.” This notation must be in error because USNM 29208 is a juvenile that measures CL 121 mm. A note in the catalog indicates that paratype USNM 30013 (CL 314 mm) had “just deposited eggs.” The original catalog entry for paratype USNM 55317 is “Vero, Florida”; Vero, then in Brevard County, later had its name changed to Vero Beach and is currently in Indian River County. Stejneger (1918) referred only to the holotype by catalog number in the original description, but he discussed seven additional Florida specimens that make up the paratype series.

#### FAMILY DERMATEMYIDAE

##### ***Dermatemys abnormis* Cope, 1868**

[= *Dermatemys mawii* Gray, 1847; *fide*, Boulenger, 1889:29, Iverson and Mittermeier, 1980:237.1]

Cope, 1868, *Proc. Acad. Nat. Sci. Philadelphia* 20(2): 120.

**Holotype:** USNM 6545 (currently ANSP 61) (alcoholic juvenile female, CL “seven inches” [= 178 mm]), collected by Dr. D. B. Parsons, 1865 (see “Remarks”).

**Type Locality:** “Belize River, Yucatan,” restricted to “Belize” [city] by Smith and Taylor (1950a:316).

**Other Type Material:** See “Remarks.”

**Etymology:** The Latin *abnormis* means irregular or abnormal and refers to the large openings between the incompletely ossified parts of the juvenile carapace and its large vertebral scutes.

**Remarks:** The locality for USNM 6545 listed in the catalog is “Belize.” It was not among the USNM type specimens listed by Cochran (1961). Although Cope (1868:120) stated that the single specimen (= holo-

type) he examined was “Museum Smithsonian, No. 6545,” it was also cataloged into the ANSP as number 61, where it resides at present (Malnate, 1971:353). Cope was affiliated with both the Smithsonian and the ANSP and often carried specimens between the two institutions to facilitate study at whichever museum was his destination. Unfortunately Cope was quite disorderly and sometimes removed tags when illustrating specimens or for other reasons (Crombie, 1999). After his death, confusion reigned as to which of the two museums rightfully owned certain specimens. As a result, some Smithsonian specimens, including types, were cataloged at the ANSP, and ANSP specimens inadvertently cataloged at the Smithsonian. See Crombie (1999) for a discussion of Cope’s treatment of USNM specimens in his care.

#### FAMILY EMYDIDAE

##### ***Chrysemys dorsalis* Agassiz, 1857**

[= *Chrysemys dorsalis* Agassiz, 1857; *fide*, Starkey et al., 2003:125 (see “Remarks”)]

Agassiz, 1857, *Contrib. Nat. Hist. U.S. America (Testudinata)*, p. 440.

**Syntype:** USNM 21 (alcoholic female, CL 121 mm), Washington, Mississippi, collected by Benjamin L. C. Wailes, date unknown, cataloged 24 Jan 1856 (see “Remarks”).

**Type Locality:** “States of Mississippi and Louisiana. Lake Concordia is the locality whence most specimens were obtained”; restricted to vicinity of “Natchez, Adams Co., Miss.” by Ernst (1967:133) (see “Remarks”).

**Other Type Material:** Syntypes: MCZ 1801, 31960.

**Etymology:** The name *dorsalis* is from the Latin *dorsum*, pertaining to the back; refers to the broad, bright vertebral stripe on the carapace.

**Remarks:** Agassiz (1857:440) did not identify the type series by numbers in the original description. The location “Washington, Mississippi,” given as the collection site of some National Museum specimens, probably refers only to Wailes’s home, from which he sent the specimens to the museum. The rank of the taxon *dorsalis* is in question. Stejneger and Barbour (1917:118) relegated it to a subspecies of *Chrysemys marginata*, but Bishop and Schmidt (1931) placed all *Chrysemys* within the species *picta*, and on page 136 recognized the subspecies *C. p. dorsalis*. The taxon remained thus known until recently, when Starkey et al. (2003:125), in a molecular study of DNA variation within the genus *Chrysemys*, returned *dorsalis* to species standing. Because morphological intermediate specimens

are known between *C. dorsalis* and *C. p. picta*, *C. p. marginata*, and *C. p. bellii* (Ernst, 1967, 1970, and others), the taxonomy of this taxon is debatable. Examination of the syntypes MCZ 1801 from Natchez, Mississippi, and MCZ 31960 from Concordia Lake, Louisiana, by Ernst (1967) revealed that the Natchez syntype (MCZ 1801) exhibits the diagnostic characteristics of *dorsalis* to the strongest degree, and the Louisiana specimen more closely resembles *C. p. picta*. Accordingly, Schmidt's (1953:100) restriction of the type locality to the "vicinity of New Orleans" is arguable. Hence Ernst (1967:133) restricted the type locality to Natchez, Adams County, Mississippi (see above).

### ***Chrysemys treleasei* Hurter, 1911**

[= *Chrysemys picta bellii* (Gray, 1831); *fide*, Bishop and Schmidt, 1931:136, Ernst, 1971:106.2]

Hurter, 1911, *Trans. Acad. Sci. St. Louis* 20:235, pl. 23: fig. 3; pl. 24.

Syntypes: USNM 49427 (alcoholic female, CL 132 mm), St. Clair County, Illinois, collected by Julius Hurter Sr., 3 Jul 1908; USNM 49428 (alcoholic juvenile, CL 39 mm), St. Clair County, Illinois, collected by Julius Hurter Sr., 16 Jun 1895; and USNM 49429 (alcoholic juvenile, CL 64 mm), Madison County, Illinois, collected by Julius Hurter Sr., 9 Jul 1905.

Type Locality: "On the east side of the Mississippi River, in Madison, St. Clair, and Monroe Counties, Illinois" (see "Remarks").

Etymology: A patronym honoring Professor William Trelease, then president of the Academy of Science of St. Louis.

Remarks: Despite the stated type locality, no syntypes are known from Monroe County, Illinois.

### ***Cistudo ornata* Agassiz, 1857**

[= *Terrapene ornata* (Agassiz, 1857); *fide*, Baur, 1891:191, Ward, 1978:217.1]

Agassiz, 1857, *Contrib. Nat. Hist. U.S. America (Testudinata)*, p. 445, pl. 3: figs. 12–13.

Paralectotype: USNM 57 (alcoholic adult female, CL 95 mm), Yellowstone, collected by Ferdinand V. Hayden, date unknown, cataloged 14 Feb 1856 (see "Remarks").

Type Locality: "From the Upper Missouri . . . and from Iowa" (see "Remarks"); first restricted to "Council Bluffs [Pottawattomie County], Iowa" by Smith and Taylor (1950b:36), later to "junction of the Platte and Missouri rivers" by Schmidt (1953:951), and finally to "Burlington [Des Moines County], Iowa," the local-

ity of the lectotype, MCZ 1536, by Smith and Smith (1980:587). See Smith and Smith (1980) for a discussion of the history of the type locality designations and earlier erroneous restrictions.

Other Type Material: Lectotype: MCZ 1536, designated by Smith and Smith (1980:587).

Etymology: The name *ornata* is from the Latin *ornatus*, decorated or adorned, referring to the streaked pattern of the carapace.

Remarks: Agassiz (1857:445) did not record the museum numbers of the type series of *Cistudo ornata* [= *Terrapene ornata*] but stated that he had "examined many hundred specimens of the genus" [*Cistudo*=*Terrapene*], so the exact number of individuals constituting the original type series is unknown, and this has led to confusion. He called *Cistudo ornata* "the north-western type" of *Cistudo* to differentiate it from his "north-eastern type" [*C. virginica*] and "western and south-western type" [*C. triunguis*]. Agassiz was clear, however, in recording the type localities of the specimens of *C. ornata* that he had examined: "I have received specimens from the Upper Missouri [River] through the Smithsonian Institution, and from Iowa through Dr. J. Rauch." Cochran (1961:229) listed USNM 57, 7541, 7542, and 7547 as syntypes in the National Museum, and Ward (1978:1) also recognized these specimens as syntypes of *Cistudo ornata*. USNM 7542, collected by Dr. Robert W. Kennicott in Illinois, has a catalog notation by George R. Zug stating: "probably not a syntype, since not from a locality mentioned in the type description." We agree with Zug's conclusion and have removed USNM 7542 from the syntopic series. USNM 7541 ("Southern Boundary Kansas") was originally cataloged as four specimens, but Cochran (1961) indicated that only the one specimen currently carrying that number was a syntype. One of the other original three specimens of USNM 7541 was recataloged as USNM 131837, one is now BMNH 1873.8.13.3, and the fate of the last specimen is unknown. In addition to USNM 7541 (including USNM 131837 and BMNH 1873.8.13.3), both USNM 7547 and 7740 from the Republican River, Kansas, have been annotated as possible syntypes in the USNM catalog; however, locality data for these records is inconsistent with the type locality given by Agassiz (1857:445). The entry for paralectotype USNM 57 has the notation "Agassiz type" in the catalog. The locality for USNM 57 in the catalog, "Yellowstone," is both confusing and questionable (Ward, 1978) because it is different from the type

locality “Upper Missouri.” However, Baird gave the locality of USNM 57 as “Upper Missouri” (Herber, 1963:121) in a letter to Agassiz dated 23 Feb 1856, which clearly established the association of USNM 57 to the type locality. Maxwell et al. (2003:104) briefly reviewed the published reports of *Terrapene ornata* from southwest Montana and concluded that the reports are based either on translocated animals or on paralectotype USNM 57, a locality record they also regard as suspect. They conclude that USNM 57 is likely the specimen of *Cistudo* reported by Ferdinand Hayden (1858, 1863) from “the mouth of the Powder River” (a tributary of the Yellowstone River), but that the locality listed is either incorrect or represents a shipping locality. However, on the basis of the locality reported in Hayden (1858:104) and the data recorded in the museum catalog, we see no reason to doubt the locality record.

### ***Cistudo triunguis* Agassiz, 1857**

[= *Terrapene carolina triunguis* (Agassiz, 1857); *fide*, Strecker, 1910:121, Ernst and McBreen, 1991:512.6] Agassiz, 1857, *Contrib. Nat. Hist. U.S. America (Testudinata)*, p. 445.

Syntypes: USNM 86871 (formerly MCZ 1519) (alcoholic adult female, CL 119 mm), New Orleans, Louisiana, collected by N. B. Benedict, date unknown, cataloged 6 Dec 1932 (see “Remarks”); USNM 86872 (formerly MCZ 1519) (alcoholic adult female, CL 114 mm), locality, collector, and catalog date as for USNM 86871 (see “Remarks”).

Type Locality: “Louisiana and Mississippi . . . New Orleans . . . Osage River . . . and from Georgia.” Restricted to “New Orleans, Louisiana,” by Schmidt (1953:94).

Other Type Material: Syntypes: MCZ 1519, 1522–1525.

Etymology: The term *triunguis* is from the Latin *tri*, three, and *unguis*, nail or claw, referring to the three toes on each hind foot.

Remarks: Cochran (1961:230) listed USNM 86871 and USNM 86872 as the only syntypes in the Smithsonian collection. In the description of *Cistudo triunguis*, Agassiz did not mention examining specimens provided by the Smithsonian Institution or by Professor Baird. The following USNM specimens may also be part of the syntype series, however, because they were available to Agassiz and their data are consistent with those provided by Agassiz: USNM 22, alcoholic adult female, CL 122 mm, Washington, Adams County, Mississippi, collected by Benjamin L. Wailes,

date unknown, cataloged 24 Jan 1856; USNM 7545, alcoholic adult male, CL 122 mm, Mississippi (no further locality data), collected by Benjamin L. Wailes, date unknown, cataloged in 1872; USNM 7546, two dry stuffed adult females, one with skull separate, CL 119 mm, and another with skull in situ, CL 128 mm, no locality or collection data, cataloged in 1872; USNM 131838 (formerly USNM 7546), alcoholic adult female, CL 118 mm, no locality or collection data, originally cataloged in 1872; and USNM 213736 (formerly USNM 7545), alcoholic adult female, CL 112 mm, Mississippi, collected by Benjamin L. Wailes, date unknown, originally cataloged in 1872. USNM 7545 originally consisted of six specimens; one was sent to “Chicago,” and another was recataloged on 3 Apr 1980 as USNM 213736. The other three specimens are unaccounted for. USNM 7546 originally consisted of four specimens; one was exchanged to Wesleyan University (WU 218), but was returned and recataloged as USNM 131838 on 3 Jan 1952, and another, misnumbered USNM 7547, was found during an inventory search and has been reassociated with USNM 7546. The remaining specimen is unaccounted for. Specimens USNM 86871–72 were donated in 1932 by the Museum of Comparative Zoology, where they were part of the series MCZ 1519 (originally eight specimens).

### ***Clemmys nuchalis* Dunn, 1917**

[= *Clemmys mublenbergii* Schoepff, 1792–1801; *fide*, Wright, 1918:51, Ernst and Bury, 1977:204.1]

Dunn, 1917, *Bull. Am. Mus. Nat. Hist.* 37(23):624, fig. 6, pl. 61.

Paratype: USNM 62016 (formerly AMNH 8264) (alcoholic adult female, CL “89 mm”), Brevard, Transylvania County, North Carolina, elev. about 2100 ft (640 m); collected by Emmett R. Dunn, 12 Jul 1916.

Type Locality: “On side of Yonahlassee Road, about 3 miles from Linville, North Carolina, . . . Altitude, 4200 feet” [Avery County, North Carolina].

Other Type Material: Holotype: AMNH 8430. Paratypes: AMNH 8389; MCZ 12498.

Etymology: The Latin *nuchalis*, of the neck, refers to the elongate nuchal plate diagnostic of this taxon.

Remarks: USNM 62016 was cited as AMNH 8264 in the original description.

### ***Deirochelys reticularia miaria* Schwartz, 1956**

[= *Deirochelys reticularia miaria* Schwartz, 1956; *fide*, Zug and Schwartz, 1971:107.2]

Schwartz, 1956a, *Fieldiana, Zool.* 34(41):486, figs. 107–108.

Paratype: USNM 85145 (alcoholic subadult female, CL “134.6 mm”), White Rock Creek, near White Rock Lake, 4 miles northeast of Dallas, Dallas County, Texas, collected by Charles E. Burt, 16 Apr 1932.

Type Locality: “College Station, Brazos County, Texas.”

Other Type Material: Holotype: FMNH 37478. Paratypes: AMNH 36726; BCBC 225, 3044–46, 4690, 4694; CHM 55.39.3; CM 5443–45; FMNH 37482, 46282–83, 52995–96; KU 3145; SMBU 0085, 157, 160, 6684; TCWC 326, 691, 4679, 4680, 7278; TNHC 6035, 7325, 8905–07; UIMNH 2397, 28503, 31696.

Etymology: The name *miaria* is from the Greek *miaros*, defiled; refers to the dark plastron pattern.

Remarks: USNM 85145 was listed as an allotype in the description.

### ***Emys marmorata* Baird and Girard, 1852**

[= *Actinemys marmorata* (Baird and Girard, 1852); *fide*, Holman and Fritz, 2001:333]

Baird and Girard, 1852, *Proc. Acad. Nat. Sci. Philadelphia* 6(5):177.

Syntypes: USNM 88 (alcoholic juvenile, CL 53 mm), cataloged 1856; USNM 7594 (alcoholic juvenile, CL 33 mm), cataloged 1872; USNM 7595 (alcoholic juvenile, CL 56 mm), cataloged 1872; USNM 7596 (alcoholic juvenile, CL 31 mm), cataloged 1872; and USNM 131830 (formerly USNM 7593, see “Remarks”) (alcoholic juvenile, CL 148 mm), originally cataloged 1872. All from Puget Sound, Washington, collector unknown, during the U.S. Exploring Expedition, May–Jun 1841.

Type Locality: “Puget Sound” [state of Washington].

Etymology: The name *marmorata* is from the Latin *marmor*, marble; refers to the marbled (mottled) pattern of the carapace.

Remarks: USNM 7593 was exchanged to Wesleyan University (WU 203), returned to Smithsonian, then recataloged as USNM 131830 on 3 Jan 1952. The Exploring Expedition operated in Puget Sound during May–Jun 1841 (Viola and Margolis, 1985:262).

### ***Emys nigra* Hallowell, 1856**

[= *Actinemys marmorata* (Baird and Girard, 1852); *fide*, Schmidt, 1953:92, Holman and Fritz, 2001:333]

Hallowell, 1856 [1854], *Proc. Acad. Nat. Sci. Philadelphia* 7(3):91.

Holotype: USNM 26 (dry skin, sex unknown), [outhern] California, collected by Dr. Heerman and Lt. Williamson, date unknown, cataloged 29 Jan 1856. The speci-

men is lost; it was determined to be missing during the various inventories of 1957 (see “Remarks”).

Type Locality: “Poso Creek, Lower California” [“Posa Creek, southern part of Upper California,” Hallowell 1859:3] (see “Remarks”).

Etymology: The name *nigra* is from the Latin *niger*, dark or black; refers to the dark color of the carapace.

Remarks: Although the date of the original description of *Emys nigra* is usually stated as 1854, the index of the Academy of Natural Sciences of Philadelphia lists the publication date for the issue as 1856. The specimen is possibly the holotype of *Emys nigra* Hallowell, 1856; Agassiz (1857:444) stated that he examined the original specimen of Dr. Hallowell’s *Emys nigra* in the Smithsonian Institution. Seeliger (1945:158) thought the name *Emys nigra* could not be applied to *Emys marmorata pallida* because the type specimen was taken in Poso [= Posa] Creek, Kern County, a known zone of intergradation between *E. m. marmorata* and *E. m. pallida*, where the intergrades as a group fall closer to *E. m. marmorata* than *E. m. pallida*. A site description of the type locality—which has been variously referred to as Poso Creek (Hallowell, 1856 [1854]), Posa Creek (Hallowell, 1859), Pose Creek (Williamson, 1857b [1856]), and Ocoya Creek (Williamson, 1857a [1856])—was provided by Blake (1857 [1856]). Williamson (1857a [1856], 1857b [1856]) put the type locality at latitude 35°30'27"N, longitude 118°53'02"W, and elevation at 738 ft (=225 m). USNM 26 was not listed by Yarrow (1883 [1882]:36) and may in fact have been missing since at least that time.

### ***Graptemys ernsti* Lovich and McCoy, 1992**

[= *Graptemys ernsti* Lovich and McCoy, 1992; *fide*, Lovich and McCoy, 1994:585.1]

Lovich and McCoy, 1992, *Ann. Carnegie Mus.* 61(4):300, figs. 4, 5.

Paratypes: USNM 300604 (alcoholic adult male, CL 84 mm); USNM 300605 (alcoholic male, CL 62 mm), both collected at the type locality by Jeffrey E. Lovich, Anthony M. Mills, and Joshua Schachter, 29 Sept 1988.

Type Locality: “Conecuh River, 1 mile upstream from County Road 4 Bridge, 14 km east of East Brewton, Escambia County, Alabama, USA.”

Other Type Material: Holotype: CM 122408. Paratypes: CM 122403–07, 122409–11.

Etymology: The name *ernsti* is a patronym honoring North American herpetologist, Dr. Carl H. Ernst, for his contributions to the study of turtles.

***Graptemys pseudogeographica ouachitensis*  
Cagle, 1953**

[= *Graptemys ouachitensis* Cagle, 1953; *fide*, Vogt, 1980:18, Stephens and Wiens, 2003:596]

Cagle, 1953a, *Occas. Pap. Mus. Zool. Univ. Michigan* 546:10, figs. 2, 3.

Paratype: USNM 139733 (formerly UIMNH 26717) (alcoholic male, CL 107 mm), collected at the type locality by a Tulane University field party, 10–11 Jun 1950.

Type Locality: “Ouachita River, four miles northeast of Harrisonburg, Louisiana” [Catahoula, Parish, Louisiana].

Other Type Material: Holotype: UMMZ 104345. Paratypes: CAS-SU 16288; FMNH 67101–04; MCZ 53271; TU 12536, 12545, 12631, 12655, 12658, 12664–67, 12670–71, 12695, 12701, 12705, 12710, 12783, 12975(3); UIMNH 26716; UMMZ 104346–50.

Etymology: The name *ouachitensis* refers to the Ouachita River, Louisiana.

Remarks: The specimen was cited as UIMNH 26717 in the original description.

***Graptemys pseudogeographica sabinensis* Cagle, 1953**

[= *Graptemys sabinensis* Cagle, 1953; *fide*, Vogt, 1980:18, Stephens and Wiens, 2003:596]

Cagle, 1953a, *Occas. Pap. Mus. Zool. Univ. Michigan* 546:2, figs. 1, 3.

Paratype: USNM 134312 (formerly UIMNH 26722), (alcoholic juvenile female, CL 104 mm), collected at the type locality by a Tulane University field party, 5–9 Jul 1950.

Type Locality: “Sabine River, eight miles southwest of Neregreen, Louisiana” [Sabine Parish, Louisiana].

Other Type Material: Holotype: UMMZ 104351. Paratypes: CAS-SU 16287; FMNH 67105–15; MCZ 53270; TU 13110–11, 13116, 13119–21, 13127–28, 13131, 13139, 13141–42, 13148–49, 13152, 13160, 13166, 13172, 13175, 13177–79, 13181, 13185–86, 13190, 13194–95, 13197, 13200, 13202–04, 13206–09, 13253, 13258, 13261–62, 13510(2), 13564(3), 13740(13), 13741(7), 13743(8), 13744(7), 13745(4), 13746(5), 13747(2), 13748(17), 13760(14); UIMNH 26718–21; UMMZ 104352–69.

Etymology: The name *sabinensis* refers to the Sabine River in Louisiana.

Remarks: The specimen was cited as UIMNH 26722 in the original description.

***Graptemys pseudogeographica versa* Stejneger, 1925**

[= *Graptemys versa* Stejneger, 1925; *fide*, Smith, 1948:60, Vogt, 1981:280.1]

Stejneger, 1925, *J. Washington Acad. Sci.* 15(20):463.

Holotype: USNM 27473 (alcoholic adult male, CL 87 mm, rear scute missing), collector unknown, Jul 1900, donated by Herbert H. and Clement S. Brimley.

Type Locality: “Austin, Texas” [Travis County, Texas].

Paratypes: USNM 27474 (alcoholic male, CL 89 mm); USNM 27475 (alcoholic male, CL 87 mm); USNM 27476 (alcoholic male, CL 85 mm); USNM 27477 (alcoholic male, CL 90 mm); USNM 27478 (alcoholic male, CL 95 mm); USNM 27479 (alcoholic male, CL 74 mm); and USNM 27480 (alcoholic specimen, exchanged, see “Remarks”); all collected at the type locality, collector unknown, Jul 1900.

Other Type Material: Paratype: MCZ 42346 (see “Remarks”).

Etymology: The name *versa* is from the Latin *vers*, to change; refers to its head pattern differing from that of *Graptemys p. pseudogeographica*.

Remarks: Paratype USNM 27480 was exchanged to the Museum of Comparative Zoology (MCZ 42346), 9 Dec 1936.

***Graptemys pulchra* Baur, 1893**

[= *Graptemys pulchra* Baur, 1893; *fide*, Cagle, 1952:223, Lovich, 1985:360.1]

Baur, 1893b, *Am. Nat.* 27(319):675.

Lectotype: USNM 8808 (alcoholic subadult female, CL “176 mm”), lake near Montgomery, Montgomery County, Alabama, collected by Dr. Tarleton H. Bean and A. L. Kumlien, Jul 1876. Lectotype designation by Lovich and McCoy (1992:304).

Type Locality: “Montgomery, Ala.” [Montgomery Co., Alabama].

Paralectotype: USNM 318254 (formerly USNM 8808) (alcoholic subadult female with separate skull, CL 180 mm), same locality and collection data as lectotype. The original second specimen cataloged under USNM 8808 was recataloged as USNM 318254 on 20 May 1992 (see “Remarks”).

