



Smithsonian
Scholarly Press

SMITHSONIAN CONTRIBUTIONS TO ZOOLOGY • NUMBER 654



Catalog of Type Specimens of Recent Caudata and Gymnophiona in the National Museum of Natural History, Smithsonian Institution

Kenneth A. Tighe

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 a 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.” The Smithsonian has adhered to this theme of basic research through the years in thousands of titles issued in series publications, first with Smithsonian Contributions to Knowledge in 1848 and continuing with the following active series:

Smithsonian Contributions to Anthropology	Smithsonian Contributions to the Marine Sciences
Smithsonian Contributions to Botany	Smithsonian Contributions to Museum Conservation
Smithsonian Contributions to the Earth Sciences	Smithsonian Contributions to Paleobiology
Smithsonian Contributions to History and Technology	Smithsonian Contributions to Zoology

Smithsonian Institution Scholarly Press (SISP) publishes small papers and full-scale monographs that report on research and collections of the Institution’s museums and research centers. Manuscripts intended for publication in the series undergo substantive peer review and editorial board evaluation, as well as evaluation by SISP for compliance with editorial requirements. Each Smithsonian Contributions Series volume is licensed under a Creative Commons license based on copyright status of its content and is published online at <https://smithsonian.figshare.com/ScholarlyPress>. SISP prints limited quantities for official use, including for distribution via exchange mailings to libraries, universities, and similar institutions throughout the world.

SUMMARY OF REQUIREMENTS FOR SMITHSONIAN CONTRIBUTIONS SERIES

Visit <https://scholarlypress.si.edu> for comprehensive guidelines, specifications, and other author resources.

ABSTRACTS must not exceed 300 words.

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.

REQUIRED ELEMENTS are title page, abstract, table of contents, main text, and references.

FIGURES must be numbered sequentially (1, 2, 3, etc.) in the order called out; have components lettered consistently (in size, font, and style) and described in captions; include a scale bar or scale description, if appropriate; include any legends in or on figures rather than in captions. Figures must be submitted as individual TIF or EPS files.

FIGURE FILES must meet all required specifications in SISP’s Digital Art Preparation Guide. Color figures are permitted.

TAXONOMIC KEYS in natural science manuscripts 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 manuscript under “References.”

REFERENCES should be in alphabetical order and in chronological order for same-author entries. Each reference should be cited at least once in the manuscript text. Complete bibliographic information must be included in all citations. Examples of the most common types of citations can be found at SISP’s website under Resources/Guidelines & Forms.

Catalog of Type Specimens of Recent Caudata and Gymnophiona in the National Museum of Natural History, Smithsonian Institution

Kenneth A. Tighe



Smithsonian
Scholarly Press
WASHINGTON, D.C.
2022

ABSTRACT

Tighe, Kenneth A. Catalog of Type Specimens of Recent Caudata and Gymnophiona in the National Museum of Natural History, Smithsonian Institution. *Smithsonian Contributions to Zoology*