Etymology: The name *pulchra* is from the Latin *pulcher*, beautiful, referring to the head pattern.

Remarks: Baur (1893b:675) designated two specimens as syntypes for *Graptemys pulchra*, both bearing the number USNM 8808. One had its skull removed, and the skull was assigned to the former Division of Comparative Anatomy as USNM Osteo 29526.

This specimen was recataloged as USNM 318254 on 20 May 1992. A second, smaller unnumbered skull was mistakenly placed in association with the skull of *G. pulchra* numbered USNM Osteo 29526. Cagle (1952) examined the two skulls and determined that the smaller unnumbered skull probably belonged to a female *G. oculifera*. The skull of *G. oculifera* was removed from association with USNM Osteo 29526 and cataloged as USNM 252600 on 17 Sept 1985. See "Remarks" under *Malacoclemmys oculifera* Baur, 1890. Cochran (1961) listed the two syntypes as USNM 8808 and USNM Osteo 29526.

### ***Malaclemmys littoralis* Hay, 1904**

[= *Malaclemmys terrapin littoralis* Hay, 1904; *fide*, Siebenrock, 1909:473, Lindholm, 1929:294, Ernst and Bury, 1982:299.2]

Hay, 1904. *Bull. U.S. Bur. Fisheries* 24:18; pl. 8: figs. 1–5; pl. 9: figs. 1–4; pl. 12: figs. 2–3.

Holotype: USNM 33913 (alcoholic adult female, CL 201 mm), secured by William P. Hay, Aug 1904.

Type Locality: "Rockport, Texas" [Aransas County, Texas].

Paratypes: USNM 33918 (alcoholic male, CL 144 mm); USNM 33920 (alcoholic male, CL 140 mm); both from the type locality, collector and date unknown, cataloged 24 May 1904 (see "Remarks").

Etymology: The name *littoralis* is from the Latin *litoralis*, seashore, referring to the turtle's habitat.

Remarks: Hay (1904:18) examined "250 specimens" of the taxon. USNM 33918 and USNM 33920 were not mentioned by number in the type description, but they are listed as types in the original catalog entries. We determined that USNM 33918 is the specimen illustrated in plate IX in the original description. Hay (1904:18) indicated that USNM 33913 was secured at Crisfield, Maryland, in August 1904. There is a discrepancy, however, between when USNM 33913 was supposedly secured by Hay, as the catalog record indicates that it was cataloged into the collection on 24 May 1904. According to Hay (1904:3), terrapins purchased from commercial dealers from localities throughout the species' entire range were temporarily held in impoundments at Crisfield, Maryland, "to fatten them for market." Cochran (1961) listed only the Holotype USNM 33913.

### ***Malaclemmys macrospilota* Hay, 1904**

[= *Malaclemmys terrapin macrospilota* Hay, 1904; *fide*, Siebenrock, 1909:472, Lindholm, 1929:294, Ernst and Bury, 1982:299.2]

Hay, 1904, *Bull. U.S. Bur. Fisheries* 24:16; pl. 6: figs. 1–5; pl. 7: figs. 1–3; pl. 11: fig. 1.

Holotype: USNM 33917 (alcoholic adult female, CL 175 mm, right hind leg missing), secured by William P. Hay, Dec 1902.

Type Locality: "Charlotte Harbor, Florida" [Charlotte County, Florida].

Paratype: USNM 33919 (alcoholic adult male, CL 137 mm), Sand Key, Florida, collector and date unknown, cataloged 24 May 1904 (see "Remarks").

Etymology: The name *macrospilota* is from the Greek *makros*, large, and *spilados*, spot, referring to the large yellowish spot on each carapace scute.

Remarks: Hay (1904:17) examined "about 100 specimens" of the taxon. USNM 33917 was secured by Hay at "the" market in Washington, D.C. USNM 33919 was not mentioned by number in the type description, but it was listed as a type in the original catalog entry. Cochran (1961) listed only the Holotype USNM 33917.

### ***Malaclemmys terrapin tequesta* Schwartz, 1955**

[= *Malaclemmys terrapin tequesta* Schwartz, 1955; *fide* Ernst and Bury, 1982:299.2]

Schwartz, 1955, *Proc. Biol. Soc. Washington* 68(27):158.

Paratype: USNM 37020 (alcoholic male, CL 170 mm), New Smyrna, Volusia County, Florida, collected by Barton W. Evermann, 3 Dec 1905.

Type Locality: "Miami Beach, Dade County, Florida" [Miami-Dade County].

Other Type Material: Holotype: UMMZ 108482. Paratypes: UF 4242, 6589–90; MCZ 20287, 48787; UMMZ 106147–51.

Etymology: The name *tequesta* honors the native American tribe Tequesta of eastern Florida.

### ***Malacoclemmys oculifera* Baur, 1890**

[= *Graptemys oculifera* (Baur, 1890); *fide*, Baur, 1893b:675, Cagle, 1953b:137, McCoy and Vogt, 1988:422.1]

Baur, 1890, *Science* 16(405):262.

Syntypes: USNM 15508 (alcoholic female, CL 203 mm); USNM 15509 (alcoholic female, CL 181 mm); USNM 15510 (adult female, skeleton, CL 206 mm, see "Remarks"); USNM 15511 (alcoholic female, CL 167 mm); all from Mandeville, St. Tammany Parish, Louisiana, collected by Gustave Kohn, Jun 1889.

Type Locality: "Mandeville, La.," restricted to "the Pearl River, 26 miles east of Mandeville, St. Tammany Parish, Louisiana" by Cagle (1953b:138).

Other Type Material: Syntype: MCZ 6430.

**Etymology:** The name *oculifera* is from the Latin *oculus*, eye, and the Greek *phero*, to bear; refers to the well-developed ocellated pattern on the pleural scutes.

**Remarks:** The original catalog record states New Orleans is the locality of the syntype series. However, the specimens were collected at Mandeville (Baur, 1890) and were undoubtedly shipped from New Orleans, where Gustave Kohn resided. The disassociation of the dry skull of USNM 15510 (syntype of *Malacoclemmys oculifera* Baur, 1890; skull originally cataloged as USNM Osteo 29539 in the former Division of Comparative Anatomy) from the postcranial portion of the specimen caused confusion in the National Collection, with the result that a second USNM catalog number was assigned to the misplaced skull. A cleaned, unnumbered turtle skull was discovered in the skeletal collection in the same box with the cleaned skull of USNM 8808, one of the syntypes of *Graptemys pulchra* (now paralectotype USNM 318254). Cagle (1952) examined the two skulls associated with USNM 8808 and identified the larger skull as belonging to the alcoholic, headless female USNM 8808. He also thought that the second skull was “probably the skull of a female of *G. oculifera*.” The unnumbered *Graptemys oculifera* skull was cataloged as USNM 252600 in 1985. During the curation of the type turtle collection in 1995, it was discovered that the dry skull of USNM 15510 was missing. Subsequent investigation revealed that the skull cataloged as USNM 252600 (formerly USNM Osteo 29539) actually belonged to USNM 15510. The skull has been labeled USNM 15510 and reassociated with the remainder of specimen USNM 15510. See also “Remarks” under *Graptemys pulchra* Baur, 1893:675. Only USNM 15511 was identified by number in the original description. Cochran (1961) listed USNM 15511 as the holotype and USNM 15508–15510 as paratypes. We follow Cagle (1953b:138), however, and consider the specimens to be syntypes.

### ***Pseudemys alabamensis* Baur, 1893**

[= *Pseudemys alabamensis* Baur, 1893; *fide*, McCoy and Vogt, 1985:371.1]

Baur, 1893a, *Proc. Am. Philos. Soc.* 31(141):224.

**Syntypes:** USNM 20966 (stuffed adult male and skull, CL 278 mm), collected by Gustave Kohn, 7 May 1885; USNM 20967 (stuffed adult female and skull, CL 290 mm), collected by Gustave Kohn, 11 May 1885.

**Type Locality:** “Mobile Bay, Alabama” [Baldwin County, Alabama].

**Etymology:** The name *alabamensis* refers to the state of Alabama.

**Remarks:** McCoy and Vogt (1985:1) mistakenly regarded USNM 20966 as the holotype of *Pseudemys alabamensis*, but Baur (1893a:224) clearly indicated that the description was based on two syntypes. Baur did not list these specimens by catalog number in the original description.

### ***Pseudemys concinna gorzugi* Ward, 1984**

[= *Pseudemys gorzugi* Ward, 1984; *fide*, Ernst, 1990:461.1; Seidel, 1994:123]

Ward, 1984, *Spec. Publ. Mus. Texas Tech Univ.* 21:29, fig. 6.

**Paratypes:** USNM 76 (alcoholic juvenile, CL 58 mm), Cadereita, Nuevo Leon, Mexico, collected by Lt. Darius N. Couch, 1853; USNM 80 (alcoholic juvenile, CL 42 mm), Guadalupe Mountains, Texas, collected by Capt. Jonathan Pope, date unknown, cataloged 14 Feb 1856.

**Type Locality:** “3 1/2 mi. W Jimenez, Río San Diego, Coahuila, México, 850 feet altitude.”

**Other Type Material:** Holotype: KU 39986. Paratypes: KU 15929, 39985; TTU 7347; and UU 4097–98, 4106–07, 4110.

**Etymology:** The name *gorzugi* is a patronym honoring Smithsonian Institution herpetologist Dr. George R. Zug.

**Remarks:** Paratypes USNM 76 and USNM 80 are also paratypes of *Pseudemys texana* Baur, 1893a:223. See discussion of Couch localities and itinerary in Conant (1968). Paratype USNM 80 is illustrated in figure 6 of Ward (1984:30).

### ***Pseudemys concinna metterii* Ward, 1984**

[= *Pseudemys concinna concinna* (Le Conte, 1830); *fide*, Seidel, 1994:124; Seidel and Dreslik, 1996:626.4.

Ward, 1984, *Spec. Publ. Mus. Texas Tech Univ.* 21:34, fig. 7.

**Holotype:** USNM 7173 (adult female, dry shell, and alcoholic head, limbs, and an egg, CL “268 mm”), collected by Edward Palmer, 1 Jun 1868.

**Type Locality:** “Old Fort Cobb, Caddo County, Oklahoma.”

**Other Type Material:** Paratypes: TCWC 14579, 18462–63, 57934; UTA 5163.

**Etymology:** The term *metterii* is a patronym honoring the late Dr. Dean E. Metter, zoologist at the University of Missouri.

**Remarks:** The holotype, USNM 7173, is also a paratype of *Pseudemys texana* Baur, 1893a:223.

***Pseudemys decorata* Barbour and Carr, 1940**

[= *Trachemys decorata* (Barbour and Carr, 1940); *fide*, Seidel, 1988a:7]

Barbour and Carr, 1940, *Mem. Mus. Comp. Zool.* 54(5):409, pl. 2: fig. 1; pl. 7: fig. 3; pl. 9, figs. 3–4.

Paratypes: USNM 59093 (alcoholic juvenile, CL 95 mm), USNM 59094 (alcoholic juvenile, CL 99 mm), USNM 59095 (alcoholic juvenile, CL 86 mm), and USNM 59096 (alcoholic juvenile, CL 77 mm), all from Thomazeau, Haiti, collected by J. B. Henderson and Paul Bartsch, 2 Apr 1917; and USNM 81091 (alcoholic juvenile, CL 91 mm), 10 miles north of Port-au-Prince, Haiti, collected by W. M. Perrygo, 1930.

Type Locality: “Fond Parisien, Haiti” [Department de l’Ouest, Haiti].

Other Type Material: Holotype: MCZ 36862. Paratypes: MCZ 36851–57, 36859–61, 36863–66; ZMB 38082.

Etymology: The term *decorata* is from the Latin *decorus*, elegant or decorative, referring to the plastron pattern.

Remarks: Barbour and Carr (1940) stated the locality for USNM 81091 incorrectly as “Île à Vache.” Cochran (1941) noted the error and provided the correct locality, indicated above.

***Pseudemys elonae* Brimley, 1928**

[= *Pseudemys concinna concinna* (LeConte, 1830); *fide*, Schmidt, 1953:101, and Seidel and Dreslik, 1996:626.4].

Brimley, 1928, *J. Elisha Mitchell Sci. Soc.* 44(1):67, pl. 1, pl. 2: fig. 1.

Holotype: USNM 79631 (= Brimley 124) (dry stuffed adult male, CL “9 inches” [229 mm]), collected by D. W. Rumbold and F. J. Holl, Nov 1927.

Type Locality: “From a pond in Guilford County, North Carolina, not far from Elon College, in the Cape Fear drainage.”

Paratypes: USNM 166487 (= Brimley 130) (dry stuffed adult female, CL “12 inches” [305 mm]); locality and collector data as for holotype, 18 Nov 1927, allotype written on shell; USNM 166488 (= Brimley 128) (dry stuffed adult male, CL “9 inches” [229 mm]), locality and collector data as for holotype, 18 Nov 1927; USNM 166489 (= Brimley 127) (dry stuffed adult female, CL “7 1/4 inches” [189 mm]), collected at the type locality by D. W. Rumbold, Nov 1927.

Etymology: The feminine form *elonae* honors Elon College, North Carolina.

Remarks: The three paratypes were donated by the North Carolina State Museum of Sciences, Raleigh, where

they were cataloged as NCSM 3653–54 and 3665. All specimens were referenced by the private Brimley collection numbers in the original description. Cochran (1961) listed the holotype only; the paratypes were not cataloged until after 1961. USNM 166487 (= Brimley 130) was listed as an allotype in the original description.

***Pseudemys felis* Barbour, 1935**

[= *Trachemys terrapin* (Lacépède, 1788); *fide*, Seidel, 1988a:7, Seidel, 1988b:442.1]

Barbour, 1935, *Occas. Pap. Boston Soc. Nat. Hist.* 8:206.

Paratype: USNM 102447 (alcoholic adult female, CL “160 mm”), collected at the type locality by Wilton G. Albury and Charles S. Dooley, Jan 1935.

Type Locality: “Tea Bay, Cat Island, Bahamas.”

Other Type Material: Holotype: MCZ 38385. Paratypes: MCZ 38386, SMF 22332.

Etymology: The Latin *felis* is the genitive for cat, referring to Cat Island, Bahamas, the type locality of the taxon.

Remarks: USNM 102447 was originally MCZ 38388 and listed as such in the original description.

***Pseudemys floridana peninsularis* Carr, 1938**

[= *Pseudemys peninsularis* Carr, 1938; *fide*, Seidel, 1994:128, Seidel and Ernst, 1998:669.1]

Carr, 1938, *Copeia* 1938(3):105.

Paratypes: USNM 104389 (dry stuffed adult female, CL 309 mm), collected at the type locality by Lewis J. Marchand, 20 Feb 1938; and USNM 104390 (dry stuffed adult male, CL 243 mm), near Umatilla, Lake County, Florida, collected by Archie F. Carr Jr., 16 Mar 1934.

Type Locality: “Crystal Springs, Pasco County, Florida.”

Other Type Material: Holotype: MCZ 42849. Paratypes: CM 9875–77; MCZ 43850, 44069; UF 951; UMMZ 83358–59.

Etymology: The Latin *peninsularis* refers to the peninsula of Florida, to which the range of the taxon is restricted.

***Pseudemys scripta gaigeae* Hartweg, 1939**

[= *Trachemys gaigeae* (Hartweg, 1939); *fide*, Dixon, 1987:85, Price and Hillis, 1989:no page number, Stuart and Ernst, 2004:787.1]

Hartweg, 1939, *Occas. Pap. Mus. Zool. Univ. Michigan* 397:1.

Paratypes: USNM 60921 (dry juvenile shell, CL 108 mm), Lerdo, Durango, Mexico, collected by August Busck,

May 1918; USNM 103706 (originally USNM Osteo 3376) (dry adult shell, skull and skeleton, CL 164 mm), Rio Nazas, Durango, Mexico, collected by Lt. Darius N. Couch, 1853, recataloged 16 Feb 1938.

Type Locality: “Boquillas, Rio Grande River, Brewster County, Texas.”

Other Type Material: Holotype: UMMZ 66472. Paratypes: FMNH 27760; MCZ 4550–51(3).

Etymology: The name *gaigeae* is a genitive matronym honoring Dr. Helen Thompson Gaige, who collected the holotype and was a mentor of Hartweg at the Museum of Zoology, University of Michigan.

Remarks: For a discussion of Couch’s localities and itinerary, see Conant (1968).

### ***Pseudemys stejnegeri* Schmidt, 1928**

[= *Trachemys stejnegeri* (Schmidt, 1928); *fide*, Seidel, 1988a:30, Seidel, 1988c:441.1]

Schmidt, 1928, *New York Acad. Sci.* 10(1):147, figs. 51–52.

Holotype: USNM 25642 (adult female, dry shell and skull, and alcoholic limbs, skin, and viscera, CL “232 mm”), collector unknown, collected during U.S. Fish Commission Scientific Survey by the steamer *Fish Hawk*, 14 Jan 1899.

Type Locality: “San Juan, Porto Rico” [Puerto Rico].

Paratypes: USNM 25643 (alcoholic adult male, CL 141 mm) and USNM 25644 (alcoholic adult male, CL 144 mm), both from the type locality, collection data as for holotype; and USNM 25653 (dry stuffed subadult male with skull, CL 120 mm), Caguas, Caguas, Puerto Rico, collection data as for holotype, collected on 9 Jan 1899.

Other Type Material: Paratypes: AMNH 15186; FMNH 12476–78, 12480–89; UIMNH 39950.

Etymology: The name *stejnegeri* is a patronym honoring Smithsonian Institution herpetologist Dr. Leonhard Stejneger.

### ***Pseudemys texana* Baur, 1893**

[= *Pseudemys texana* Baur, 1893; *fide*, Etchberger and Iverson, 1990:485.1]

Baur, 1893a, *Proc. Am. Philos. Soc.* 31(141):223.

Paratypes: USNM 76 (alcoholic juvenile, CL 58 mm), near Cadereita, Nuevo Leon, Mexico, collected by Lt. Darius N. Couch, 1853; USNM 80 (alcoholic juvenile, CL 42 mm), Guadalupe Mountains, Texas, collected by Capt. Jonathan Pope, date unknown, cataloged 14 Feb 1856; USNM 7173 (formerly ANSP 247, in part, see “Remarks”) (adult female shell, head, limbs, and

egg; CL 268 mm), creek near Old Fort Cobb, Caddo County, Oklahoma, collected by Edward Palmer, 1 Jun 1868.

Type Locality: “San Antonio, Texas” [Bexar County, Texas].

Other Type Material: Holotype: ANSP 246. Paratype: ANSP 247 (formerly USNM 7173, see “Remarks”).

Etymology: The name *texana* refers to the state of Texas.

Remarks: The shell of USNM 7173 was previously cataloged as ANSP 247, whereas the alcoholic body remained USNM 7173. In his description, Baur (1893a:224) stated that ANSP 247 was a dry shell that “has the Smithsonian Institution number 7173 and was collected near Old Fort Cobb, I.T. [Indian Territory, at present the state of Oklahoma]. The soft parts, limbs and head are preserved in alcohol at the Smithsonian.” ANSP 247 was returned to the USNM in 1940 (*in Litt.*, N. Gilmore to R. P. Reynolds, 23 Mar 2006) and reassociated with the alcoholic body as USNM 7173. None of the three USNM type specimens of *P. texana* are currently recognized as that taxon. These specimens are also the holotype (USNM 7173) of *Pseudemys concinna metterii* Ward, 1984:34, and the paratypes (USNM 76, USNM 80) of *Pseudemys concinna gorzugi* Ward, 1984:29.

### ***Pseudemys vioscana* Brimley, 1928**

[= *Pseudemys concinna concinna* (Le Conte, 1830); *fide*, Schmidt, 1953:102, and Seidel, 1994:124 (see “Remarks”)]

Brimley, 1928, *J. Elisha Mitchell Sci. Soc.* 44(1):66; pl. 2: fig. 2.

Holotype: USNM 79632 (= Brimley 115) (dry stuffed adult male, CL “8 1/4 inches” [209.5 mm]), collected by Dr. Percy Viosca Jr., Apr 1927.

Type Locality: “Lake Des Allemands, La.” [St. John the Baptist Parish, Louisiana].

Paratypes: USNM 79633 (= Brimley 7807) (alcoholic male, CL 187 mm), USNM 79634 (= Brimley 7808) (dry stuffed male with skull, CL 194 mm), both from the type locality and collected by Percy Viosca Jr. on 26 Apr 1927; USNM 166490 (= Brimley 106) (dry stuffed adult male, CL 243 mm); USNM 166491 (= Brimley 111) (dry stuffed adult female, CL 286 mm) [allotype written on plastron]; USNM 167248 (= Brimley 112) (dry male shell, head and limbs, CL 302 mm); USNM 167249 (= Brimley 113) (dry adult male shell and head, CL 256 mm); and USNM 167250 (= Brimley 107) (dry stuffed adult male, CL 170 mm); all five from the type locality and collected by Percy Viosca Jr. in Apr 1927.

Paratypes USNM 166490–91 and USNM 167248–50 were donated by the North Carolina State Museum of Sciences, where they were cataloged as NCSM 3646–49 and 3651, respectively.

**Etymology:** The name *vioscana* is a patronym honoring Dr. Percy Viosca Jr., who collected the type series.

**Remarks:** Brimley (1928) indicated a holotype and 11 paratypes for this taxon in his personal collection. The holotype and 7 of the paratypes are currently cataloged in the USNM collection. The other 4 paratypes are not cataloged at the USNM, the NCSM (*In Litt.*, Steve Busack to R. P. Reynolds, 2 Jul 2005) or TU (*In Litt.*, Harold Dundee to R. P. Reynolds, 15 Jul 2005) and are unaccounted for. The Brimley private collection numbers were listed in the original description. Another specimen, USNM 194822 (= Brimley 142), has the same locality and collection data as the type series and has “paratype” written on the plastron. Despite this notation, we do not include this specimen as a paratype. It was not included in the description, and because the plastron lacks natural markings, it is likely the specimen referenced by Brimley (1928), “which has the plastron wholly without markings and which may (or may not) be the same species.” Cochran (1961:235) listed only USNM 79633–34 as paratypes. *Pseudemys vioscana* was first placed in the synonymy of *Pseudemys floridana mobilensis* (= *Pseudemys concinna mobilensis* Holbrook, 1838:53) by Schmidt (1953:101); but *P. c. mobilensis* was synonymized with *P. c. concinna* (Le Conte, 1830:106) by Seidel (1994:124).

### ***Ptychemys hoyi* Agassiz, 1857**

[= *Pseudemys concinna concinna* (Le Conte, 1830); *fide*, Ward, 1984:39, Seidel, 1994:124, Seidel and Dreslik, 1996:626.4 (see “Remarks”)]

Agassiz, 1857, *Contrib. Nat. Hist. U.S. America (Testudinata)*, p. 433.

**Neotype:** USNM 55516 (dry stuffed female, CL “237 mm”), Newton County, Missouri [no further locality data], collected by J. H. Black [in pencil in catalog], in 1899 (see “Remarks”).

**Type Locality:** As for the neotype, “Newton County, Missouri.”

**Etymology:** The name *hoyi* is a patronym honoring Dr. Philo R. Hoy, who collected the original type specimens Baird sent to Agassiz.

**Remarks:** Neotype USNM 55516 was originally Hurter field number 709. Agassiz (1857:433) designated no type specimens. He apparently did not intend to use *hoyi* to identify a particular taxon, but instead to distin-

guish specimens of *Ptychemys* (= *Pseudemys*) with blunt heads, an embryonic character that sometimes persists into adulthood. Stejneger (1938:175), after determining that the original type specimens collected by Dr. P. R. Hoy for the Smithsonian had apparently never been entered into the collection, reinstated the name *Ptychemys hoyi* Agassiz, 1857, for individuals of *Pseudemys* from western rivers, and designated USNM 55516 as the neotype, and “Newton County, Missouri” as the type locality. Schmidt (1953:101) restricted Agassiz’s type locality “south-western Missouri” to the “vicinity of Springfield [Greene County], Missouri,” but he provided no explanation for this action, nor did he reference the neotype designation by Stejneger (1938). The neotype locality designated by Stejneger (1938) clearly takes precedence over the subsequent restriction to the original type locality suggested by Schmidt (1953). Ward (1984:38–39) placed *Ptychemys hoyi* in the synonymy of *Pseudemys concinna hieroglyphica*, and Seidel (1994:124) placed *P. c. hieroglyphica* in the synonymy of *P. c. concinna*. USNM 55516 is currently a dry stuffed specimen, but it was in alcohol when Stejneger (1938:175) described the specimen.

### ***Terrapene bauri* Taylor, 1895**

[= *Terrapene carolina bauri* Taylor, 1895; *fide*, Carr, 1940:100, Ernst and McBreen, 1991:512.6]

Taylor, 1895, *Proc. U.S. Natl. Mus.* 17(1019):576.

**Holotype:** USNM 8352 (alcoholic adult female, CL 137 mm), collected by F. B. Meek, 1875.

**Type Locality:** “Florida;” restricted to “Orlando, Florida” [Orange County] by Schmidt (1953:94).

**Etymology:** The name *bauri* is a patronym honoring Dr. Georg Baur, “who first noted the peculiarities of the type.”

### ***Terrapene goldmani* Stejneger, 1933**

[= *Terrapene mexicana* (Gray, 1849); *fide*, Stephens and Wiens, 2003:597].

Stejneger, 1933, *Proc. Biol. Soc. Washington* 46(24):119.

**Holotype:** USNM 46251 (alcoholic adult female, CL “151 mm”), collected by Dr. Edward W. Nelson and Edward A. Goldman, 11 May 1898.

**Type Locality:** “Chijol (or Chijoles), southeastern corner of the State of San Luis Potosi, Mexico; in the coast plain.” Locality listed as extreme northern Veracruz by Goldman (1951:270).

**Etymology:** The name *goldmani* is a patronym honoring Edward A. Goldman of the U.S. Biological Survey, and co-collector of the type specimen.

***Terrapene nelsoni* Stejneger, 1925**

[= *Terrapene nelsoni* Stejneger, 1925; *fide*, Iverson, 1982:289.1]

Stejneger, 1925, *J. Washington Acad. Sci.* 15(20):463.

Holotype: USNM 46252 (alcoholic adult male, CL 128 mm), collected by Dr. Edward W. Nelson and Edward A. Goldman, 4 Aug 1897.

Type Locality: “Pedro Pablo, Tepic, Mexico; 2500 feet altitude” [Nayarit, Mexico].

Etymology: The name *nelsoni* is a patronym honoring Dr. Edward W. Nelson, chief of the U.S. Biological Survey and co-collector of the type specimen.

***Trachemys adiutrix* Vanzolini, 1995**

[= *Trachemys adiutrix* Vanzolini, 1995]

Vanzolini, 1995, *Rev. Brasil. Biol.* 55(1):112, figs. 1–7, 2 of 3 figs. on unnumbered pl.

Paratype: USNM 329467 (formerly MZUSP 3226) (alcoholic male, CL 144 mm), from the type locality, collected by Paulo E. Vanzolini and Maria do Socorro Pinheiro, 9–11 Mar 1993.

Type Locality: “Brasil: Maranhão: Santo Amaro, 02°33'S, 43°14'W.”

Other Type Material: Holotype: MZUSP 3224. Paratypes: MZUSP 3221–23, 3225.

Etymology: The feminine Latin *adiutrix*, helper, honors Dr. Maria do Socorro Pinheiro, who rediscovered the species and was Vanzolini's field companion.

Remarks: The specimen was cited as MZUSP 3226 in the original description.

**FAMILY GEOEMYDIDAE*****Chelopus funereus* Cope, 1875**

[= *Rhinoclemmys funerea* (Cope, 1875); *fide*, Meyer and Wilson, 1973:6, Frey et al., 1977:63–66, Smith, 1978:93, Ernst, 1980a:263.1]

Cope, 1875 [1876], *J. Acad. Nat. Sci. Philadelphia* 2(8):154.

Syntypes: USNM 45900 (alcoholic juvenile, CL 111 mm); USNM 45901 (alcoholic juvenile, CL 112 mm); USNM 46134 (alcoholic juvenile, CL 93 mm); USNM 46135 (alcoholic juvenile, CL 73 mm); all from the type locality, and collected by William M. Gabb, date unknown, cataloged 16 May 1911.

Type Locality: “Limon” [Puerto Limon, Limon Province, Costa Rica].

Etymology: The name *funereus* is from the Latin *funeris*, funeral, referring to the black color of the shell and limbs.

Remarks: Syntypes not listed by catalog number in the original description.

***Chelopus gabbii* Cope, 1875**

[= *Rhinoclemmys annulata* (Gray, 1860); *fide*, Medem, 1956:317, Frey et al., 1977:63–66, Smith, 1978:93, Ernst, 1980b:250.1]

Cope, 1875, *J. Acad. Nat. Sci. Philadelphia* 2(8):153.

Holotype: USNM 45905 (alcoholic adult male, CL “.186 m”), collected by William M. Gabb, date unknown, cataloged 10 May 1911.

Type Locality: Not given; recorded as “Sipurio, Costa Rica,” in catalog [Sipurio, Limon Province, Costa Rica].

Etymology: The name *gabbii* is a patronym honoring the geologist William M. Gabb, who collected the holotype.

Remarks: Holotype not listed by catalog number in the original description.

***Chelopus rubidus* Cope, 1870**

[= *Rhinoclemmys rubida* (Cope, 1870) *fide*, Smith and Taylor, 1966:12, Frey et al., 1977:63–66, Smith, 1978:93, Ernst, 1981:277.1]

Cope, 1870 [1869], *Proc. Am. Philos. Soc.* 11:148.

Syntypes: USNM 45612 (alcoholic adult female, limbs, girdles, skin of head, and skull, CL “.16” [160mm]), USNM 45613 (alcoholic adult female, limbs, girdles, head), USNM 45614 (alcoholic juvenile, poorly preserved, missing several scutes, CL 87 mm), all collected by Francois Sumichrast at the type locality, date unknown, cataloged 4 May 1911.

Type Locality: “Tuchitan Tehuantepec, Mexico” [Juchitan Tehuantepec, Oaxaca, Mexico].

Other Type Material: Syntypes: ANSP 285, 337–341 (see “Remarks”).

Etymology: The Latin *rubidus*, reddish, refers to the light red markings on the skin.

Remarks: Cope (1870 [1869]:149) referenced four specimens by field number (264–267) in the original description, but only three syntypes are recorded at the USNM (Cochran 1961:228). Syntypes USNM 45612, 45613, and 45614 are field numbers 265, 266, and 267, respectively. The status of the fourth specimen (field number 264) is unknown.

Malnate (1971:354) also listed six syntypes of *Chelopus rubidus* at the Academy of Natural Sciences, Philadelphia (ANSP 285, 337–341), collected by Sumichrast at the type locality. The type status of these specimens is unknown. The missing syntype

(field number 264) may be included in the ANSP series. As previously discussed in “Remarks” for *Dermatemys abnormis*, because of Cope’s association with both the Smithsonian Institution and the Philadelphia Academy of Sciences and the confusion over specimen ownership that occurred after his death, some Smithsonian specimens were cataloged at the ANSP and some ANSP specimens inadvertently cataloged at the Smithsonian.

### ***Cuora amboinensis lineata* McCord and Philippen, 1998**

[= *Cuora amboinensis lineata* McCord and Philippen, 1998] McCord and Philippen, 1998, *Reptile Hobbyist*, Mar 1998:54, 8 unnumbered figs.

Holotype: USNM 122189 (alcoholic adult male, CL “166.3 mm”), collected by Capt. Kenneth E. Stager in 1945.

Type Locality: “Myitkyina, Kachin Province, Myanmar (Burma).”

Other Type Material: Paratypes: ZMA 19223–24 (see “Remarks”).

Etymology: The Latin *lineata*, meaning lined, refers to the light vertebral and pleural stripes on the carapace.

Remarks: The date of collection was penciled into the catalog subsequent to cataloging on 18 Jan 1946. McCord and Philippen (1998:54) listed ZMA 19223, an adult male, and ZMA 19224, a juvenile female, as paratypes, but failed to deposit these specimens in the Universiteit van Amsterdam Zoölogisch Museum (*in Litt.*, Miguel Vences to C. H. Ernst, 2003).

### ***Cuora chriskarannarum* Ernst and McCord, 1987**

[= *Cuora pani* Song, 1984; *fide*, de Bruin, 1988:6] Ernst and McCord, 1987, *Proc. Biol. Soc. Washington* 100(3):624, fig. 1.

Holotype: USNM 266162 (alcoholic adult male, CL 112 mm), purchased from locals by “Oscar Shiu, Sep 1986.”

Type Locality: “Ta Lau Shan, Yunnan Province, China (23°30'N, 102°25'E).”

Paratype: USNM 266163 (alcoholic adult female, CL 145 mm), “Chinsha (= Chin Ping), Yunnan Province, China (22°46'N, 103°15'E),” purchased from locals by “Oscar Shiu, Sep 1986.”

Etymology: The name *chriskarannarum* honors Dr. William P. McCord’s daughters Christine and Karen and his wife Anne.

Remarks: The type locality has been questioned (McCord and Iverson, 1991:411; Parham and Li, 1999:111).

### ***Cuora evelynae* Ernst and Lovich, 1990**

[= *Cuora flavomarginata evelynae* Ernst and Lovich, 1990; *fide*, McCord and Iverson, 1991:411, see “Remarks”] Ernst and Lovich, 1990, *Proc. Biol. Soc. Washington* 103(1):31, fig. 1.

Paratypes: USNM 34076 (alcoholic adult male, CL 130 mm), USNM 34077 (alcoholic adult female, CL 124 mm), USNM 34078 (alcoholic juvenile, CL 92 mm), and USNM 34079 (alcoholic juvenile, CL 60 mm), all from Yaeyama, Ishigaki Shima, Sakishima Gunto, Ryukyu Islands, Japan; collector unknown, date unknown, cataloged 11 Jul 1904.

Type Locality: “Ishigaki Shima, Ryukyu Islands, Japan.”

Other Type Material: Holotype: CAS 26113. Paratypes: AMNH 50804; CAS 21026–29, 26102–12, 26801; MCZ 56064.

Etymology: The name *evelynae* is a genitive form honoring Dr. Evelyn M. Ernst.

Remarks: McCord and Iverson (1991) considered *Cuora evelynae* to be a subspecies of *Cuora flavomarginata*. Subsequent morphometric and molecular genetic analyses by Yasukawa and Ota (1999) and Honda et al. (2002) supports the interpretation of *C. f. evelynae* as a valid subspecies of *C. flavomarginata*.

### ***Cuora galbinifrons serrata* Iverson and McCord, 1992**

[= *Cuora galbinifrons* Bourret, 1939:11 × *Cuora mouhotii* (Gray, 1862); *fide*, Parham et al., 2001:363]

Iverson and McCord, 1992, *Proc. Biol. Soc. Washington* 105(3):434, fig. 1.

Paratype: USNM 314208 (alcoholic adult female, CL 182 mm), Tainhfen, 100 km east of Tungfang, Hainan Island, China, purchased from locals by Oscar Shiu, early summer 1988.

Type Locality: “100 km east of Tungfang at Tainhfen in central Hainan Island, China.”

Other Type Material: Holotype: UF 81791. Paratypes: UF 81792–98.

Etymology: The name *serrata* is from the Latin *serratus*, saw-shaped or serrated, referring to the serrated posterior carapace rim.

Remarks: USNM 314208 is listed as an allotype in the original description. Fritz and Obst (1997) examined the morphology of *Cuora galbinifrons serrata* Iverson and McCord, 1992, to determine if it and *Cuora mouhotii* were allopatric or if the two taxa hybridized naturally on Hainan Island, but they rejected the idea of natural hybridization and raised *serrata* to a full species. Parham et al. (2001) showed the molecular

DNA structure of *C. serrata* is of hybrid origin consisting of genetic material from both the species *C. galbinifrons* and *C. mouhotii*. The available evidence indicates that this hybridization is likely the result of recent artificial breeding and that the taxon does not represent a valid phylogenetic species.

### ***Cuora mccordi* Ernst, 1988**

[= *Cuora mccordi* Ernst, 1988]

Ernst, 1988, *Proc. Biol. Soc. Washington* 101(2):466, fig. 1. Holotype: USNM 281850 (alcoholic adult male, CL 131.9 mm), “purchased from locals by Oscar Shiu, Aug 1986.”

Type Locality: “Highland near Paise, Guangxi Province, China (23°54'N, 106°37'E)” [Guangxi Zhundzu]. Type Locality corrected to “in Yunnan Province, west of Paise, Guangxi Province” by McCord and Iverson (1991:414).

Etymology: The name *mccordi* is a patronym, for Dr. William P. McCord.

Remarks: Although Ernst (1988:466) did not designate paratypes of *Cuora mccordi*, in addition to the holotype he examined 11 specimens (p. 467) from the type locality in the collection of Dr. William P. McCord of Hopewell Junction, New York. One of these, USNM 285129 (an alcoholic adult male, CL 145 mm), was subsequently donated to the Smithsonian by Dr. McCord in 1988.

### ***Cyclemys atripons* Iverson and McCord, 1997**

[= *Cyclemys atripons* Iverson and McCord, 1997; *fide*, Fritz et al., 2001]

Iverson and McCord, 1997, *Proc. Biol. Soc. Washington* 110(4):632, fig. 3.

Holotype: USNM 81865 (dry, stuffed, adult female shell and skull, CL 172 mm), collected by Hugh M. Smith, 24 Dec 1929.

Type Locality: “Thailand, Krat [Trat], Kao [= Mt.] Kuap (= Khao Kuap).”

Paratypes: USNM 53423 (adult female with alcoholic head, limbs, viscera, and dry shell, CL 225 mm), Koh Chang (= Ko Chang) Island, Thailand, collected by C. Boden Kloss and William L. Abbott, Dec 1914; USNM 53424 (alcoholic juvenile, CL 82 mm), locality and collection data as for USNM 53423; USNM 79515 (dry, mummified adult female, CL 194 mm), Koh Kut (= Ko Kut), Trat, Gulf of Thailand, collected by Hugh M. Smith, 21 May 1929; and USNM 94745 (alcoholic juvenile, CL 79 mm), Kao Sabab (= Khao Sabap), Chanthaburi, Thailand, collected by Hugh M. Smith, 20 Nov 1933.

Other Type Material: Paratypes: KU 47171, MCZ 29571–72, UF 105992–93.

Etymology: The name *atripons* is from the Latin *atri*, black, and *pons*, bridge, referring to the dark pigmented shell bridge.

### ***Kachuga smithii pallidipes* Moll, 1987**

[= *Kachuga smithii pallidipes* Moll, 1987]

Moll, 1987, *J. Bombay Nat. Hist. Soc.* 84(1):8, pl. 3: figs. B, C.

Paratype: USNM 257779 (alcoholic adult female, CL “15.6” cm), Karnali River, Royal Bardia Wildlife Reserve, 2 km N of Thakurdara, Bardiya District, Bheri, Nepal; collected by Iman Singh and Joseph C. Mitchell, 23 Apr 1985.

Type Locality: “Gandak River, Bherihasi Wildlife Sanctuary, Bettiah (West Champaran) District, Bihar” [India].

Other Type Material: Holotype: FMNH 224177. Paratype: FMNH 224186.

Etymology: The name *pallidipes* is from the Latin *pallidus*, pale or pallid, and *ped*, foot, referring to the light pigmented feet of the subspecies.

### ***Mauremys mutica kami* Yasukawa, Ota, and Iverson, 1996**

[= *Mauremys mutica kami* Yasukawa, Ota, and Iverson, 1996]

Yasukawa, Ota, and Iverson, 1996, *Zool. Sci.* (Japan) 13(2):311, fig. 7.

Paratypes: USNM 498367 (alcoholic adult male, CL 132 mm); USNM 498368 (alcoholic adult female, CL 146 mm); both from Uranchi, Iriomrejima, Yaeyama Group, Ryukyu Islands, Japan, and collected by Yuichirou Yasukawa, 3 Aug 1992.

Type Locality: “Okawa, Ishigakijima Is., the Yaeyama Group, Ryukyu Archipeligo, Japan.”

Other Type Material: Holotype: KUZ 19541. Paratypes: BMNH 1994.527–28; CAS 200286–87; KUZ 19508, 19524–25, 19527–28, 19533–40, 19542; NSMT 02098–99, 02100, 02102–03, 02108; OMNH 4018–19.

Etymology: The term *kami* refers to the vernacular name for turtles among the inhabitants of the Yaeyama Group, southern Ryukyu Islands, Japan.

## **FAMILY KINOSTERNIDAE**

### ***Cinosternum berendtianum* Cope, 1865**

[= *Kinosternon acutum* Gray, 1831; *fide*, Stejneger, 1941: 457, Iverson, 1980:261.1]

Cope, 1865, *Proc. Acad. Nat. Sci. Philadelphia* 17(4): 189.

Syntypes: USNM 6517 (originally three dry shells; one female and two males; see “Remarks”); USNM 106293 (dry male shell, CL 94 mm); USNM 106294 (dry male shell, CL 97 mm; see “Remarks”) (Stejneger, 1941:458); all collected by Dr. C. H. Berendt, 1863 and Jan 1864 (see “Remarks”).

Type Locality: “Tabasco” [Mexico].

Etymology: The name *berendtianum*, meaning connected to Berendt, honors Dr. C. H. Berendt, the collector of the type series.

Remarks: Two of three specimens under USNM 6517 were recataloged as USNM 106293 and 106294. The female specimen that retained USNM 6517 is lost; it was not found during the inventory in 1958. The alcoholic body parts for two of the specimens of USNM 6517 were cataloged as USNM 6534, but these are now lost.

### ***Cinosternum brevigulare* Cope, 1885, not Günther, 1885:17**

[= *Kinosternon leucostomum postinguinale* (Cope, 1887); *fide*, Berry and Iverson, 2001a:724.4]

Cope, 1885, *Proc. Am. Philos. Soc.* 22(120):389.

Syntypes: USNM 45582 (alcoholic adult female, CL “.127” m [131 mm]), Sipurio, Limon, Costa Rica; USNM 51165 (dry adult male, CL “.144” m, lost, see “Remarks”), Sipurio, Limon, Costa Rica; collected by Dr. William M. Gabb; date unknown. USNM 45582 cataloged 1 May 1911, and USNM 51165 cataloged 25 Apr 1914.

Type Locality: “Tierra Caliente of Costa Rica at Sipurio, on the east coast.”

Etymology: The name *brevigulare* is from the Latin *brevis*, short, and *gula*, throat, referring to the small gular scute on the plastron.

Remarks: Cope did not specify catalog numbers in the original description. USNM 19797, USNM 45582, and USNM 51165 are listed as the syntypes of *Cinosternum brevigulare* Cope, 1885, by Cochran (1961:229). USNM 51165 is now lost. In contrast to Cochran (1961), we do not recognize USNM 19797 as a syntype of *C. brevigulare* because it was not collected at the type locality, and its 60 mm CL is less than half the length of the two specimens indicated by Cope (1885:389). William Gabb collected USNM 19797 at Old Harbor (= Puerto Viejo de Limon) Limon, Costa Rica. Cope (1885:389) clearly based his description on the two specimens collected by

Gabb from the Tierra Caliente of Costa Rica at Sipurio. *Cinosternum postinguinale* (Cope 1887:23) is the replacement name for the preoccupied *Cinosternum brevigulare* Cope 1885:389. USNM 19797, USNM 45582, and USNM 51165 are also listed as the syntypes of *Cinosternum postinguinale* Cope 1887:23 (replacement name) by Cochran (1961:229). Berry and Iverson (2001a) stated that both USNM 45582 and USNM 51165 were examined by the authors. Recently, however, John B. Iverson established that while he definitely examined USNM 45582, he did not see USNM 51165 when he visited the NMNH in June 1975 (*In Litt.*, John B. Iverson to R. P. Reynolds, 28 Mar 2007).

### ***Cinosternum postinguinale* Cope, 1887**

[= *Kinosternon leucostomum postinguinale* (Cope, 1887); *fide*, Wermuth and Mertens, 1961:22, Berry and Iverson, 2001a:724.4]

Cope, 1887, *Bull. U.S. Natl. Mus.* 32:23.

Syntypes: See *Cinosternum brevigulare* Cope, 1885.

Type Locality: See *Cinosternum brevigulare* Cope, 1885.

Etymology: The name *postinguinale* is derived from the Latin *post*, after or behind, and *inguen* (= *inguina*), the groin, and refers to the inguinal scute located posterior on the shell bridge.

Remarks: *Cinosternon postinguinale* Cope, 1887 is a substitute name proposed by Cope (1887:23) for *Cinosternum brevigulare* Cope (1885:389), which was preoccupied by *Cinosternum brevigulare* Günther (1885:17). Cope (1887:23) indicated that Günther 1885 was published in May, whereas Cope 1885 was published in June. For additional remarks concerning the syntypes, see *Cinosternum brevigulare* Cope, 1885.

### ***Claudius angustatus* Cope, 1865**

[= *Claudius angustatus* Cope, 1865; *fide*, Iverson and Berry, 1980:236.1]

Cope, 1865, *Proc. Acad. Nat. Sci. Philadelphia* 17(4):187.

Holotype: USNM 6518 (alcoholic adult female shell and separate body, CL 103 mm), collected by Dr. C. H. Berendt, 1863/1864.

Type Locality: “Tabasco” [Mexico].

Etymology: The name *angustatus* is from the Latin *angustare*, narrow or small, referring to the very narrow shell bridge.

Remarks: Cochran (1961:230) listed two syntypes, USNM 6518 and USNM 6525, but these numbers represented the shell (USNM 6518) and the soft body parts (USNM 6525) of the same individual. They were recombined

under USNM 6518, the earlier catalog number and the number originally cited by Cope (1865:188).

### ***Claudius severus* Cope, 1872**

[= *Staurotypus salvinii* Gray, 1864; *fide*, Bocourt, 1876:387, Dean and Bickham, 1983:327.1]

Cope, 1872, *Proc. Acad. Nat. Sci. Philadelphia* 24(1):24. Holotype: USNM 64005 (Sumichrast 485) (dry shell, sex indeterminate, CL “0.18 m” [180 mm]), collected by Francois Sumichrast, date unknown, cataloged 1 Apr 1921 (see “Remarks”).

Type Locality: “Santa Efigenia, on the western side of the Isthmus of Tehuantepec, Mexico” [Oaxaca, Mexico]. Etymology: The Latin *severus*, stern or serious, refers to the pugnacious temperament of the animal.

Remarks: The specimen was not cataloged at the time of the description, but Cope referenced it as Sumichrast’s number 485. Cope’s description of the holotype included soft parts preserved in alcohol that are no longer present in the USNM collection. Dean and Bickham (1983:1) listed the sex of USNM 64005 as female. When describing the taxon, Cope (1872) examined only one specimen, the holotype USNM 64005. Interestingly, although not examined by Cope and not designated as types, the MNHN has the following specimens from Tehuantepec, Mexico, collected by Sumichrast apparently in the same series as the holotype: “MNHN 6218, 6219, 6220 (×2), don AC . . . 6623 [2]” (*In Litt.*, Roger Bour to C. H. Ernst, 31 May 2005).

### ***Goniochelys minor* Agassiz, 1857**

[= *Sternotherus minor* (Agassiz, 1857); *fide*, Stejneger, 1923:2, Iverson, 1977a:195.1, Zug, 1986:397.1]

Agassiz, 1857, *Contrib. Nat. Hist. U.S. America (Testudinata)*, p. 424.

Syntype: USNM 7111 (originally MCZ 1572) (alcoholic adult female, CL 94 mm), New Orleans, Louisiana, collected by N. B. Benedict, date unknown, cataloged at MCZ before 1863.

Type Locality: “Columbus, Georgia . . . New Orleans . . . Mobile”; restricted to “Columbus, Georgia” [Muscoogie County] by Schmidt (1953:88).

Other Type Material: Syntypes: MCZ 1570, 1571(2), 1573 (see “Remarks”), UMMZ 63520.

Etymology: The Latin *minor*, smaller or inferior, refers to the taxon’s smaller size than its congener *Sternotherus carinatus*.

Remarks: Syntypes are not listed by catalog number in the original description. MCZ 1573 is a specimen of *Ster-*

*notherus odoratus* (*In Litt.*, Jose M. Rosado to R. P. Reynolds, 6 Jun 2005).

### ***Goniochelys triquetra* Agassiz, 1857**

[= *Sternotherus carinatus* (Gray, 1856 [1855]); *fide*, Boulenger, 1889:38, Stejneger, 1923:2, Iverson, 1979:226.1, Zug, 1986:397.1]

Agassiz, 1857, *Contrib. Nat. Hist. U.S. America (Testudinata)*, p. 423; pl. 5: figs. 20–22.

Syntype: USNM 2 (lost, dry stuffed shell, sex unknown), collected by B. L. Chase at the type locality, May 1852 (see “Remarks”).

Type Locality: “Lake Concordia, in Louisiana” [Concordia Parish, Louisiana].

Other Type Material: Syntypes: MCZ 15085–86, 46634–35 (see “Remarks”).

Etymology: The name *triquetra* is from the Latin *triquetrus*, having three corners or a triangular shape; refers to the taxon’s triangular appearance when viewed from the front or rear.

Remarks: Syntypes are not listed by catalog number in the original description. Agassiz (1857:423) stated that he “was indebted for specimens to Prof. Baird, Mr. B. Chase and Prof. Wailes” and that “several specimens from the same source are preserved in the Museum of the Essex Institute in Salem” [Massachusetts]. Syntypes MCZ 46634–35 were returned to the MCZ from the Essex Institute in 1942 (*In Litt.*, Jose M. Rosado to R. P. Reynolds, 6 Jun 2005). The syntype USNM 2 was apparently lost before Yarrow (1882) prepared his checklist, as it is not mentioned in the list of specimens of *Aromochelys* (= *Sternotherus carinata*) on page 30.

### ***Kinosternon abaxillare* Baur, in Stejneger, 1925:462**

[= *Kinosternon scorpioides abaxillare* Baur, in Stejneger, 1925:462; *fide*, Berry, 1979:3186, Berry and Iverson, 2001b:725.2]

Stejneger, 1925, *J. Washington Acad. Sci.* 15(20):463.

Holotype: USNM 7518 (adult male shell, lost), collected by Dr. C. H. Berendt, 1863 or 1864 (see “Remarks”).

Type Locality: “Tuxtla, Chiapas, Mexico”; amended to “Tuxtla [Gutiérrez], Chiapas, Mexico” (Berry and Iverson, 2001b:5).

Paratypes: USNM 7519 (dry female shell, CL 122 mm); USNM 7520 (dry shell, sex unknown, lost); USNM 7521 (dry shell, sex unknown, CL 93 mm); USNM 7523 (dry shell, sex unknown, CL 120 mm); USNM 7524 (dry shell, sex unknown, CL 118 mm);

USNM 7525 (dry shell, sex unknown, CL 117 mm); USNM 7526 (dry shell, sex unknown, CL 133 mm); USNM 7527 (dry shell, sex unknown, CL 113 mm); USNM 7528 (dry male shell, CL 124 mm); and USNM 7529 (dry plastron and partial carapace, sex unknown, PL 113 mm). All paratypes collected at the type locality by Dr. C. H. Berendt. The collection dates are unknown, but probably the entire type series was collected in 1863–1864. All paratypes were cataloged on 6 Feb 1870 (see “Remarks”).

Other Type Material: Paratype: MCZ 66964 (formerly USNM 7522, sent to the MCZ on 15 Nov 1961).

Etymology: The term *abaxillare* is from the Latin prefix *ab*, from or away, and *axillaris*, axilla or armpit, referring to the absence of an axillary scute on the shell bridge.

Remarks: Stejneger (1925:462) credits the taxon to Georg Baur, from whose manuscript note he abstracted the diagnosis. Although no paratypes were designated in the original description, Baur, in Stejneger (1925:462), based his description on twelve shells in the Smithsonian collection collected by Dr. C. H. Berendt. Cochran (1961:231) cited USNM 7519–29 as paratypes. They were taken at the type locality by the collector of the holotype. Both the holotype, USNM 7518, and the paratype, USNM 7520, have been lost; neither was found during the Dry Type Inventory of 1992. The holotype was present in the collection in 1958 when John Legler examined and photographed it (pers. comm., John M. Legler to George R. Zug, 10 Nov 1993). Copies of these photos are archived in the Division of Amphibians and Reptiles. Presumably it was present in the collection when Doris Cochran published her type catalog in 1961, because she included only specimens that were in collection. John B. Iverson, however, stated that he examined the entire *K. abaxillare* type series except the holotype, which was not present, when he visited the USNM collection in June 1975 (pers. comm., John B. Iverson to R. P. Reynolds, 3 Nov 1993). Berry and Iverson (2001b:725.5) reported that they had examined the paratypes USNM 7519–29. However, John B. Iverson recently stated that the report is in error and that they did not see USNM 7520 (*In Litt.*, John B. Iverson to R. P. Reynolds, 28 Mar 2007).

### ***Kinosternon arizonense* Gilmore, 1923**

[= *Kinosternon arizonense* Gilmore, 1923; *fide*, Iverson, 1989:356, Serb et al., 2001:149]

Gilmore, 1923, *Proc. U.S. Natl. Mus.* 62(2451):2, figs. 1–7, pls. 1–5.

Holotype: Smithsonian Department of Vertebrate Paleontology USNM V10463 (fossil male nearly complete carapace and plastron (lacks anterior lobe), lower jaws, fragmentary vertebrae, limb bones, etc. CL “170+ mm”), collected by J. W. Gidley, 1921.

Type Locality: “Benson Locality Quarry, two miles south of Benson, Cochise County, Arizona.” Horizon: Pliocene; San Pedro Formation.

Paratype: USNM V10462 (fossil female partial carapace, plastron and skull, and multiple appendicular and axillary elements, CL “148 mm”), locality and collection data as for holotype.

Etymology: The name *arizonense* is for the state of Arizona, where the type series was found.

Remarks: This taxon was long known as *Kinosternon flavescens stejneri* Hartweg, 1938:1, before Iverson (1989:356) placed it in the synonymy of *Kinosternon arizonense* Gilmore, 1923:2.

### ***Kinosternon bauri palmarum* Stejneger, 1925**

[= *Kinosternon baurii* (Garman, 1891); *fide*, Iverson, 1978a:141]

Stejneger, 1925, *J. Washington Acad. Sci.* 15(20):463.

Holotype: USNM 61065 (alcoholic adult female, CL 96 mm), collected by Charles A. Mosier, date unknown, cataloged 12 Aug 1918.

Type Locality: “Royal Palm State Park, Dade County, Florida” [Paradise Key, Everglades National Park, Miami-Dade County, Florida].

Paratypes: USNM 60579 (juvenile male shell, lost), collected by C. A. Mosier at the type locality, 6 Apr 1918; USNM 61331 (alcoholic juvenile, CL 24 mm), collected by C. A. Mosier at the type locality, 1918; USNM 69559 (alcoholic adult female, CL 93 mm), collected by C. A. Mosier at the type locality, 30 Oct 1918 (see “Remarks”).

Etymology: The name *palmarum*, is from the Latin *palma*, a palm tree, referring to the place of capture of the type specimen, Royal Palm State Park (see “Type Locality”).

Remarks: Stejneger (1925:463) clearly designated USNM 61065 as the type specimen. He did not designate any paratypes, but (p. 463) stated: “Three more specimens of this form, all collected at the same locality by C. A. Mosier, have been examined.” Cochran (1961:231) correctly listed USNM 69559 as a paratype but mistakenly listed USNM 60597 for USNM 60579. USNM 60579 was not present in the collection in Apr 2004 and is presumed lost. The third probable paratype, not listed by Cochran (1961), is USNM 61331.

USNM 69559 was originally cataloged as FSM [= UF] 12766.

***Kinosternon cruentatum consors* Stejneger, 1941**

[= *Kinosternon scorpioides cruentatum* (Duméril and Bibrón, 1851, *in* Duméril and Duméril, 1851); *fide*, Duellman, 1965:591].

Stejneger, 1941, *Proc. U. S. Natl. Mus.* 90(3115):457–459.

Holotype: USNM 13912 (alcoholic adult male, CL “104 mm”), collector unknown, U.S. Fish Commission Survey, U.S.S. *Albatross* Expedition, 23–29 Jan 1885.

Type Locality: “Cozumel Island, Yucatan, Mexico”; Isla Cozumel, Quintana Roo, Mexico.

Paratypes: USNM 6556 (alcoholic adult male, CL 110 mm), Progreso, Yucatan, Mexico, collected by A. Schott; USNM 13910 (alcoholic adult female, CL 107 mm); USNM 13911 (alcoholic adult male, see “Remarks,” CL 124 mm); and USNM 13913 (alcoholic adult female, CL 107 mm). Locality and collection data for USNM 13910–11, and USNM 13913 as for the holotype.

Other Type Material: Paratype: ANSP 94.

Etymology: The Latin genitive *consors*—brother, sister, or consort—refers to the taxon’s similarity to *K. scorpioides cruentatum*, with which it was later synonymized by Duellman (1965:591).

Remarks: USNM 6556 was originally cataloged as two specimens; however, only one specimen was present in 1940 (annotation in catalog by Doris M. Cochran). Stejneger (1941:459) listed the sex of USNM 13911 as female; however, we determined that it is a male on the basis of the tail length.

***Kinosternon flavescens spooneri* Smith, 1951**

[= *Kinosternon flavescens flavescens* (Agassiz, 1857); *fide*, Berry and Berry, 1984:200]

Smith, 1951, *Bull. Chicago Acad. Sci.* 9(10):195, pl. 2.

Paratype: USNM 83190 (alcoholic adult male, CL 140 mm), Meredosias Bay of the Illinois River, Meredosias, Morgan County, Illinois, collected by Alvin R. Cahn, Jun 1927.

Type Locality: “Henderson County State Forest, 7 miles north of Oquawka, Illinois.”

Other Type Material: Holotype: INHS 4244; Paratypes: CHAS 15687; FMNH 37992; INHS 3220–22, 4245, 5587–89, 5898, 5987–88, 6010–11; MCZ 53932; UIMNH 2252–53, 2255–56; UMMZ 74654, 103089.

Etymology: The name *spooneri* is a patronym honoring Dr. Charles S. Spooner, former head of the Zoology Department of Eastern Illinois University.

Remarks: In the original description, Smith (1951:195) listed D. H. Thompson as the collector for USNM 83190, not A. R. Cahn, as entered in the USNM catalog.

***Kinosternon herrerae* Stejneger, 1925**

[= *Kinosternon herrerae* Stejneger, 1925; *fide*, Berry and Iverson, 1980:239.1]

Stejneger, 1925, *J. Washington Acad. Sci.* 15(20):463.

Holotype: USNM 61249 (alcoholic adult male, CL 143 mm), collected by Alfonso L. Herrera, date collected unknown, cataloged 7 Dec 1918.

Type Locality: “Xochimilco, Valley of Mexico” [Xochimilco, Distrito Federal, Mexico]; in error, restricted first to “La Laja, Veracruz,” Mexico, by Smith and Taylor (1950b:24), and later to “the vicinity of Tampico” [Tamaulipas, Mexico] by Smith and Brandon (1968:54).

Paratypes: USNM 61250 (alcoholic adult female with dry skull and pelvis, CL 123 mm), locality and collection data as for the holotype; USNM 61251 (alcoholic adult female, CL 117 mm), locality and collection data as for the holotype; USNM 61252 (alcoholic adult female, CL 99 mm), locality and collection data as for the holotype (see “Remarks”).

Etymology: The name *herrerae* is a patronym honoring the collector of the type series, Dr. Alfonso L. Herrera, director of Biological Studies, National Museum of Mexico.

Remarks: Cochran (1961:232) listed USNM 61250–52, three females, as paratypes, based on the statement by Stejneger (1925:462) that “in addition to the type three adult females were presented to the National Museum by Dr. Alfonso L. Herrera, the distinguished director of Biological Studies, and the National Museum of Mexico, through Dr. A. Busck.”

***Kinosternon louisianae* Baur, 1893**

[= *Kinosternon subrubrum hippocrepsis* Gray, 1856; *fide*, Stejneger and Barbour, 1917:112, Iverson, 1977b:193.2]

Baur, 1893b, *Am. Nat.* 27(319):676.

Holotype: USNM 15527 (alcoholic adult female, CL 100 mm), collected by Robert W. Shufeldt, 1883.

Type Locality: “New Orleans, La.” [Louisiana].

Etymology: The name *louisianae* refers to the state of Louisiana.

***Kinosternon murrayi* Glass and Hartweg, 1951**

[= *Kinosternon hirtipes murrayi* Glass and Hartweg, 1951; *fide*, Schmidt, 1953:89, Iverson, 1985:361.2]

Glass and Hartweg, 1951, *Copeia* 1951(1):50, fig. 1.  
 Paratype: USNM 15860 (alcoholic adult male and plaster cast of shell, CL “145.7” mm), Marfa, Presidio County, Texas; collected by Vernon O. Bailey, 24 Jan 1890.  
 Type Locality: “Harper Ranch, 37 miles south of Marfa, Presidio County, Texas.”  
 Other Type Material: Holotype: TCWC 650; Paratypes: UMMZ 101294, and UMMZ S-1083.  
 Etymology: The name *murrayi* is a patronym honoring Dr. Leo T. Murray.

### ***Kinosternon panamensis* Schmidt, 1946**

[= *Kinosternon scorpioides scorpioides* (Linnaeus, 1766); *fide*, Berry and Iverson, 2001b:2, 5; see “Remarks”]  
 Schmidt, 1946, *Smithson. Misc. Coll.* 106(8):5.  
 Holotype: USNM 117369 (formerly MCZ 7996) (alcoholic male, CL “150” mm), collected by Dr. Thomas Barbour, 10 Jun 1932 (see “Remarks”).  
 Type Locality: “Panamá Railroad, C. Z.” [Canal Zone, Panamá].  
 Paratypes: USNM 7864 (alcoholic male, CL 145 mm), Panamá, collector and date unknown, cataloged 1872; USNM 117370 (formerly MCZ 7996) (alcoholic female, CL 141 mm), collection data as for holotype (see “Remarks”).  
 Other Type Material: Paratypes: MCZ 18930, 24957, 27919, 31486–89.  
 Etymology: The name *panamensis* refers to the country of origin of the type series.  
 Remarks: The holotype and paratype USNM 117370 were originally cataloged as MCZ 7996 in 1907 (*In Litt.*, Jose M. Rosado to R. P. Reynolds, 6 Jun 2005). Therefore the date of 10 Jun 1932 (incorrectly listed as 10 Jun 1922 by Cochran 1961) given in Schmidt 1946 is in error. Although Berry (1978) relegated *K. panamensis* to the synonymy of *K. scorpioides* in his unpublished doctoral dissertation, he failed to do so in the published abstract of it in 1979. The first published designation of *panamensis* to the synonymy of *scorpioides* was by Berry and Iverson (2001b:2).

### ***Kinosternon sonoriense longifemorale* Iverson, 1981**

[= *Kinosternon sonoriense longifemorale* Iverson, 1981]  
 Iverson, 1981, *Tulane Stud. Zool. Bot.* 23(1):43, fig. 27.  
 Holotype: USNM 21710 (alcoholic young adult male, CL 93 mm), collected by Dr. Edgar A. Mearns during the U.S. Mexican Boundary Survey, 15 Jan 1894.  
 Type Locality: “Sonoyta, Sonora, Mexico (31°51'N, 112°50'W).”

Paratypes: USNM 21708 (alcoholic adult female, CL 111 mm), from the Sonoyta River, 3 miles from Sonoyta, Sonora, Mexico, collected by B. A. Wood, 22 Jan 1894; USNM 21709 (alcoholic adult male, CL 109 mm), locality and collection data as for the holotype; and USNM 21711 (alcoholic adult female, CL 110 mm), locality, and collection data as for the holotype.  
 Other Type Material: Paratypes: UAZ 27987, 27996; and UF 47719–20.

Etymology: The subspecific name *longifemorale* is from the Latin *longus*, long, and *femoralis*, of the femur (here, the femoral scute of the plastron), referring to the long interfemoral seam of the taxon.

Remarks: Iverson (1981:43) considered USNM 21709 and USNM 21711 a topotypic male and a topotypic female, respectively.

### ***Ozotheca tristycha* Agassiz, 1857**

[= *Sternotherus odoratus* (Latreille, in Sonnini de Manoncourt and Latreille, 1801); *fide*, Boulenger, 1889:37, Schmidt, 1953:87, Reynolds and Seidel, 1982:287.1]  
 Agassiz, 1857, *Contrib. Nat. Hist. U.S. America (Testudinata)*, p. 425, pl. 5: figs. 20–22.  
 Syntypes: USNM 64 (alcoholic juvenile, lost), USNM 65 (alcoholic juvenile, lost), both from Medina, Medina County, Texas, collected by Dr. Caleb B. Kennerly, date unknown, cataloged 14 Feb 1856; USNM 69 (alcoholic juvenile, CL 47 mm), USNM 70 (alcoholic juvenile, now MCZ 1922), USNM 71 (alcoholic juvenile, CL 31 mm), and USNM 72 (alcoholic male, CL 79 mm), all four from San Pedro, near San Antonio, Bexar County, Texas, collected by Dr. Caleb B. Kennerly, date unknown, but cataloged Feb 1856; and USNM 7890 (alcoholic juvenile, CL 28 mm), Medina River, Medina County, Texas, collected by Dr. Caleb B. Kennerly, date unknown, cataloged 1872.  
 Type Locality: “Osage River, in Missouri, and in Williamson County, in Texas . . . near San Antonio, . . . Medina River, in Texas”; restricted to “San Antonio” [Bexar County, Texas] by Schmidt (1953:87).  
 Other Type Material: Syntypes: MCZ 1574 (4), 1576 (2), and 1922 (formerly USNM 70) (see “Remarks”).  
 Etymology: The term *tristycha* is from the Greek *tri*, three, and *stichos*, a row, in reference to the three prominent keels on the carapace of juveniles.  
 Remarks: According to Agassiz (1857:425), six syntypes were originally in the Smithsonian collection. He stated: “Prof. Baird has sent me four young belonging to the Smithsonian Institution, that were obtained by Dr. C. B. Kennerly, near San Antonio, and two

others from the Medina River, in Texas.” In a letter from Agassiz to Baird dated 23 Mar 1856 (Herber, 1963:126–128), he listed these specimens as USNM 64–65 and USNM 69–72. USNM 7890 was entered into the catalog as an Agassiz type. The locality information suggests it was likely recataloged from either USNM 64 or 65, neither of which are currently in the collection, nor were they listed in Yarrow (1883 [1882]) . Cochran (1961:233) listed only USNM 69, 71, 72, and 7890 as syntypes.

***Platythyra flavescens* Agassiz, 1857**

[= *Kinosternon flavescens* (Agassiz, 1857); *fide*, Stejneger and Barbour, 1917:111, Seidel, 1978:216.1]

Agassiz, 1857, *Contrib. Nat. Hist. U.S. America (Testudinata)*, p. 430, pl. 5, figs. 12–15.

Lectotype: USNM 50 (alcoholic adult male, CL 100 mm), Rio Blanco, near San Antonio, Texas, collected by Dr. Caleb B. Kennerly, date unknown, cataloged 14 Feb 1856. Designated lectotype for the taxon by Iverson (1978b:478).

Paralectotypes: USNM 61 (alcoholic, now MCZ 1918), Lower Rio Grande, Texas, collected by Arthur Schott, date unknown, cataloged 14 Feb 1856; USNM 83 (alcoholic, now MCZ 1919), Red River, Arkansas (see “Remarks”), collected by Capt. Randolph B. Marcy, date unknown, cataloged 14 Feb 1856; USNM 86 (dry, lost), between San Antonio and El Paso, collected by J. H. Clark, date unknown, cataloged 14 Feb 1856; USNM 7892 (= USNM 68) (alcoholic adult male, CL 105 mm), Camp Yuma, California (see “Remarks”), collected by R. O. Abbott, date unknown, cataloged 14 Feb 1856 as USNM 68; USNM 131823 (originally USNM 51, then USNM 7867, now USNM 131823, see “Remarks”) (alcoholic adult female, CL 90 mm), Rio Blanco, Texas, collected by Dr. Caleb B. Kennerly, date unknown, cataloged 14 Feb 1856 as USNM 51.

Type Locality: “Texas, near San Antonio, and upon the Lower Rio Grande . . . on the Red River, Arkansas . . . at Camp Yuma, on the Gila River.” Mistakenly restricted to “Waco, McLennan County, Texas” by Smith and Taylor (1950b:24). Restricted to “the Rio Blanco, near San Antonio, Texas” by the designation of USNM 50 as the lectotype by Iverson (1978b:478).

Other Type Material: Paralectotypes: MCZ 1918 (originally USNM 61); MCZ 1919 (originally USNM 83, see “Remarks”).

Etymology: The term *flavescens* is from the Latin *flavesco*, yellow or golden, and refers to the yellowish green color.

Remarks: In a letter from Agassiz to Baird dated 23 Mar 1856 (Herber 1963:126), the specimens listed as being “the new species from Texas” were “No. 50, 51, 61 and 83.” In addition, in a letter acknowledging receipt of specimens from Baird (Herber 1963:128), Agassiz indicated number 86 was the same new species “as No. 50, 51, 61, 83.” Presumably because the catalog record remarks that USNM 7892 is “Ag type,” Cochran (1961) listed this specimen (formerly USNM 68) from Gila River, Camp Yuma (Yuma County), Arizona as a syntype of *P. flavescens*. The locality in the catalog record for USNM 68 is actually “Camp Yuma, Cal.” (see Frazer, 1972, for discussion of the locality of Camp Yuma); however, the information Baird provided to Agassiz for USNM 68 was “Camp Yuma (Gila River)” (Herber, 1963:128). In the correspondence between Agassiz and Baird (Herber, 1963:126–128), USNM 68 is listed as a young *Kinosternon sonoriense*, along with USNM numbers 63, 66, and 67. In his designation of a lectotype for *P. flavescens*, Iverson (1978b) questioned the locality for USNM 7892 (= USNM 68) and concluded that the specimen was not the nominate subspecies but actually *Kinosternon flavescens stejnegeri* (= *K. arizonense*). Our review and interpretation of the correspondence between Agassiz and Baird (Herber, 1963) leads us to believe that Agassiz mistakenly included Camp Yuma in the type locality of *Platythyra flavescens* because he used the locality for USNM 68 (“*Kinosternon sonoriense*”), instead of the locality for USNM 86 (“*Kinosternon* nov. spec.”), “between S. Antonio and El Paso.” If our interpretation is correct, USNM 7892 (formerly USNM 68) should not be considered a paralectotype of *Platythyra flavescens*. It is probable that USNM 51 is the same specimen as USNM 7867 (= USNM 131823). There is no specimen USNM 51 in the current collection, and it was probably recataloged as USNM 7867 when it was returned from the MCZ in 1872. Subsequently, USNM 7867 was sent to Wesleyan University and cataloged as WU 185, but was recataloged USNM 131823 upon its return to the Smithsonian in 1952. The original locality for USNM 83 (= MCZ 1919) in the catalog record is “Red River, Ark,” which is the same locality Baird gave Agassiz in a letter dated 20 Feb 1856 (Herber, 1963). Subsequently, “Rio Grande,” “MCZ label,” was added to the catalog record after “Red River, Ark.” Although its locality is listed as Arkansas, USNM 83 was most likely collected in what is now Oklahoma as part of the Marcy Expedition, which was searching for the

headwaters of the Red River (Marcy, 1853). The expedition route was primarily in Oklahoma and Texas and did not include present-day Arkansas.

#### FAMILY PELOMEDUSIDAE

##### ***Pelusios subniger parietalis* Bour, 1983**

[= *Pelusios subniger parietalis* Bour, 1983]

Bour, 1983, *Bull. Mus. Natl. Hist. Nat., Paris* (Series 4, Section A), 5(1):359, fig. 3E,F; pls. 5, 6.

Holotype: USNM 19802 (alcoholic adult female, CL “138.5 mm”), collected by William L. Abbott, May 1890.

Type Locality: “La Digue Island, Seychelles” [Granitic Seychelles].

Paratypes: USNM 10989 (formerly MNHN 25) (alcoholic female, CL 157 mm), Seychelles (no further locality data), collector and date unknown, cataloged 28 Jul 1881; USNM 19803 (alcoholic female, CL 119 mm), locality and collection data as for holotype; USNM 19804 (alcoholic female, CL 107 mm), locality and collection data as for holotype; USNM 20954 (formerly USNM Osteo 29349) (dry specimen [partly rotted and desiccated], sex unknown, CL 154 mm), Gloriosa Island, Mozambique Channel Islands, collected by William L. Abbott, date unknown, originally cataloged on 15 Jul 1892.

Other Type Material: Paratypes: MNHN 5300, BMNH 1907.10.15.3, BMNH 1907.10.15.4, MCZ 4487, MCZ 45511, TMP 49339, ZIN 5949, ZMB 8675.

Etymology: The name *parietalis* refers to the cephalic parietal scales, which are subdivided into several smaller scales.

#### FAMILY PLATYSTERNIDAE

##### ***Platysternon megacephalum shiui* Ernst and McCord, 1987**

[= *Platysternon megacephalum shiui* Ernst and McCord, 1987]

Ernst and McCord, 1987, *Proc. Biol. Soc. Washington* 100(3):626, fig. 2.

Holotype: USNM 266160 (alcoholic adult male, CL 143.0 mm), purchased from locals by “Oscar Shiu, Aug 1986.”

Type Locality: “Vicinity of Langson, Langson Province, Vietnam (26°50'N, 106°45'E)” (see “Remarks”).

Paratype: USNM 266161 (alcoholic adult male, CL 143.4 mm), same collection data as holotype.

Etymology: The name *shiui* is a patronym for Oscar Shiu, who purchased the type series.

Remarks: The type locality is suspect; the type series was acquired by a pet trade dealer. The latitude and longitude provided are incorrect for the stated locality.

#### FAMILY TESTUDINIDAE

##### ***Geochelone donosobarrosi* Freiberg, 1973**

[= *Chelonoidis chilensis* (Gray, 1870); *fide*, Wermuth and Mertens, 1977:78, Buskirk, 1993:248, Le et al., 2006:528].

Freiberg, 1973, *Bol. Soc. Biol. Concepcion* 46:83, 1 unnumbered fig.

Holotype: USNM 192961 (alcoholic adult male, CL “230 mm”), collected by Samuel Narosky, 22 Apr 1971.

Type Locality: “San Antonio, Río Negro” [San Antonio Oeste, Río Negro Province, Argentina].

Paratype: USNM 192962 (alcoholic adult female, CL 171 mm), Colonia 25 de Mayo, cerca Río Colorado, La Pampa, Argentina; collected by Carlos A. Arenzo, 15 May 1971.

Other Type Material: Paratypes: ILPLA 5501, MACN 26048 (see “Remarks”).

Etymology: The name *donosobarrosi* is a patronym honoring Dr. Roberto Donoso-Barros of the Universidad de Concepcion, Chile.

Remarks: Freiberg (1973:83) also referenced a paratype at the IINM without catalog number as “IINM General Acha, La Pampa. Reig collector.” The IINM collections were subsequently transferred to the Museo Argentino de Ciencias Naturales, Buenos Aires, Argentina (*in Litt.*, Esteban Lavilla to R. P. Reynolds, 23 May 2006), but we have been unable to determine if this specimen was deposited at the MACN.

##### ***Geochelone petersi* Freiberg, 1973**

[= *Chelonoidis chilensis* (Gray, 1870); *fide*, Wermuth and Mertens, 1977:78, Le et al., 2006:528, Fritz and Havaš, 2006:126]

Freiberg, 1973, *Bol. Soc. Biol. Concepcion* 46:86, 1 unnumbered fig.

Holotype: USNM 192959 (alcoholic adult male, CL “156 mm”), collected by Jose I. Marcos, 5 May 1971.

Type Locality: “Kishka, La Banda, Santiago del Estero” [Argentina].

Paratype: USNM 192960 (alcoholic adult female, CL 171 mm), same locality and collection data as holotype, 10 May 1971.

Other Type Material: Paratype: ILPA 5502.

Etymology: The name *petersi* is a patronym honoring the late Smithsonian herpetologist Dr. James A. Peters.

***Gopherus flavomarginatus* Legler, 1959**[= *Gopherus flavomarginatus* Legler, 1959]Legler, 1959, *Univ. Kansas Publ. Mus. Nat. Hist.* 11(5): 337, fig. 1, pls. 7, 8.

Holotype: USNM 61253 (stuffed adult, sex unknown, with disassociated skull, CL “222 mm”), collected by Dr. August Busck, date unknown, cataloged 7 Dec 1918 (see “Remarks”).

Type Locality: “30 to 40 miles from Lerdo, Durango, Mexico.”

Paratypes: USNM 60976 (stuffed adult of unknown sex with skull separate, CL “246 mm”), Durango, collected by Dr. Elswood Chaffee, May 1918; USNM 61254 (stuffed adult of unknown sex, CL “371 mm”), same locality and collection data as for the holotype (see “Remarks”).

Other Type Material: Paratypes: KU 39415, UIMNH 42953–54.

Etymology: The name *flavomarginatus* is from the Latin *flavos*, yellow, and *marginis*, border, referring to the pale lateral rims of the carapace.

Remarks: The USNM catalog records for the holotype and paratype 61254 have Dr. August Busck as the collector and donor, but Legler (1959:337) states that these specimens were obtained by Dr. Elswood Chaffee in 1918. He also gives the locality of paratype USNM 60976 as “Lerdo, Durango,” but only “Durango, Mex.” is recorded in the catalog.

***Testudo gigantea* Schweigger, 1812**[= *Aldabrachelys gigantea* (Schweigger, 1812); *fide*, Lovelidge and Williams, 1957:225, Arnold, 1979:138, Frazier, 2006:278]Schweigger, 1812, *Königsberger Archiv. Naturwiss. Math.* 1:327, 362–363.

Neotype: USNM 269962 (dry complete skeleton with skin fragments, adult male, CL “82.4 cm,” Frazier, 2006), on E side of Dune Patates, Grande Terre, Aldabra Atoll, Aldabra Islands, salvaged by John G. Frazier, 14 Mar 1985.

Type Locality: “Dune Patates, South Island, Aldabra Atoll, Republic of Seychelles.”

Etymology: The name *gigantea* is from the Greek *gigas*, meaning giant or huge, and refers to the large size of this tortoise.Remarks: Neotype designated by Frazier (2006:278). Subsequently, however, Bour (2006:19) claimed to have rediscovered the holotype of *Testudo gigantea*.***Testudo graeca cyrenaica* Pieh and Perälä, 2002**[= *Testudo graeca cyrenaica* Pieh and Perälä, 2002]Pieh and Perälä, 2002, *Herpetozoa* 15(1/2):8, color figs. 1–5.

Paratypes: USNM 139091 (alcoholic adult male, CL 137 mm), 12 km W of El Marj (= Barsee), Cyrenaica, Libya, collected by Henry W. Setzer, 12 Nov 1955; USNM 140247 (alcoholic adult female, CL 184 mm), 10 km SW of El Faidia, Cyrenaica, Libya, collected by Henry W. Setzer, 12 Nov 1955; USNM 142155 (alcoholic adult male, CL 160 mm), locality and collector as for USNM 139091, 14 Nov 1955.

Type Locality: “Derna 32°46'N, 22°39'E (= Darnah, Cyrenaica Ostlibyen)” [Cyrenaican Peninsula (NE Libya)].

Other Type Material: Holotype: MTKD 31880. Paratypes: MTKD 31879, 34852–53; MZUF 17264; SMF 36127; and ZSM 109/1983.

Etymology: The name *cyrenaica* refers to the Cyrenaica region of northeastern Libya.***Testudo graeca lamberti* Pieh and Perälä, 2004**[= *Testudo graeca lamberti* Pieh and Perälä, 2004]Pieh and Perälä, 2004, *Herpetozoa* 17(1/2):33, figs. 8–9.

Paratypes: USNM 196494 (alcoholic adult male, CL “159 mm”), 20 km SE of Tetouan, Larache Province, Morocco (35°02'N, 06°03'W), collected by Lynn W. Robbins and Michael G. Hearst, 11 May 1970; USNM 220760 (alcoholic adult female, CL “182 mm”), collection data as for USNM 196494 (see “Remarks”).

Type Locality: “22 km nördlich von Tetuan (ja nach Schreibweise Tetouan; Tétuan 35°34'N, 5°22'W)” (= 22 km N of Tetuan, Tetouan Province, Morocco).

Other Type Material: Holotype: BMNH 1974.661. Paratypes: EBD 7432–33, 7435–39, 7441, 16328.

Etymology: The name *lamberti* is a patronym for Michael R. K. Lambert, the British testudinologist who donated the holotype.

Remarks: USNM 220760 was recataloged from USNM 196494 (originally lot cataloged as two specimens) on 27 May 1981.

***Testudo kleinmanni* Lortet, 1883**[= *Testudo kleinmanni* Lortet, 1883]Lortet, 1883, *Arch. Mus. Hist. Nat. Lyon* 3:188.

Paralectotype: USNM 10979 (formerly MNHN 21) (alcoholic adult female, CL 108 mm); Egypt; exact locality, collector, and date unknown; cataloged 29 Jul 1881.

Type Locality: “Dans les sables de la basse Égypte, surtout dans les environs d’Alexandrie” [vicinity of Alexandria, Egypt].

Other Type Material: Lectotype: MG 42000414 (see “Remarks”). Paralectotypes: BMNH 1947.3.4.35

(see “Remarks”), MCZ 5081 (see “Remarks”), MG 42000413, 42006110, 42006125, 42006132, 42006138; MNHN DC 183, 1878-602, 1878-603 (lost), 1987-971, 1876-416, 1992-197, 9462.

**Etymology:** The name *kleinmanni* is a patronym honoring Mons. Kleinmann, who apparently collected the specimens described by Lortet.

**Remarks:** Lortet (1883:188–189) did not list the syntypes in the original description, so the total number and their identities remain uncertain. The present lectotype, MG 42000414, was designated by Perälä (2001:579). Earlier, Mertens (1967:52) designated SMF 7810 as a lectotype without description or discussion; however, this specimen is not from the original syntopic series (Perälä 2001:579) and thus is ineligible for designation as the lectotype. Perälä (2001:582) mentioned MNHN 7838 (1879-774), but this specimen was collected by “Letourneux” and is also not of the syntopic series (*In Litt.*, Roger Bour to C. H. Ernst, 3 Jun 2005). Paralectotypes BMNH 1947.3.4.35 and MCZ 5081 are also syntypes of *Testudo leithii* Günther, 1869:502. Boulenger (1889:176) referred to an alcoholic female specimen (BMNH 1888.4.24.2) from Alexandria, Egypt, sent from the MG by Lortet as “typical of *T. kleinmanni*”; however, no mention of type status appears in the BMNH register (*In Litt.*, Colin McCarthy to C. H. Ernst, 6 Feb 2004). It is possible that BMNH 1888.4.24.2 is a paralectotype of *T. kleinmanni*, but there is no proof.

### ***Testudo mauritanica* Duméril and Bibron, 1835**

[= *Testudo graeca* Linnaeus, 1758; *fide*, Auffenberg, 1974:200]

Duméril and Bibron, 1835, *Erpétologie Générale . . .*, p. 44. Syntype: USNM 10980 (formerly MNHN 22) (alcoholic adult male, CL 110 mm), Algeria; exact locality, collector, and date unknown; cataloged 29 Jul 1881.

**Type Locality:** None provided, but stated to be common in area of “Alger”; restricted to “Algier” by Mertens and Wermuth, 1955:378.

**Etymology:** The name *mauritanica* refers to ancient Mauritania, North Africa.

**Remarks:** USNM 10980 is a possible syntype of *Testudo mauritanica*; type specimens were not identified in the original description (Duméril and Bibron, 1835:44), but the specimen was present in the Paris Museum at the time of the description, and the locality is in agreement.

### ***Testudo perses* Perälä, 2002**

[= *Testudo graeca buxtoni* Perälä, 2002; *fide*, Fritz et al., 2007:117]

Perälä, 2002, *Chelonii* 3:81, figs. 2–6.

**Paratypes:** USNM 154515 (alcoholic subadult, CL 109 mm), 42 km W of Kermanshah, Kermanshah, Iran, collected by Robert G. Tuck Jr., 28 Jun 1964; USNM 158528 (alcoholic subadult, CL 112 mm), 32 km WSW of Sanandaj, Kurdistan, Iran, collected by Robert G. Tuck Jr., 20 May 1965.

**Type Locality:** “Vicinity of Lalabad village, some 25 mi NW of Kermānshāh, Kermānshāhān Province, W Iran.”

**Other Type Material:** Holotype: FMNH 130820. Paratypes: BMNH 76.11.23.2; FMNH 73484, 73488, 74504, 74950, 141621, 141631; MCZ 53817, 53824–25, 53834, 53836; MTDK 31816; NMW 32897, 32898:2.

**Etymology:** “The specific name *perses* is a Latin masculine noun for a Persian, pertaining to the main distribution and the masculine or robust overall appearance of the new species.”

### ***Xerobates agassizii* Cooper, 1863**

[= *Gopherus agassizii* (Cooper, 1863); *fide*, Stejneger, 1893:161; Auffenberg and Franz, 1978a:1]

Cooper, 1863, *Proc. California Acad. Nat. Sci.* 2:120.

**Syntype:** USNM 7888 (alcoholic juvenile, CL 92 mm), Soda or Solado Valley (see “Remarks”), California; collected by James G. Cooper, Mar 1861.

**Type Locality:** “Mountains of California, near Fort Mojave.”

**Other Type Material:** Two other syntypes were originally in the collection of the California State Geological Survey and later deposited in the California Academy of Sciences. Unfortunately both specimens were destroyed in the earthquake and consequent fire at the CAS in 1906 (*In Litt.*, Michelle Koo to R. P. Reynolds, 29 Jun 2005). Even though it is not possible to verify now, catalog records indicate that CAS 7141 and CAS 7142 (*In Litt.*, Michelle Koo to R. P. Reynolds, 29 Jun 2005) were the likely syntypes of *Xerobates agassizi* from the California State Geological Survey that were destroyed in 1906.

**Etymology:** The name *agassizii* is a patronym honoring Harvard University, Museum of Comparative Zoology, zoologist Louis Agassiz.

**Remarks:** The original parchment label attached to USNM 7888 lists the locality as Soda Valley, but the original catalog record has Solado Valley. Cochran (1961:236) included “Utah Basin, Mojave River” as part of the stated locality for USNM 7888. This information is not in the catalog record, and we have been unable to determine why she included it in the locality for this specimen.

***Xerobates berlandieri* Agassiz, 1857**

[= *Gopherus berlandieri* (Agassiz, 1857); *fide*, Stejneger, 1893:161]

Agassiz, 1857, *Contrib. Nat. Hist. U.S. America (Testudinata)*, p. 447, pl. 3: figs. 17–19.

Syntypes: USNM 59 (alcoholic, lost), Lower Rio Grande, Texas, collected by Arthur Schott, date unknown, cataloged 14 Feb 1856 (see “Remarks”); USNM 60(2) (alcoholic juvenile, CL 40 mm; and alcoholic juvenile, CL 71 mm), collector unknown, date unknown, cataloged Feb 1856; USNM 75 (alcoholic, lost), Nuevo Leon, Mexico, collected by Lt. Darius N. Couch, 1853; USNM 222511 (originally USNM 85, then USNM Osteo 8601, now USNM 222511, see “Remarks”) (dry skull, hyoid, and shell with legs attached, CL 148 mm) Monterey, Nuevo Leon, Mexico, collected by Lt. Darius N. Couch, 1853, recataloged Sept 1981; USNM 222512 (originally USNM Osteo 1528, then USNM Osteo 29610, now USNM 222512, see “Remarks”) (dry partial skull, CBL 47 mm), Matamoros, Tamaulipas, Mexico, collected by Jean Louis Berlandier, date unknown, originally cataloged 30 Jan 1855 as USNM Osteo 1528, recataloged Sept 1981.

Type Locality: “Limited to southern Texas and Mexico;” stated as “Brownsville, Cameron County, Texas,” by Schmidt (1953:105), and restricted to “Brownsville, Texas” by Cochran (1961:236).

Etymology: The name *berlandieri* is a patronym honoring Jean Louis Berlandier, an early French naturalist who worked extensively in northern Mexico.

Remarks: Cochran (1961:236) and Auffenberg and Franz (1978b:213.1) both listed only USNM 60 (2 specimens) as syntypes. However, in a letter from Agassiz to Baird dated 23 Mar 1856 (Herber, 1963:127–128), the following specimens were listed as being the *Testudo* nov. spec.: numbers 59, 60, 75, 85 and osteological specimen O 1536. The number for the latter specimen is actually USNM Osteo 1528 as listed by Baird in the original invoice of specimens loaned to Agassiz, dated 20 Feb 1856 (Herber, 1963:122). The number USNM Osteo 1536, which was incorrectly listed by Agassiz, applies to a *Trachemys scripta*. USNM Osteo 1528 was later recataloged as USNM 222512. We believe that USNM 85, originally entered into the catalog record as a dry specimen, was cataloged into the osteological collection as USNM Osteo 8601 on 8 Apr 1869 and then subsequently recataloged as USNM 222511. There is currently no specimen USNM 85 in the collection. The locality data for USNM Osteo 8601 (= USNM 222511) matches the original data entered for USNM 85. At

present, USNM 59 is not in the collection under that number but it is probably one of the two specimens currently included in USNM 60. The original entry for USNM 60 did not indicate more than one specimen, nor was more than one specimen indicated for USNM 60 in the 20 Feb 1856 invoice of specimens sent by Baird to Agassiz (Herber, 1963:121). It is probable that USNM 59 and USNM 60 were initially stored in the same jar and at some point USNM 59 was retagged USNM 60 when the original numbers were obliterated and new catalog tags were applied. Specimens in the collection were regularly retagged when the original tags became illegible.

**FAMILY TRIONYCHIDAE*****Amyda spinifera hartwegi* Conant and Goin, 1948**

[= *Apalone spinifera hartwegi* (Conant and Goin, 1948); *fide*, Meylan, 1987:92]

Conant and Goin, 1948, *Occas. Pap. Mus. Zool. Univ. Michigan* 510:1, pl. I.

Paratypes: USNM 55683 (alcoholic male, CL 158 mm), Greenwood County, Kansas, collected by Julius Hurter, Jul–Aug 1912; USNM 91022 (alcoholic juvenile, CL 57 mm), 5 miles northeast of Winfield, Cowley County, Kansas, collected by Luther Hoyle, 28 May 1933; USNM 95301 (alcoholic male, CL 130 mm), 11 miles southeast of Winfield, Cowley County, Kansas, collected by Charles E. Burt, 31 Aug 1934; USNM 100529 (alcoholic male, CL 167 mm), Winfield, Cowley County, Kansas, collected by Charles E. Burt, 12 Aug 1935; USNM 100530 (alcoholic female, CL 109 mm), Winfield, Cowley County, Kansas, collected by Charles E. Burt, 12 Aug 1935; USNM 123446 (alcoholic male, CL 147 mm), Kansas River, Topeka, Shawnee County, Kansas, collected by Charles E. Burt, 26 Jun 1945.

Type Locality: “Wichita, Sedgwick County, Kansas.”

Other Type Material: Holotype: UMMZ 95365. Paratypes: KU 2990, 3289, 3758, 3769, 15934; MCZ 5758; UMMZ 66939–41, 69294, 75963, 95363–64.

Etymology: The name *hartwegi* is a patronym honoring Dr. Norman E. Hartweg of the Museum of Zoology, University of Michigan.

***Aspidonectes asper* Agassiz, 1857**

[= *Apalone spinifera aspera* (Agassiz, 1857); *fide*, Stejneger and Barbour, 1939:172, Meylan, 1987:92]

Agassiz, 1857, *Contrib. Nat. Hist. U.S. America (Testudinata)*, p. 405.

Paralectotypes: USNM 22676 (formerly USNM Osteo 12349) (partial dry adult carapace, CL “14.9 cm” [Webb, 1960:3]), Lake Concordia, Concordia Parish, Louisiana, collected by Professor Benjamin L. C. Wailes, 1851, originally cataloged 16 Mar 1875, recataloged 18 Feb 1896; USNM 248989 (formerly USNM Osteo 1084) (dry cranium without mandible, CBL “16 mm” [Stejneger, 1944:63]), Washington, Adams County, Mississippi, collected by Professor Benjamin L. C. Wailes, date unknown, originally cataloged 21 Mar 1853, recataloged 20 Mar 1985; USNM 248990 (formerly USNM Osteo 1086) (dry carapace with disarticulated plastron and skull, sex unknown, CL “19.8 cm” [Webb, 1960:3]), locality, collector, and catalog and recatalog data as for USNM 248989 (see “Remarks”).

Type Locality: None stated. Schmidt (1953:109) listed it as “Lake Concordia, Louisiana,” but Webb (1960:7) restricted it to “the Pearl River at Columbus, Marion County, Mississippi.”

Other Type Material: Lectotype: MCZ 1597; designated by Webb (1960:6) (see “Remarks”). Paralectotypes: MCZ 1622, 37173, 46615, 46621, 46633.

Etymology: The Latin *asper*, rough or harsh, refers to the tubercles on the posterior of the carapace of some females.

Remarks: Agassiz did not give the museum numbers for the specimens that formed the syntopic series of *Aspidonectes asper*, so the exact number of specimens in the series is unknown. Agassiz (1857:405) stated: “I have for a long time known only an imperfect skeleton of this species, belonging to the Smithsonian Institution, and prepared from a specimen forwarded by Professor B. L. C. Wailes, of Washington, Mississippi. Afterwards I obtained through the agency of Dr. L. Harper, a stuffed specimen belonging to the Museum of the University of Oxford, that had been collected during the geological survey of Mississippi, under the superintendence of Professor Wailes. Lately, I have received a number of living specimens through the kindness of Mr. Winthrop Sargent of Natchez.” The University of Oxford later became the University of Mississippi, but its museum has long been disbanded. Also, the location “Washington, Mississippi,” given as the collection site of some National Museum specimens, probably refers only to Wailes’s home, from which he sent the specimens to the museum. Smithsonian specimens USNM 248989 and USNM 248990 are probably syntypes, as they were collected by Wailes and sent to the Smithsonian before Agassiz described the

taxon. Agassiz stated that he saw only one “imperfect skeleton” sent by the Smithsonian Institution, a description that fits each of USNM specimens 22676, 248989, and 249090. Stejneger (1944:57) noted that Wailes had sent “2 shells & crania . . . that were entered in the register of the osteological collection of the Smithsonian Institution under the generic name *Trionyx* only by Professor Baird on March 21, 1853 as numbers 1084 and 1086, received from B. L. C. Wailes, Washington, Miss.” Stejneger (1944:64) considered USNM Osteo 1084, USNM Osteo 1086, and USNM Osteo 12349, which minimally represented two individuals, part of the syntopic series. Webb (1960:3–4) listed all three of the USNM specimens as syntypes. However, Cochran (1961:227) included only USNM 22676 (USNM Osteo 12349) and USNM 248990 (USNM Osteo 1086) as syntypes.

### ***Aspidonectes emoryi* Agassiz, 1857**

[= *Apalone spinifera emoryi* (Agassiz, 1857); *fide*, Schwartz, 1956b:11, and Meylan, 1987:92]

Agassiz, 1857, *Contrib. Nat. Hist. U.S. America (Testudinata)*, p. 407, pl. 6: figs. 4–5.

Lectotype: USNM 7855 (alcoholic juvenile, CL 79 mm), Brownsville, Cameron County, Texas, collected by Caleb B. R. Kennerly during the Mexican Boundary Survey under the command of Maj. William H. Emory, date unknown, cataloged in 1872. Designated the lectotype for the syntopic series by Webb (1962:510).

Type Locality: “the lower Rio Grande of Texas, near Brownsville . . . Williamson County, Texas, in a stream emptying into the Rio Brazos.”

Paralectotypes: USNM 7637 (alcoholic juvenile, CL 44 mm), Rio Bravo [= Rio Grande], Texas, collected by Arthur C. V. Schott, date unknown, cataloged 1872; USNM 7638 (alcoholic juvenile, CL 43 mm), locality and collection data as USNM 7637, cataloged 1872; USNM 7639 (2 eggs, lost), same collection and locality data as USNM 7637, cataloged 1872; USNM 7642 (alcoholic male, CL 129 mm), Brownsville, Cameron County, Texas, collector and date unknown, cataloged 1872; USNM 7644 (alcoholic juvenile, CL 46 mm), locality and collection data as for USNM 7642, cataloged 1872; USNM 7856 (alcoholic, exchanged), Brownsville, Cameron County, Texas, collected by Caleb B. R. Kennerly, date unknown, cataloged 1872 (see “Remarks”); USNM 7857 (originally USNM 62 [= Agassiz No. 74], now BMNH 1873.8.13.6 see “Remarks”) (alcoholic, exchanged), Lower Rio Grande, Texas, collected by Caleb B. R. Kennerly, date un-

known, originally cataloged 14 Feb 1856; USNM 7858 (originally USNM 94 [= Agassiz No. 76]) (alcoholic, lost), Texas, collected by Caleb B. R. Kennerly, date unknown, originally cataloged 14 Feb 1856; USNM 131841 (originally USNM 7643) (alcoholic juvenile, CL 94 mm), Brownsville, Cameron County, Texas, collector unknown, cataloged 1872 (see “Remarks”); USNM Osteo 2157 (dry skeleton, lost), Rio Grande [Texas?], collector and date unknown, cataloged 18 Feb 1856. All above paralectotypes were collected during the Mexican Boundary Survey (see “Remarks”).

Other Type Material: Paralectotypes: BMNH 1873.8.13.6 (see “Remarks”); MCZ 1909–10(4), 1626(2).

Etymology: The name *emoryi* is a patronym honoring Maj. William Hemsley Emory, U.S. Army Corps of Topographical Engineers, commander of the Mexican Boundary Survey during which the type series was collected.

Remarks: Agassiz (1857:407) did not indicate the number of specimens of *Aspidonectes emoryi* in the syntopic series but stated that he had “received from the Smithsonian Institution all specimens of Turtles collected in Texas during the operations of the Boundary Survey, under the command of Colonel Emory, among which were young and adult specimens of this species, collected in the lower Rio Grande of Texas, near Brownsville.” This statement indicates that all of the Smithsonian series of *Aspidonectes emoryi* collected during the Boundary Survey should be considered syntypes. USNM Osteo 2157 was collected during the Mexican Boundary Survey under the command of Col. J. D. Graham. In a letter to Baird dated 23 Mar 1856 (Herber, 1963:128), Agassiz indicated this specimen was a new species of *Trionyx*, the same as USNM 62. BMNH 1873.8.13.6 was originally USNM 7857 (= USNM 62) collected during the Mexican Boundary Survey by Caleb B. R. Kennerly. The USNM catalog indicates that it was exchanged to “Chicago”; however, the specimen was cataloged into the BMNH collection in London. USNM 7856 was exchanged to “Chicago.” USNM 7643 was exchanged to Wesleyan University, and cataloged there as either number WU 60, WU 176, or WU 177. It was returned to the USNM and recataloged as number 131841 on 3 Jan 1952. Consequently, Cochran (1961:227) did not list these three specimens as syntypes.

### ***Trionyx muticus calvatus* Webb, 1959**

[= *Apalone mutica calvata* (Webb, 1959); *fide*, Meylan, 1987:92]

Webb, 1959, *Univ. Kansas Publ. Mus. Nat. Hist.* 11(9):519, pls. 13–14.

Paratype: USNM 7655 (alcoholic juvenile, CL 59 mm), Monticello, Lawrence County, Mississippi, collected by Helen Teunison, date unknown, cataloged 1872 (see “Remarks”).

Type Locality: “Pearl River, Roses Bluff, 14 miles northeast Jackson, Rankin County, Mississippi.”

Other Type Material: Holotype: UIMNH 31071. Paratypes: KU 47117–19; TU 13473, 16682, 17301, 17302.1(2), 17303.4 (5), 17304.3(4), 17305, 17306.

Etymology: The name *calvatus* is derived from the Latin *calvus*, smooth or bald, and refers to the skin surface of the carapace.

Remarks: A metal tag and an early paper tag attached to USNM 7655 were both mistakenly labeled 7652; USNM 7652 is the catalog number of two eggs of “*Trionyx* [= *Apalone*] *ferox*.” However, locality and collector information on an original parchment label attached to the specimen coincides with the catalog record for USNM 7655. A new catalog tag labeled USNM 7655 has been affixed to this specimen.

### ***Trionyx spinifer guadalupensis* Webb, 1962**

[= *Apalone spinifera guadalupensis* (Webb, 1962); *fide*, Meylan, 1987:92]

Webb, 1962, *Univ. Kansas Publ. Mus. Nat. Hist.* 13(10): 517, figs. 5g, 6e, 7c, 8d, pls. 41–42.

Paratypes: USNM 78515 (dry mummified hatchling, CL 41 mm), USNM 78516 (dry mummified hatchling, CL 30 mm), both from Coletto Creek, Victoria County, Texas, collected by Joseph D. Mitchell, Oct 1905. Measurements for both specimens are undoubtedly underrepresentations because both specimens are deformed by desiccation.

Type Locality: “15 miles northeast Tilden, McMullen County, Texas.”

Other Type Material: Holotype: UMMZ 89926. Paratypes: ANSP 16717; UMMZ 89915–25, 89927, 92752; TU 10143–45, 10147–59, 10160–65, 10176, 10833.

Etymology: The name *guadalupensis* refers to the Guadalupe River in Texas.



# References

---

- Agassiz, L. 1857. *Contributions to the Natural History of the United States of America*. Volume 1, Part 2: *North American Testudinata*. Boston: Little, Brown.
- Arnold, E. N. 1979. Indian Ocean Giant Tortoises: Their Systematics and Island Adaptations. *Philosophical Transactions of the Royal Society of London B*, 286:127–145.
- Auffenberg, W. 1974. Checklist of Fossil Land Tortoises (Testudinidae). *Bulletin of the Florida State Museum, Biological Sciences*, 18(3):121–251.
- Auffenberg, W., and R. Franz. 1978a. *Gopherus agassizii*. *Catalogue of American Amphibians and Reptiles*, 212:1–2.
- . 1978b. *Gopherus berlandieri*. *Catalogue of American Amphibians and Reptiles*, 213:1–2.
- Ayarzagüena, J. 1984. Variaciones en la dieta de *Caiman sclerops*. La relación entre morfología bucal y dieta. *Memoria de la Sociedad de Ciencias Naturales La Salle, Caracas*, 44(122):123–140.
- Babcock, H. L. 1933(1932). The American Snapping Turtles of the Genus *Chelydra* in the Collection of the Museum of Comparative Zoology, Cambridge, Mass., U.S.A. *Proceedings of the Zoological Society of London*, 4:873–874.
- Baird, S. F., and C. Girard. 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 Academy of Natural Sciences of Philadelphia*, 6(5):174–177.
- Barbour, T. 1935. A New *Pseudemys* from Cat Island, Bahamas. *Occasional Papers of the Boston Society of Natural History*, 8:205–206.
- Barbour, T., and A. F. Carr, Jr. 1940. Antillean Terrapins. *Memoirs of the Museum of Comparative Zoology at Harvard College*, 54(5):381–415.
- Baur, G. 1890. Two New Species of Tortoises from the South. *Science (New York)*, 16(405):262–263.
- . 1891. American Box-tortoises. *Science (New York)*, 17(426):190–191.
- . 1893a. Notes on the Classification and Taxonomy of the Testudinata. *Proceedings of the American Philosophical Society*, 31(141):210–225.
- . 1893b. Two New Species of North American Testudinata. *American Naturalist*, 27(319):675–677.
- 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. diss., University of Utah, Salt Lake City.

- . 1979. Variation and Systematics in the *Kinosternon scorpioides* and *K. leucostomum* Complexes (Reptilia: Testudines: Kinosternidae) of Mexico and Central America. *Dissertation Abstracts International B*, 39(7):3186.
- Berry, J. F., and C. M. Berry. 1984. A Re-analysis of Geographic Variation and Systematics in the Yellow Mud Turtle, *Kinosternon flavescens* (Agassiz). *Annals of Carnegie Museum*, 53(7):185–206.
- Berry, J. F., and J. B. Iverson. 1980. *Kinosternon herrerae*. *Catalogue of American Amphibians and Reptiles*, 239:1–2.
- . 2001a. *Kinosternon leucostomum*. *Catalogue of American Amphibians and Reptiles*, 724:1–8.
- . 2001b. *Kinosternon scorpioides*. *Catalogue of American Amphibians and Reptiles*, 725:1–11.
- Bishop, S. C., and F. J. W. Schmidt. 1931. The Painted Turtles of the Genus *Chrysemys*. *Field Museum of Natural History Publication 293, Zoological Series*, 18(4):123–139.
- Blake, W. P. 1857 [1856]. “Geology of Portions of the Route.” In *United States War Department Reports of Explorations and Survey . . . [Pacific Railroad Reports]*. Volume 5, ed. R. S. Williamson, pp. 131–310. Washington, D.C.: U.S. House of Representatives, 33 Cong., 2 sess., Exec. Doc. 91.
- Bocourt, M. F. 1876. Note sur quelques reptiles de l’Isthme de Tehuantepec (Mexique) donnés par M. Sumichrast au Muséum. *Journal Zoology (Paris)*, 5(5–6):386–411.
- Boulenger, G. A. 1889. *Catalogue of the Chelonians, Rhynchocephalians, and Crocodiles in the British Museum (Natural History)*. London: Trustees of the British Museum of Natural History.
- Bour, R. 1983. Trois populations endémiques du genre *Pelusios* (Reptilia, Chelonii, Pelomedusidae) aux îles Seychelles; relations avec les espèces africaines et malagaches. *Bulletin du Muséum National d’Histoire Naturelle, Paris (Series 4, Section A)*, 5(1):343–382.
- . 2006. Identity of *Testudo gigantea* Schweigger, 1812 and Rediscovery of the Type Specimen. *Emys*, 13(4): 12–23.
- Bourret, R. 1939. Notes herpétologiques sur l’Indochine française, XVIII. Reptiles et batraciens reçus au Laboratoire des Science Naturelles de l’Université au cours de l’année 1939. Descriptions de quatre espèces et d’une variété nouvelles. *Bulletin Général de l’Instruction Publique (Hanoi)*, 1939(4):5–39.
- Brazaitis, P. 2002 [2001]. *A Guide to the Identification of the Living Species of Crocodilians*. New York: privately printed.
- Brazaitis, P., R. Madden, G. Amato, G. Rebêlo, C. Yamashita, and M. E. Watanabe. 1997. Systematics of the Caiman: Results of Morphological, Statistical, Molecular Genetics, and Species Discrimination Studies. The South American and Central American Caiman (*Caiman*) Complex. Unpublished report to the U.S. Fish and Wildlife Service, Division of Law Enforcement, 25 April 1997.
- Brimley, C. S. 1928. Two New Terrapins of the Genus *Pseudemys* from the Southern States. *Journal of the Elisha Mitchell Scientific Society*, 44(1):66–69.
- Busack, S. D., and S. Pandya. 2001. Geographic Variation in *Caiman crocodilus* and *Caiman yacare* (Crocodylia: Alligatoridae): Systematic and Legal Implications. *Herpetologica*, 57(3):294–312.
- Buskirk, J. R. 1993. Distribution, Status and Biology of the Tortoise, *Geochelone chilensis*, in Río Negro Province, Argentina. *Studies on Neotropical Fauna and Environment*, 28(4):233–249.
- Cagle, F. R. 1952. The Status of the Turtles *Graptemys pulchra* Baur and *Graptemys barbouri* Carr and Marchand, with Notes on Their Natural History. *Copeia*, 1952(4):223–234.
- . 1953a. Two New Subspecies of *Graptemys pseudogeographica*. *Occasional Papers of the Museum of Zoology University of Michigan*, 546:1–17.
- . 1953b. The Status of the Turtle *Graptemys oculifera* (Baur). *Zoologica (New York)*, 38(3):137–144.
- Carr, A. F., Jr. 1938. A New Subspecies of *Pseudemys floridana*, with Notes on the *floridana* Complex. *Copeia*, 1938(3):105–109.
- . 1940. A Contribution to the Herpetology of Florida. *University of Florida Biological Series*, 3:1–118.
- Cochran, D. M. 1941. The Herpetology of Hispaniola. *Bulletin of the United States National Museum*, 177:vii + 398 pp.
- . 1961. Type Specimens of Reptiles and Amphibians in the U.S. National Museum. *Bulletin of the United States National Museum*, 220:xv + 291 pp.
- Conant, R. 1968. Zoological Exploration in Mexico—The Route of Lieut. D. N. Couch in 1853. *American Museum Novitates*, 2350:1–14.
- Conant, R., and C. J. Goin. 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. 1863. New Californian Animals. *Proceedings of the California Academy of Natural Sciences*, 2:118–123.
- Cope, E. D. 1865. Third Contribution to the Herpetology of Tropical America. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 17(4):185–198.
- . 1868. An Examination of the Reptilia and Batrachia Obtained by the Orton Expedition to Ecuador and the Upper Amazon, with Notes on Other Species. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 20(2):96–140.
- . 1870 [1869]. Seventh Contribution to the Herpetology of Tropical America. *Proceedings of the American Philosophical Society*, 11(82):147–169.
- . 1872. Synopsis of the Species of the Chelydrinae. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 24(1):22–29.
- . 1875 [1876]. On the Batrachia and Reptilia of Costa Rica. *Journal of the Academy of Natural Sciences of Philadelphia*, 2(8):93–154.
- . 1885. A Contribution to the Herpetology of Mexico. *Proceedings of the American Philosophical Society*, 22 (120): 379–404.

- . 1887. Catalogue of Batrachians and Reptiles of Central America and Mexico. *Bulletin of the United States National Museum*, 32:1–98.
- Crombie, R. I. 1999. “Jamaica.” In *Caribbean Amphibians and Reptiles*, ed. B. I. Crother, pp. xvi–xvii, 63–92. San Diego, Calif.: Academic Press.
- Cuvier, G. 1807. Sur les différentes espèces de crocodiles vivans et sur leurs caractères distinctifs. *Annales du Muséum d’Histoire Naturelle, Paris*, 10:8–66.
- Dean, R. H., and J. W. Bickham. 1983. *Staurotypus salvini*. *Catalogue of American Amphibians and Reptiles*, 327:1–2.
- de Bruin, R. 1988. Twee nieuwe *Cuora*-soorten uit China. *Lacerta*, 47(1):5–7.
- Dixon, J. R. 1987. *Amphibians and Reptiles of Texas. With Keys, Taxonomic Synopses, Bibliography, and Distribution Maps*. College Station, Tex.: Texas A&M University Press.
- Dodd, C. K. 1990. *Caretta caretta*. *Catalogue of American Amphibians and Reptiles*, 483:1–7.
- Duellman, W. E. 1965. Amphibians and Reptiles from the Yucatan Peninsula, México. *University of Kansas Publications Museum of Natural History*, 15(12):577–614.
- Duméril, A. M. C., and G. Bibron. 1835. *Erpétologie générale ou histoire naturelle complète des reptiles*. Volume 2. Paris: Librairie Encyclopédique de Roret.
- Duméril, A. M., and A. H. A. Duméril. 1851. *Catalogue méthodique de la collection des reptiles du Muséum d’Histoire Naturelle*. Paris: Gide & Boudry.
- 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(23):593–634.
- Ernst, C. H. 1967. Integradation between the Painted Turtles *Chrysemys picta picta* and *Chrysemys picta dorsalis*. *Copeia*, 1967(1):131–136.
- . 1970. The Status of the Painted Turtle, *Chrysemys picta*, in Tennessee and Kentucky. *Journal of Herpetology*, 4(1–2):39–45.
- . 1971. *Chrysemys picta*. *Catalogue of American Amphibians and Reptiles*, 106:1–4.
- . 1980a. *Rhinoclemmys funerea*. *Catalogue of American Amphibians and Reptiles*, 263:1–2.
- . 1980b. *Rhinoclemmys annulata*. *Catalogue of American Amphibians and Reptiles*, 250:1–2.
- . 1981. *Rhinoclemmys rubida*. *Catalogue of American Amphibians and Reptiles*, 277:1–2.
- . 1984 [1983]. Geographic Variation in the Neotropical Turtle, *Platemys platycephala*. *Journal of Herpetology*, 17(4):345–355.
- . 1987. *Platemys, Platemys platycephala*. *Catalogue of American Amphibians and Reptiles*, 405:1–4.
- . 1988. *Cuora mccordi*, a New Chinese Box Turtle from Guangxi Province. *Proceedings of the Biological Society of Washington*, 101(2):466–470.
- . 1990. *Pseudemys gorzugi*. *Catalogue of American Amphibians and Reptiles*, 461:1–2.
- Ernst, C. H., and R. B. Bury. 1977. *Clemmys muhlenbergii*. *Catalogue of American Amphibians and Reptiles*, 204:1–2.
- . 1982. *Malaclemmys, M. terrapin*. *Catalogue of American Amphibians and Reptiles*, 299:1–4.
- Ernst, C. H., and J. E. Lovich. 1990. A New Species of *Cuora* (Reptilia: Testudines: Emydidae) from the Ryukyu Islands. *Proceedings of the Biological Society of Washington*, 103(1):26–34.
- Ernst, C. H., and J. F. McBrean. 1991. *Terrapene carolina*. *Catalogue of American Amphibians and Reptiles*, 512:1–13.
- Ernst, C. H., and W. P. McCord. 1987. Two New Turtles from Southeast Asia. *Proceedings of the Biological Society of Washington*, 100(3):624–628.
- Ernst, C. H., F. D. Ross, and C. A. Ross. 1999. *Crocodylus acutus*. *Catalogue of American Amphibians and Reptiles*, 700:1–17.
- Eschscholtz, J. F. 1829. *Zoologischer Atlas, enthaltend Abbildungen und Beschreibungen neuer Thierarten, während des Flottcapitains von Kotzebu zweiter Reise um die Welt, auf der Russisch-Kaiserlichen Kriegsschlupp Predpriatië in den Jahren 1823–1826*. Part 1. Berlin: G. Reimer.
- Etchberger, C. R., and J. B. Iverson. 1990. *Pseudemys texana*. *Catalogue of American Amphibians and Reptiles*, 485:1–2.
- Feuer, R. C. 1971. Integradation of the Snapping Turtles *Chelydra serpentina serpentina* (Linnaeus, 1758) and *Chelydra serpentina osceola* Stejneger, 1918. *Herpetologica*, 27(4):379–384.
- Frazer, R. W. 1972. *Forts of the West: Military Forts and Presidios and Posts Commonly Called Forts West of the Mississippi River to 1898*. Norman: University of Oklahoma Press.
- Frazier, J. 2006. A Neotype for the Aldabra Tortoise, *Testudo gigantea* Schweigger, 1812. *Herpetological Review*, 37(3):275–280.
- Freiberg, M. A. 1973. Dos nuevas tortugas terrestres de Argentina. *Boletín de la Sociedad de Biología de Concepción*, 46:81–93.
- Freytey, J., M. S. Hoogmoed, and J. Lescure. 1977. Etude taxinomique de *Rhinoclemmys punctularia punctularia* (Daudin) (Testudinata, Emydidae). *Zoologische Mededelingen Rijksmuseum van Natuurlijke Historie te Leiden*, 52(6):63–80.
- Fritz, U., D. Guicking, M. Wink, and E. Lehr. 2001. Sind *Cyclemys atripons* Iverson & McCord, 1997 und *Cyclemys pulchriata* Fritz, Gaulke & Lehr, 1997 identisch? *Sauria* (Berlin), 23(2):33–38.
- Fritz, U., and P. Havaš. 2006. *Checklist of the Chelonians of the World*. Dresden, Germany: CITES Nomenclature Committee and the German Agency for Nature Conservation.
- Fritz, U., A. K. Hunsdörfer, P. Široký, M. Auer, H. Kami, J. Lehmann, L. F. Mazanaeva, O. Türkozan, and M. Wink. 2007. Phenotypic Plasticity Leads to Incongruence between Morphology-based Taxonomy and Genetic Differentiation in Sestern Palaearctic Tortoises (*Testudo graeca* Complex; Testudines, Testudinidae). *Amphibia-Reptilia*, 28(1):97–121.

- Fritz, U., and F. J. Obst. 1997. Zum taxonomischen status von *Cuora galbinifrons serrata* Iverson & McCord, 1992 und *Pyxidea mouhotii* (Gray, 1862) (Reptilia: Testudines: Bataguridae). *Zoologische Abhandlungen Staatliches Museum für Tierkunde Dresden*, 49(14):261–279.
- Garman, S. 1891. On a Tortoise Found in Florida and Cuba, *Cinosternum baurii*. *Bulletin of the Essex Institute*, 23(7–9): 141–144.
- Gibbons, J. W., S. S. Novak, and C. H. Ernst. 1988. *Chelydra serpentina*. *Catalogue of American Amphibians and Reptiles*, 420:1–4.
- Gilmore, C. W. 1923 [1922]. A New Fossil Turtle, *Kinosternon arizonense*, from Arizona. *Proceedings of the United States National Museum*, 62(2451):1–8.
- Girard, C. 1858. *Herpetology*. Prepared under the Superintendence of S. F. Baird. United States Exploring Expedition during the years 1838, 1839, 1840, 1841, 1842, under the Command of Charles Wilkes, U.S.N. Volume 20. Philadelphia: J. P. Lippincott.
- Glass, B., and N. Hartweg. 1951. *Kinosternon murrayi*, a New Muskturtle of the *hirtipes* Group from Texas. *Copeia*, 1951(1):50–52.
- Goldman, E. A. 1951. Biological Investigations in Mexico. *Smithsonian Miscellaneous Collections*, 115:1–476.
- Gorzula, S. 1994. A Longirostrine *Caiman crocodilus* from Central Venezuela. *Crocodile Specialist Group Newsletter*, 13(3):16.
- Gray, J. E. 1831. *Synopsis Reptilium; or Short Descriptions of the Species of Reptiles*. Part 1. *Cataphracta*. Tortoises, Crocodiles and Enaliosaurians. London: Truettel Wurtz.
- . 1847. Description of a New Genus of Emydae. *Proceedings of the Zoological Society of London*, 1847(15):55–56.
- . 1849. Description of a New Species of Box Tortoise from Mexico. *Proceedings of the Zoological Society of London*, 1849(17):16–17.
- . 1856 [1855]. 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(23):197–202.
- . 1860. Description of a New Species of *Geoclemmys* from Ecuador. *Proceedings of the Zoological Society of London*, 1860(28):231–232.
- . 1862. Notice of a New Species of *Cyclemys* from the Lao Mountains, in Siam. *Annals and Magazine of Natural History* (London), ser. 3, 10(56):157.
- . 1864. Description of a New Species of *Staurotypus* (*S. salvinii*) from Guatemala. *Proceedings of the Zoological Society of London*, 1864(9):127–128.
- . 1870. Notice of a New Chilean tortoise (*Testudo chilensis*). *Annals and Magazine of Natural History* (London), ser. 4, 6(32):190.
- Günther, A. 1869. Report on Two Collections of Indian Reptiles. *Proceedings of the Zoological Society of London*, 1869:500–507.
- . 1885. “Reptilia and Batrachia.” In *Biologia Centrali-Americana*, ed. O. Salvin and F. O. Godman. Volume 20. London: R. H. Porter and Dalau.
- Hallowell, E. 1856 [1854]. Descriptions of New Reptiles from California. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 7(3):91–97.
- . 1859. “Report upon the Reptiles Collected on the Survey.” In *United States War Department Reports of Explorations and Survey . . . [Pacific Railroad Reports]*. Volume 10 (Zoological Reports). Washington, D.C.: United States House of Representatives, 33 Cong. 2 sess., Exec. Doc. 91.
- 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.
- . 1939. A New American *Pseudemys*. *Occasional Papers of the Museum of Zoology University of Michigan*, 397: 1–4.
- Hay, O. P. 1908. On Three Existing Species of Sea-turtles, One of Them (*Caretta remivaga*) New. *Proceedings of the United States National Museum*, 34(1605):183–198.
- Hay, W. P. 1904. A Revision of *Malaclemmys*, a Genus of Turtles. *Bulletin of the United States Bureau of Fisheries*, 24:1–20.
- Hayden, F. 1858. “Catalogue of the Collections in Geology and Natural History, Obtained by the Expedition under Command of Lieut. G. K. Warren, Topographic Engineers.” In *Explorer on the Northern Plains: Lieutenant Gouverneur K. Warren’s Preliminary Report of Explorations in Nebraska and Dakota, in the Years 1855–’56–’57*, ed. F. N. Shubert, pp. 60–125. Engineer Historical Studies 2. Washington, D.C.: Office of the Chief of Engineers.
- . 1863. On the Geology and Natural History of the Upper Missouri. *Transactions of the American Philosophical Society*, n.s., 12(1):1–218.
- Herber, E. C. 1963. *Correspondence between Spencer Fullerton Baird and Louis Agassiz—Two Pioneer American Naturalists*. Washington, D.C.: Smithsonian Institution.
- Hirth, H. F. 1980. *Chelonia mydas*. *Catalogue of American Amphibians and Reptiles*, 249:1–4.
- Holbrook, J. E. 1838. *North American Herpetology; or, a Description of the Reptiles Inhabiting the United States*. Volume 2. Philadelphia: J. Dobson.
- Holman, J. A., and U. Fritz. 2001. A New Emydine Species from the Middle Miocene (Barstovian) of Nebraska, USA with a New Generic Arrangement for the Species of *Clemmys* Sensu McDowell (1964) (Reptilia: Testudines: Emydidae). *Zoologische Abhandlungen, Staatliches Museum für Tierkunde Dresden*, 51(20): 331–353.
- Honda, M., Y. Yasukawa, R. Hirayama, and H. Ota. 2002. Phylogenetic Relationships of the Asian Box Turtles of the Genus *Cuora* Sensu Lato (Reptilia: Bataguridae) Inferred from Mitochondrial DNA Sequences. *Zoological Science* (Japan), 19(11):1305–1312.
- Hornaday, W. T. 1875. The Crocodile in Florida. *American Naturalist*, 9(9):498–504.

- Hurter, J., Sr. 1911. Herpetology of Missouri. *Transactions of the Academy of Science of St. Louis*, 20:58–274.
- International Commission on Zoological Nomenclature. 1999. *International Code of Zoological Nomenclature*, 4th ed. London: International Trust for Zoological Nomenclature.
- Iverson, J. B. 1977a. *Sternotherus minor*. *Catalogue of American Amphibians and Reptiles*, 195:1–2.
- . 1977b. *Kinosternon subrubrum*. *Catalogue of American Amphibians and Reptiles*, 193:1–4.
- . 1978a. Variation in Striped Mud Turtles, *Kinosternon baurii* (Reptilia, Testudines, Kinosternidae). *Journal of Herpetology*, 12(2):135–142.
- . 1978b. Distributional Problems of the Genus *Kinosternon* in the American Southwest. *Copeia*, 1978(3):476–479.
- . 1979. *Sternotherus carinatus*. *Catalogue of American Amphibians and Reptiles*, 226:1–2.
- . 1980. *Kinosternon acutum*. *Catalogue of American Amphibians and Reptiles*, 261:1–2.
- . 1981. Biosystematics of the *Kinosternon hirtipes* Species Group (Testudines: Kinosternidae). *Tulane Studies in Zoology and Botany*, 23(1):1–74.
- . 1982. *Terrapene nelsoni*. *Catalogue of American Amphibians and Reptiles*, 289:1–2.
- . 1985. *Kinosternon hirtipes*. *Catalogue of American Amphibians and Reptiles*, 361:1–4.
- . 1989. The Arizona Mud Turtle, *Kinosternon flavescens arizonense* (Kinosternidae), in Arizona and Sonora. *Southwestern Naturalist*, 34(3):356–368.
- Iverson, J. B., and J. F. Berry. 1980. *Claudius*, *C. angustatus*. *Catalogue of American Amphibians and Reptiles*, 236:1–2.
- Iverson, J. B., and W. P. McCord. 1992. A New Subspecies of *Cuora galbinifrons* (Testudines: Batagurinae) from Hainan Island, China. *Proceedings of the Biological Society of Washington*, 105(3):433–439.
- . 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., and R. A. Mittermeier. 1980. Dermatemydidae, *Dermatemys*. *Catalogue of American Amphibians and Reptiles*, 237:1–4.
- Lacépède, B. G. E. 1788. *Histoire Naturelle des Quadrupèdes Ovipares et des Serpens*. Volume 1. Paris: Hotel de Thou.
- Le, M., C. J. Raxworthy, W. P. McCord, and L. Mertz. 2006. A Molecular Phylogeny of Tortoises (Testudines: Testudiniidae) Based on Mitochondrial and Nuclear Genes. *Molecular Phylogenetics and Evolution*, 40:517–531.
- Le Conte, J. 1830. Description of the Species of North American Tortoises. *Annals of the Lyceum of Natural History* (New York), 3:91–131.
- Legler, J. M. 1959. A New Tortoise, Genus *Gopherus*, from North-Central Mexico. *University of Kansas Publications Museum of Natural History*, 11(5):335–343.
- Leviton, A. E., R. H. Gibbs, E. Heal, and C. E. Dawson. 1985. Standards in Herpetology and Ichthyology. Part 1: Standard Symbolic Codes for Institutional Resource Collections in Herpetology and Ichthyology. *Copeia*, 1985(3):802–832.
- Leviton, A. E., and R. H. Gibbs, Jr. 1988. Standards in Herpetology and Ichthyology: Standard Symbolic Codes for Institutional Resource Collections in Herpetology and Ichthyology. Supplement 1: Additions and Corrections. *Copeia*, 1988(1):280–282.
- Lindholm, W. A. 1929. Revidiertes Verzeichnis der Gattungen der rezenten Schildkröten nebst Notizen zur Nomenklatur einiger Arten. *Zoologischer Anzeiger*, 81(11–12):275–295.
- Linnaeus, C. 1758. *Systema Naturae per Regne Tria Naturae, Secundum Classes, Ordines, Genera, Species, cum Characteribus, Differentiis, Synonymis, Locis*, 10th ed. rev. Volume 1. Laurentii Salvii, Holmiae.
- . 1766. *Systema Naturae per Regne Tria Naturae, Secundum Classes, Ordines, Genera, Species, cum Characteribus, Differentiis, Synonymis, Locis*. 12th ed. rev. Volume 1. Laurentius Salvius, Holmiae.
- Lortet, L. 1883. Poissons et reptiles du Lac de Tibériade: de quelques autres parties de la Syrie. *Archives Museum d'Histoire Naturelle Lyon*, 3:88–189.
- Loveridge, A., and E. E. Williams. 1957. Revision of the African Tortoises and Turtles of the Suborder Cryptodira. *Bulletin of the Museum of Comparative Zoology*, 115:161–557.
- Lovich, J. E. 1985. *Graptemys pulchra*. *Catalogue of American Amphibians and Reptiles*, 360:1–2.
- Lovich, J. E., and C. J. McCoy. 1992. Review of the *Graptemys pulchra* group (Reptilia: Testudines: Emydidae), with Descriptions of Two New Species. *Annals of Carnegie Museum*, 61(4):293–315.
- . 1994. *Graptemys ernsti*. *Catalogue of American Amphibians and Reptiles*, 585:1–2.
- Malnate, E. V. 1971. A Catalog of Primary Types in the Herpetological Collections of the Academy of Natural Sciences, Philadelphia (ANSP). *Proceedings of the Academy of Natural Sciences, Philadelphia*, 123(9):345–375.
- Marcy, R. B. 1853. *Exploration of the Red River of Louisiana in the Year 1852, by Randolph B. Marcy; Assisted by George B. McClellan. With Reports on the Natural History of the Country, and Numerous Illustrations*. Washington, D.C.: United States War Department.
- Maxwell, B. A., J. K. Werner, P. Hendricks, and D. L. Flath. 2003. Herpetology in Montana. *Northwest Fauna*, 5:1–135.
- McCord, W. P., and J. B. Iverson. 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., M. Joseph-Ouni, and W.W. Lamar. 2001. A Taxonomic Reevaluation of *Phrynops* (Testudines: Chelidae) with the Description of Two New Genera and a New Species of *Batrachemys*. *Revista Biología Tropical*, 49(2): 715–764.
- McCord, W. P., and H.-D. Philippen. 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*, March 1998:51–58.
- McCoy, C. J., and R. C. Vogt. 1985. *Pseudemys alabamensis*. *Catalogue of American Amphibians and Reptiles*, 371:1–2.
- . 1988. *Graptemys oculifera*. *Catalogue of American Amphibians and Reptiles*, 422:1–2.
- Medem, F. 1955. A New Subspecies of *Caiman sclerops* from Colombia. *Fieldiana: Zoology*, 37(11):339–344.
- . 1956. Informe sobre reptiles Colombianos (I). Noticia sobre el primer hallazgo de la tortuga *Geoemyda annulata* (Gray) en Colombia. *Caladasia*, 7(34):317–325.
- Mertens, R. 1967. Die herpetologische Sektion des Natur-Museums und Forschungs-Institutes Senckenberg in Frankfurt a. M. nebst einem Verzeichnis ihrer Typen. *Senckenbergiana Biologica*, 48 (suppl. A):1–106.
- Mertens, R., and H. Wermuth. 1955. Die rezenten Schildkröten, Krokodile und Brückeneschen. Eine kritische liste der heute lebenden arten und rassen. *Zoologische Jahrbücher*, 83(5):323–440.
- Meyer, J. R., and L. D. Wilson. 1973. A Distributional Checklist of the Turtles, Crocodylians, and Lizards of Honduras. *Los Angeles County Museum Contributions in Science*, 244:1–39.
- Meylan, P. A. 1987. The Phylogenetic Relationships of Soft-shelled Turtles (Family Trionychidae). *Bulletin of the American Museum of Natural History*, 186(1):1–101.
- Moll, E. O. 1987. Survey of the Freshwater Turtles of India. Part 2: The Genus *Kachuga*. *Journal of the Bombay Natural History Society*, 84(1):7–25.
- Parham, J. F., and D. Li. 1999. A New Locality for *Cuora pani* Song 1984 with Comments on Its Known Range. *Asiatic Herpetological Research*, 8:111–113.
- Parham, J. F., W. B. Simison, K. H. Kozak, C. R. Feldman, and H. Shi. 2001. New Chinese Turtles: Endangered or Invalid? A Reassessment of Two Species Using Mitochondrial DNA, Allozyme Electrophoresis and Known-Localities Specimens. *Animal Conservation*, 4(4):357–367.
- 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.
- . 2002. Morphological Variation among Middle Eastern *Testudo graeca* L., 1758 (Sensu Lato), with a Focus on Taxonomy. *Chelonii*, 3:78–108.
- Philippen, H.-D., and P. Grossmann. 1990. Eine neue Schlangenhalschildkröte von Neuguinea: *Chelodina reimanni* sp. n. (Reptilia, Testudines, Pleurodira: Chelidae). *Zoologische Abhandlungen Staatliches Museum für Tierkunde Dresden*, 46(5):95–102.
- Pieh, A., and J. Perälä. 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.
- . 2004. Variabilität der maurischen landschildkröten (*Testudo graeca* Linnaeus, 1758 – komplex) im zentralen und nordwestlichen Marokko mit beschreibung zweier neuer taxa (Testudines: Testudinidae). *Herpetozoa*, 17 (1/2):19–47.
- Price, A. H., and D. M. Hillis. 1989. Biochemical Genetics and Taxonomic Status of *Trachemys gaigeae* and of the *Trachemys scripta* Complex in Texas. Abstract, First World Congress of Herpetology, Canterbury, United Kingdom.
- Reynolds, S. L., and M. E. Seidel. 1982. *Sternotherus odoratus*. *Catalogue of American Amphibians and Reptiles*, 287:1–4.
- Rüppell, E. 1835. *Neue Wirbelthiere zu der Fauna von Abyssinien gehörig*. 3: *Amphibien*. Frankfurt am Main.
- Schmidt, K. P. 1928. Amphibians and Land Reptiles of Porto Rico, with a List of Those Reported from the Virgin Islands. *New York Academy of Sciences*, 10(1):1–160.
- . 1946. Turtles Collected by the Smithsonian Biological Survey of the Panamá Canal Zone. *Smithsonian Miscellaneous Collections*, 106(8):1–9.
- . 1953. *A Checklist of North American Amphibians and Reptiles*. 6th ed. Chicago: American Society of Ichthyologists and Herpetologists.
- Schoepff, J. D. 1792–1801. *Naturgeschichte der Schildkröten mit Abbildungen erläutert, vom ihm selbst uebersetzt*. Erlangen: Johan Jacob Palm.
- Schwartz, A. 1955. The Diamondback Terrapin (*Malaclemys terrapin*) of Peninsular Florida. *Proceedings of the Biological Society of Washington*, 68(27):157–164.
- . 1956a. Geographic Variation in the Chicken Turtle *Deirochelys reticularia* Latreille. *Fieldiana: Zoology*, 34(41):461–503.
- . 1956b. The Relationships and Nomenclature of the Soft-shelled Turtles (Genus *Trionyx*) of the Southeastern United States. *Charleston Museum Leaflet*, 26:1–21.
- Schweigger, A. F. 1812. *Prodromus monographiae Cheloniorum*. *Königsberger Archiv für Naturwissenschaften und Mathematik*, 1:271–368, 406–468.
- Seeliger, L. M. 1945. Variations in the Pacific Mud Turtle. *Copeia*, 1945(3):150–159.
- Seidel, M. E. 1978. *Kinosternon flavescens*. *Catalogue of American Amphibians and Reptiles*, 216:1–4.
- . 1988a. Revision of the West Indian Emydid Turtles (Testudines). *American Museum Novitates*, 2918:1–41.
- . 1988b. *Trachemys terrapin*. *Catalogue of American Amphibians and Reptiles*, 442:1–2.
- . 1988c. *Trachemys stejnegeri*. *Catalogue of American Amphibians and Reptiles*, 441:1–3.
- . 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., and M. J. Dreslik. 1996. *Pseudemys concinna*. *Catalogue of American Amphibians and Reptiles*, 626:1–12.
- Seidel, M. E., and C. H. Ernst. 1998. *Pseudemys peninsularis*. *Catalogue of American Amphibians and Reptiles*, 669:1–4.
- Serb, J. M., C. A. Phillips, and J. B. Iverson. 2001. Molecular Phylogeny and Biogeography of *Kinosternon flavescens* Based

- on Complete Mitochondrial Control Region Sequences. *Molecular Phylogenetics and Evolution*, 18(1):149–162.
- Siebenrock, F. 1909. Synopsis der rezenten Schildkröten, mit Berücksichtigung der in historischer Zeit ausgestorbenen Arten. *Zoologischer Jahrbüchern*, Supplement, 10(3):427–618.
- Smith, H. M. 1948. The Map Turtles of Texas. *Proceedings and Transactions of the Texas Academy of Sciences*, 30(1):60.
- . 1978. The Status of Suppressed Names and of *Callopsis* Gray (Reptilia: Testudines). *Herpetological Review*, 9(3):93.
- Smith, H. M., and R. A. Brandon. 1968. Data Nova Herpetologica Mexicana. *Transactions of the Kansas Academy of Sciences*, 71(1):49–61.
- Smith, H. M., and R. B. Smith. 1980 [1979]. *Synopsis of the Herpetofauna of Mexico*. Volume 6: *Guide to Mexican Turtles*. Bibliographic Addendum 3. North Bennington, Vt.: John Johnson.
- Smith, H. M., and E. H. Taylor. 1950a. Type Localities of Mexican Reptiles and Amphibians. *University of Kansas Science Bulletin*, 33(8):313–380.
- . 1950b. An Annotated Checklist and Key to the Reptiles of Mexico, Exclusive of Snakes. *Bulletin of the United States National Museum*, 199, v + 253 pp.
- . 1966. *Herpetology of Mexico. Annotated Checklists and Keys to the Amphibians and Reptiles*. A Reprint of Bulletins 187, 194, and 199 of the U.S. National Museum with a List of Subsequent Taxonomic Innovations. Ashton, Md.: Eric Lundberg.
- 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.
- Song, M.-T. 1984. A New Species of the Turtle Genus *Cuora* (Testudoformes: Testudinata). *Acta Zootaxonomica Sinica*, 9(3):330–332 (in Chinese with English abstract; translation in *Asiatic Herpetological Research*, 2001, 9:142–144).
- Sonnini de Manoncourt, C. S., and P. A. Latreille. 1802. *Histoire Naturelle des Reptiles avec Figures Dessinées d'Après Nature*. I. Paris: Deterville.
- Starkey, D. E., H. B. Shaffer, R. L. Burke, M. R. J. Forstner, J. B. Iverson, F. J. Janzen, A. G. J. Rhodin, and G. R. Ultsch. 2003. Molecular Systematic, Phylogeography, and the Effects of Pleistocene Glaciation in the Painted Turtle (*Chrysemys picta*) Complex. *Evolution*, 57(1):119–128.
- Stejneger, L. 1893. An Annotated List of the Reptiles and Batrachians Collected by the Death Valley Expedition in 1891, with Descriptions of New Species. *North American Fauna*, 7:159–228.
- . 1904. *The Herpetology of Porto Rico*. Annual Report United States National Museum (1902):549–724.
- . 1918. Description of a New Snapping Turtle and a New Lizard from Florida. *Proceedings of the Biological Society of Washington*, 31(26):89–92.
- . 1923. Rehabilitation of a Hitherto Overlooked Species of Musk Turtle of the Southern States. *Proceedings of the United States National Museum*, 62(6):1–3.
- . 1925. New Species and Subspecies of American Turtles. *Journal of the Washington Academy of Sciences*, 15(20):462–463.
- . 1933. Description of a New Box Turtle from Mexico. *Proceedings of the Biological Society of Washington*, 46(24):119–120.
- . 1938. Restitution of the Name *Ptychemys hoyi* Agassiz for a Western River Tortoise. *Proceedings of the Biological Society of Washington*, 51(40):173–175.
- . 1941. Notes on Mexican Turtles of the Genus *Kinosternon*. *Proceedings of the United States National Museum*, 90(3115):457–459.
- . 1944. Notes on the American Soft-shell Turtles with Special Reference to *Amyda agassizii*. *Bulletin of the Museum of Comparative Zoölogy at Harvard College*, 94(1):1–75.
- Stejneger, L., and T. Barbour. 1917. *A Checklist of North American Amphibians and Reptiles*. Cambridge, Mass.: Harvard University Press.
- . 1939. *A Checklist of North American Amphibians and Reptiles*, 4th ed. Cambridge, Mass.: Harvard University Press.
- Stephens, P. R., and J. J. Wiens. 2003. Ecological Diversification and Phylogeny of Emydid Turtles. *Biological Journal of the Linnean Society*, 79:577–610.
- Strecker, J. K., Jr. 1910. Description of a New Solitary Spadefoot (*Scaphiopus hurreri*) from Texas, with Other Herpetological Notes. *Proceedings of the Biological Society of Washington*, 23(30):115–122.
- Stuart, J. N., and C. H. Ernst. 2004. *Trachemys gaigeae*. *Catalogue of American Amphibians and Reptiles*, 787:1–6.
- Taylor, W. E. 1895 [1894]. The Box Tortoises of North America. *Proceedings of the United States National Museum*, 17(1019):573–588.
- Vanzolini, P. E. 1995. A New Species of Turtle, Genus *Trachemys*, from the State of Maranhão, Brazil (Testudines: Emydidae). *Revistas Brasileira de Biologia*, 55(1):111–125.
- Vari, R. P., and J. C. Howe. 1991. Catalog of the Type Specimens of Recent Fishes in the National Museum of Natural History, Smithsonian Institution. 1: Characiformes (Teleostei: Ostariophysi). *Smithsonian Contributions to Zoology*, 517:1–52.
- Viola, H. J., and C. Margolis, eds. 1985. *Magnificent Voyagers: The U.S. Exploring Expedition, 1838–1842*. Washington, D.C.: Smithsonian Institution Press.
- Vogt, R. C. 1980. Natural History of the Map Turtles *Graptemys pseudogeographica* and *G. ouachitensis* in Wisconsin. *Tulane Studies in Zoology and Botany*, 22(1):17–48.
- . 1981. *Graptemys versa*. *Catalogue of American Amphibians and Reptiles*, 280:1–2.
- Ward, J. P. 1978. *Terrapene ornata*. *Catalogue of American Amphibians and Reptiles*, 217:1–4.
- . 1984. *Relationships of Chrysemys Turtles of North America (Testudines: Emydidae)*. Special Publication 21. Museum of Texas Tech University.

- 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.
- . 1960. Type and Type Locality of the Gulf Coast Spiny Softshell Turtle, *Trionyx spinifer asper* (Agassiz). *Breviora*, 129:1–8.
- . 1962. North American Recent Soft-shelled Turtles (Family Trionychidae). *University of Kansas Publications Museum of Natural History*, 13(10):429–611.
- . 1973. *Trionyx spiniferus*. *Catalogue of American Amphibians and Reptiles*, 140:1–4.
- Wermuth, H., and R. Mertens. 1961. *Schildkröten, Krokodile, Brükenechsen*. Jena, Germany: Gustav Fisher Verlag.
- . 1977. Liste der rezenten Amphibien und Reptilien. Testudines, Crocodylia, Rhynchocephalia. *Das Tierreich* (Berlin), 28:1–174.
- Williamson, R. S. 1857a [1856]. “Appendix A. Distances and Altitudes.” In *United States War Department Reports of Explorations and Survey . . . [Pacific Railroad Reports]*. Volume 5, ed. R. S. Williamson, pp. 3–4. Washington, D.C.: United States House of Representatives, 33 Cong. 2 sess., Exec. Doc. 91.
- . 1857b [1856]. “Appendix B. Latitudes and Longitudes.” In *United States War Department Reports of Explorations and Survey . . . [Pacific Railroad Reports]*. Volume 5, ed. R. S. Williamson, p. 5. Washington, D.C.: United States House of Representatives, 33 Cong., 2 sess., Exec. Doc. 91.
- Wright, A. H. 1918. Notes on *Clemmys*. *Proceedings of the Biological Society of Washington*, 31(16):51–58.
- Yarrow, H. C. 1883 [1882]. Check List of North American Reptilia and Batrachia with Catalogue of Specimens in U.S. National Museum. *United States National Museum Bulletin*, 24:ii + 249 pp.
- Yasukawa, Y., and H. Ota. 1999. “Geographic Variation and Biogeography of the Geoemydine Turtles (Testudines: Bataguridae) of the Ryukyu Archipeligo, Japan.” In *Tropical Island Herpetofauna: Origin, Current Diversity and Conservation*, ed. H. Ota, pp. 271–297. Amsterdam: Elsevier Science.
- Yasukawa, Y., H. Ota, and J. B. Iverson. 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(2):303–317.
- Yochelson, E. L. 1985. *The National Museum of Natural History: 75 Years in the Natural History Building*. Washington, D.C.: Smithsonian Institution Press.
- Zug, G. R. 1986. *Sternotherus*. *Catalogue of American Amphibians and Reptiles*, 397:1–3.
- Zug, G. R., and A. Schwartz. 1971. *Dierochelys*, *D. reticularia*. *Catalogue of American Amphibians and Reptiles*, 107:1–3.
- Zug, G. R., C. H. Ernst, and R. V. Wilson. 1998. *Lepidochelys olivacea*. *Catalogue of American Amphibians and Reptiles*, 653:1–13.

# Index of Taxa

---

*abaxillare*, 3, 7, 25, 26  
*abnormis*, 2, 11, 22  
*Actinemys*, 14  
*Actinemys marmorata*, 14  
*acutum*, 23  
*acutus*, 8  
*adiutrix*, 2, 21  
*agassizii*, 3, 7, 32  
*alabamensis*, 2, 17  
*Aldabrachelys*, 31  
*Aldabrachelys gigantea*, 31  
Alligatoridae, 2, 8  
*amboinensis*, 3, 22  
*Amyda*, 3, 33  
*Amyda spinifera hartwegi*, 3, 33  
*angustatus*, 3, 24  
*annulata*, 21  
*Apalone*, 33, 34, 35  
*Apalone mutica calvata*, 35  
*Apalone spinifera aspera*, 33  
*Apalone spinifera emoryi*, 34  
*Apalone spinifera guadalupensis*, 35  
*Apalone spinifera hartwegi*, 33  
*apaporiensis*, 2, 8  
*arizonense*, 1, 3, 26, 29  
*Aromochelys*, 25  
*Aromochelys (= Sternotherus) carinata*, 25  
*asper*, 3, 33, 34  
*aspera*, 33  
*Aspidonectes*, 3, 6, 33, 34, 35  
*Aspidonectes asper*, 3, 33, 34  
*Aspidonectes emoryi*, 3, 34, 35  
*Aspidonectes nuchalis*, 6  
*ater*, 9  
*atripons*, 3, 23

- Batrachemys*, 2, 8  
*Batrachemys heliostemma*, 2, 8  
*bauri*, 2, 3, 20, 26  
*baurii*, 26  
*bellii*, 12  
*berendtianum*, 3, 23, 24  
*berlandieri*, 3, 33  
*bissa*, 9, 10  
*brevigulare*, 3, 24  
*buxtoni*, 32
- Caiman*, 2, 8  
*Caiman crocodilus crocodilus*, 8  
*Caiman sclerops apaporiensis*, 2, 8  
*calvata*, 35  
*calvatus*, 3, 35  
*caretta*, 10  
*Caretta*, 2, 9, 10  
*Caretta caretta*, 10  
*Caretta remivaga*, 2, 9  
*Caretta rostrata*, 2, 9  
*carinata*, 25  
*carinatus*, 25  
*carolina*, 13, 20  
 Chelidae, 2, 8  
*Chelodina*, 2, 8  
*Chelodina reimanni*, 2, 8  
*Chelonia*, 2, 10  
*Chelonia formosa*, 2, 10  
*Chelonia mydas*, 10  
*Chelonia tenuis*, 2, 10  
 Cheloniidae, 2, 9  
*Chelonoidis*, 30  
*Chelonoidis chilensis*, 30  
*Chelopus*, 3, 21  
*Chelopus funereus*, 3, 21  
*Chelopus gabbii*, 3, 21  
*Chelopus rubidus*, 3, 21  
*Chelydra*, 2, 10  
*Chelydra osceola*, 2, 10  
*Chelydra serpentina osceola*, 10  
 Chelydridae, 10  
*chilensis*, 30  
*chriskarannarum*, 3, 22  
*Chrysemys*, 2, 11, 12  
*Chrysemys dorsalis*, 2, 11, 12  
*Chrysemys marginata*, 11  
*Chrysemys picta bellii*, 12  
*Chrysemys picta dorsalis*, 11  
*Chrysemys picta marginata*, 12  
*Chrysemys picta picta*, 12  
*Chrysemys treleasei*, 2, 12  
*Cinosternum*, 3, 23, 24  
*Cinosternum berendtianum*, 3, 23  
*Cinosternum brevigulare*, 3, 24  
*Cinosternum postinguinale*, 3, 24  
*Cistudo*, 2, 12, 13  
*Cistudo ornata*, 2, 12  
*Cistudo triunguis*, 2, 12, 13  
*Cistudo virginea*, 12  
*Claudius*, 3, 24, 25  
*Claudius angustatus*, 3, 24  
*Claudius severus*, 3, 25  
*Clemmys*, 2, 13  
*Clemmys muhlenbergii*, 13  
*Clemmys nuchalis*, 2, 13  
*concinna*, 2, 17, 18, 19, 20  
*consors*, 3, 27  
*corticata*, 2, 10  
 Crocodilia, 2, 8  
 Crocodilidae, 2, 8  
*crocodilus*, 8  
*Crocodylus*, 2, 8  
*Crocodylus floridanus*, 2, 8  
*Crocodylus*, 8  
*Crocodylus acutus*, 8  
*cruentatum*, 3, 27  
*Cuora*, 3, 22, 23  
*Cuora amboinensis lineata*, 3, 22  
*Cuora chriskarannarum*, 3, 22  
*Cuora evelynae*, 3, 22  
*Cuora flavomarginata*, 22  
*Cuora flavomarginata evelynae*, 22  
*Cuora galbinifrons*, 22, 23  
*Cuora galbinifrons serrata*, 3, 22  
*Cuora mccordi*, 3, 23  
*Cuora mouhotii*, 22, 23  
*Cuora pani*, 22  
*Cuora serrata*, 23  
*Cyclemys*, 3, 23  
*Cyclemys atripons*, 3, 23  
*cyrenaica*, 3, 31
- decorata*, 2, 18  
*Deirochelys*, 2, 13  
*Deirochelys reticularia miaria*, 2, 13  
 Dermatemyidae, 2, 11  
*Dermatemys*, 2, 11, 22  
*Dermatemys abnormis*, 2, 11, 22  
*Dermatemys mawii*, 11  
*donosobarrosi*, 3, 7, 30  
*dorsalis*, 2, 11
- elonae*, 2, 18  
*emoryi*, 3, 34, 35  
 Emydidae, 2, 11  
*Emys*, 2, 14  
*Emys marmorata*, 2, 14

- Emys marmorata marmorata*, 14  
*Emys marmorata pallida*, 14  
*Emys nigra*, 2, 14  
*Eretmochelys*, 9, 10  
*Eretmochelys imbricata bissa*, 9, 10  
*Eretmochelys imbricata squamata*, 10  
*ernsti*, 2, 14  
*evelynae*, 3, 22
- felis*, 2, 18  
*ferox*, 35  
*flavescens*, 3, 26, 27, 29  
*flavomarginata*, 22  
*flavomarginatus*, 3, 31  
*floridana*, 2, 18, 20  
*floridanus*, 2, 8  
*formosa*, 2, 10  
*funerea*, 21  
*funereus*, 3, 21
- gabbii*, 3, 21  
*gaigeae*, 2, 18, 19  
*galbinifrons*, 3, 22, 23  
*Geochelone*, 3, 7, 30  
*Geochelone donosobarrosi*, 3, 7, 30  
*Geochelone petersi*, 3, 30  
 Geoemydidae, 3, 21  
*gigantea*, 3, 31  
*goldmani*, 2, 20  
*Goniochelys*, 3, 25  
*Goniochelys minor*, 3, 25  
*Goniochelys triquetra*, 3, 25  
*Gopherus*, 3, 31, 32, 33  
*Gopherus agassizii*, 32  
*Gopherus berlandieri*, 33  
*Gopherus flavomarginatus*, 3, 31  
*gorzugi*, 2, 17, 19  
*graeca*, 3, 31, 32  
*Graptemys*, 2, 14, 15, 16, 17  
*Graptemys ernsti*, 2, 14  
*Graptemys oculifera*, 16, 17  
*Graptemys ouachitensis*, 15  
*Graptemys pseudogeographica ouachitensis*, 2, 15  
*Graptemys pseudogeographica pseudogeographica*, 15  
*Graptemys pseudogeographica sabinensis*, 2, 15  
*Graptemys pseudogeographica versa*, 2, 15  
*Graptemys pulchra*, 2, 15, 16, 17  
*Graptemys sabinensis*, 15  
*Graptemys versa*, 15  
*guadalupensis*, 3, 35
- hartwegi*, 3, 33  
*heliostemma*, 2, 8  
*herrerai*, 3, 27
- hieroglyphica*, 20  
*hippocrepis*, 27  
*hirtipes*, 27  
*hoyi*, 2, 20
- imbricata*, 9, 10
- Kachuga*, 3, 23  
*Kachuga smithii pallidipes*, 3, 23  
*kami*, 3, 23  
 Kinosternidae, 3, 23  
*Kinosternon*, 1, 3, 7, 23, 24, 25, 26, 27, 28, 29  
*Kinosternon abaxillare*, 3, 7, 25, 26  
*Kinosternon acutum*, 23  
*Kinosternon arizonense*, 1, 3, 26, 29  
*Kinosternon bauri palmarum*, 3, 26  
*Kinosternon baurii*, 26  
*Kinosternon cruentatum consors*, 3, 27  
*Kinosternon flavescens*, 29  
*Kinosternon flavescens flavescens*, 27  
*Kinosternon flavescens spooneri*, 3, 27  
*Kinosternon flavescens stejnegeri*, 26, 29  
*Kinosternon herrerai*, 3, 27  
*Kinosternon hirtipes murrayi*, 27  
*Kinosternon leucostomum postinguinale*, 24  
*Kinosternon louisianae*, 3, 27  
*Kinosternon murrayi*, 3, 27  
*Kinosternon panamensis*, 3, 28  
*Kinosternon scorpioides*, 28  
*Kinosternon scorpioides abaxillare*, 25  
*Kinosternon scorpioides cruentatum*, 27  
*Kinosternon scorpioides scorpioides*, 28  
*Kinosternon sonoriense*, 29  
*Kinosternon sonoriense longifemorale*, 3, 28  
*Kinosternon subrubrum hippocrepis*, 27  
*kleinmanni*, 3, 31, 32
- lamberti*, 3, 31  
*leithii*, 32  
*Lepidochelys*, 9  
*Lepidochelys olivacea*, 9  
*leucostomum*, 24  
*lineata*, 3, 22  
*littoralis*, 2, 16  
*longifemorale*, 3, 28  
*louisianae*, 3, 27
- macrospilota*, 2, 16  
*Malaclemmys*, 2, 16  
*Malaclemmys littoralis*, 2, 16  
*Malaclemmys macrospilota*, 2, 16  
*Malaclemmys*, 2, 16  
*Malaclemmys terrapin littoralis*, 16  
*Malaclemmys terrapin macrospilota*, 16

- Malaclemys terrapin tequesta*, 2, 16  
*Malacoclemmys*, 2, 16, 17  
*Malacoclemmys oculifera*, 2, 16, 17  
*marginata*, 11, 12  
*marmorata*, 2, 14  
*Mauremys*, 3, 23  
*Mauremys mutica kami*, 3, 23  
*mauritanica*, 3, 32  
*mawii*, 11  
*mccordi*, 3, 23  
*megacephalum*, 3, 30  
*melanonota*, 2, 9  
*metteri*, 2, 17, 19  
*mexicana*, 20  
*miaria*, 2, 13, 14  
*minor*, 3, 25  
*mobilensis*, 20  
*Molothrus*, 9  
*Molothrus ater*, 9  
*mouhotii*, 22, 23  
*muhlenbergii*, 13  
*murrayi*, 3, 27, 28  
*mutica*, 3, 23, 35  
*muticus*, 3, 35  
*mydas*, 10  
  
*nelsoni*, 2, 21  
*nigra*, 2, 14  
*nuchalis*, 2, 6, 13  
  
*oculifera*, 2, 16, 17  
*odoratus*, 25, 28  
*olivacea*, 9  
*ornata*, 2, 12, 13  
*osceola*, 2, 10, 11  
*ouachitensis*, 2, 15  
*Ozotheca*, 3, 28  
*Ozotheca tristycha*, 3, 28  
  
*pallida*, 14  
*pallidipes*, 3, 23  
*palmarum*, 3, 26  
*panamensis*, 3, 28  
*pani*, 22  
*parietalis*, 3, 30  
Pelomedusidae, 3, 30  
*Pelusios*, 3, 30  
*Pelusios subniger parietalis*, 3, 30  
*peninsularis*, 2, 18  
*perses*, 3, 32  
*petersi*, 3, 30  
*picta*, 11, 12  
*platycephala*, 2, 9  
*Platemys*, 2, 9  
  
*Platemys platycephala melanonota*, 2, 9  
*Platypeltis*, 3, 7  
*Platypeltis agassizii*, 3, 7  
Platysternidae, 3, 30  
*Platysternon*, 3, 30  
*Platysternon megacephalum shiui*, 3, 30  
*Platythyra*, 3, 29  
*Platythyra flavescens*, 3, 29  
*postinguinale*, 3, 24  
*Pseudemys*, 2, 17, 18, 19, 20  
*Pseudemys alabamensis*, 2, 17  
*Pseudemys concinna concinna*, 17, 18, 19, 20  
*Pseudemys concinna gorzugi*, 2, 17, 19  
*Pseudemys concinna hieroglyphica*, 20  
*Pseudemys concinna metteri*, 2, 17, 19  
*Pseudemys concinna mobilensis*, 20  
*Pseudemys decorata*, 2, 18  
*Pseudemys elonae*, 2, 18  
*Pseudemys felis*, 2, 18  
*Pseudemys floridana mobilensis*, 20  
*Pseudemys floridana peninsularis*, 2, 18  
*Pseudemys gorzugi*, 17  
*Pseudemys peninsularis*, 18  
*Pseudemys scripta gaigeae*, 2, 18  
*Pseudemys stejnegeri*, 2, 19  
*Pseudemys texana*, 2, 17, 19  
*Pseudemys vioscana*, 2, 19, 20  
*pseudogeographica*, 2, 15  
*Ptychemys*, 2, 20  
*Ptychemys hoyi*, 2, 20  
*pulchra*, 2, 15, 16, 17  
  
*reimanni*, 2, 8, 9  
*remivaga*, 2, 9  
*reticularia*, 2, 13  
*Rhinoclemmys*, 21  
*Rhinoclemmys annulata*, 21  
*Rhinoclemmys funerea*, 21  
*Rhinoclemmys rubida*, 21  
*rostrata*, 2, 9, 10  
*rubida*, 21  
*rubidus*, 3, 21  
  
*sabinensis*, 2, 15  
*salvini*, 25  
*sclerops*, 2, 8  
*scorpioides*, 25, 27, 28  
*scripta*, 2, 18, 33  
*serpentina*, 10  
*serrata*, 3, 22, 23  
*severus*, 3, 25  
*shiui*, 3, 30  
*smithii*, 3, 23  
*sonoriense*, 3, 28, 29

- spinifer*, 3, 35  
*spinifera*, 3, 33, 34, 35  
*spiniferus*, 6  
*spooneri*, 3, 27  
*squamata*, 10  
*Staurotyplus*, 25  
*Staurotyplus salvinii*, 25  
*stejnegeri*, 2, 19, 26, 29  
*Sternotherus*, 25, 28  
*Sternotherus carinatus*, 25  
*Sternotherus minor*, 25  
*Sternotherus odoratus*, 25, 28  
*subniger*, 3, 30  
*subrubrum*, 27
- tenuis*, 2, 10  
*tequesta*, 2, 16  
*Terrapene*, 2, 12, 13, 20, 21  
*Terrapene bauri*, 2, 20  
*Terrapene carolina bauri*, 20  
*Terrapene carolina triunguis*, 13  
*Terrapene goldmani*, 2, 20  
*Terrapene mexicana*, 20  
*Terrapene nelsoni*, 2, 21  
*Terrapene ornata*, 12, 13  
*terrapin*, 16, 18  
 Testudines, 2, 8  
 Testudinidae, 3, 30  
*Testudo*, 3, 31, 32, 33  
*Testudo gigantea*, 3, 31  
*Testudo graeca*, 32  
*Testudo graeca buxtoni*, 32  
*Testudo graeca cyrenaica*, 3, 31
- Testudo graeca lamberti*, 3, 31  
*Testudo kleinmanni*, 3, 31, 32  
*Testudo leithii*, 32  
*Testudo mauritanica*, 3, 32  
*Testudo perses*, 3, 32  
*texana*, 2, 17, 19  
*Thalassochelys*, 2, 10  
*Thalassochelys corticata*, 2, 10  
*Trachemys*, 2, 18, 19, 21, 33  
*Trachemys adiutrix*, 2, 21  
*Trachemys decorata*, 18  
*Trachemys gaigeae*, 18  
*Trachemys scripta*, 33  
*Trachemys stejnegeri*, 19  
*Trachemys terrapin*, 18  
*treleasei*, 2, 12  
 Trionychidae, 3, 33  
*Trionyx*, 3, 6, 35  
*Trionyx [= Apalone] ferox*, 35  
*Trionyx muticus calvatus*, 3, 35  
*Trionyx spinifer guadalupensis*, 3, 35  
*Trionyx spiniferus spiniferus*, 6  
*triquetra*, 3, 25  
*tristycha*, 3, 28  
*triunguis*, 2, 12, 13
- versa*, 2, 15  
*vioscana*, 2, 19, 20  
*virginea*, 12
- Xerobates*, 3, 32, 33  
*Xerobates agassizii*, 3, 32  
*Xerobates berlandieri*, 3, 33

## REQUIREMENTS FOR SMITHSONIAN SERIES PUBLICATION

ALL MANUSCRIPTS ARE REVIEWED FOR ADHERENCE TO THE SISP MANUSCRIPT PREPARATION AND STYLE GUIDE FOR AUTHORS (available on the “Submissions” page at [www.scholarlypress.si.edu](http://www.scholarlypress.si.edu)). Manuscripts not in compliance will be returned to the author. Manuscripts intended for publication in the Contributions Series are evaluated by a content review board and undergo substantive peer review. Accepted manuscripts are submitted for funding approval and scheduling to the Publications Oversight Board.

MINIMUM MANUSCRIPT LENGTH is thirty manuscript pages. If a manuscript is longer than average, an appropriate length will be determined during peer review and evaluation by the Content Review Board. Authors may be asked to edit manuscripts that are determined to be too long.

TEXT must be prepared in a recent version of Microsoft Word; use a Times font in 12 point for regular text; be double spaced; and have 1” margins. Each chapter/section must be saved in a separate file.

REQUIRED ELEMENTS are title page, abstract page, table of contents, main text, and reference section. See the SISP Manuscript Preparation and Style Guide for Authors for the order of all elements.

HEADINGS should be styled so different levels of headings are distinct from each other and so the organization of the manuscript is clear. Insert one line space above and one line space below all headings.

FRONT MATTER should include title page, abstract page, and table of contents. All other sections are optional. Abstracts must not exceed 250 words. Table of contents should include A-, B-, and C-level headings.

TABLES (numbered, with captions, stubs, rules) should be submitted in separate MS Word files; should include footnotes, if appropriate; should have rules only at top, bottom, and beneath column heads. Print outs of each table should accompany the manuscript to ensure correct layout of data. Tabulations within running text should not be numbered or formatted like formal tables, and should be included in the text of the manuscript.

FIGURE CAPTIONS should be provided in a separate MS Word file.

FIGURES (e.g., photographs, line art, maps) should be numbered sequentially (1, 2, 3, etc.) in the order called out; be placed throughout text, not at end of manuscript; have all components of composites lettered with lowercase letters and described in the caption; include a scale bar or scale description, if appropriate; include any legends in or on the figure rather than in a caption.

ART must not be embedded in the main text.

Figures must be original and submitted as individual TIFF or EPS files. Resolution for art files must be at least 300 dpi for grayscale and color images and at least 1200 dpi for line art. Electronic images should measure no more than 100% and no less than 75% of final size when published. JPG files will not be accepted. Color images significantly increase costs so should be included only if required. Funding for color art is subject to approval by SISP and the Publications Oversight Board.

TAXONOMIC KEYS in natural history papers should use the aligned-couplet form for zoology. If cross referencing is required between key and text, do not include page references within the key but number the keyed-out taxa, using the same numbers with their corresponding heads in the text.

SYNONYMY IN ZOOLOGY must use the short form (taxon, author, year:page), with full reference at the end of the paper under “References.”

IN-TEXT REFERENCES should be used rather than bibliographic notes and should follow the author-date system in the following format: “(author last name, year)” or “. . . author (year)”; “(author, year:page used within the text)” or “. . . author (year:page).” A full citation should be included in a “References” section.

ENDNOTES are to be used in lieu of footnotes and should be keyed manually into a separate MS Word file, in a section titled “Notes”. Notes should not contain bibliographic information. Manually type superscript numerals in text and use full-sized numerals at the beginning of each note in the “Notes” section. SISP will determine the best placement of the notes section, either at the end of each chapter or at the end of the main text.

REFERENCES should be in alphabetical order, and in chronological order for same-author entries. Each reference should be cited at least once in main text. Complete bibliographic information must be included in all citations (e.g., author/editor, title, subtitle, edition, volume, issue, pages, figures). For books, place of publication and publisher are required. For journals, use the parentheses system for volume(number):pagination [e.g., “10(2):5–9”]. Do not use “et al.”; all authors/editors should be included in reference citations. In titles, capitalize first word, last word, first word after colon, and all other words except articles, conjunctions, and prepositions. Examples of the most common types of citations are provided in the SISP Manuscript Preparation and Author Style Guide.

For questions regarding the guidelines, please email SISP at [schol.press@si.edu](mailto:schol.press@si.edu).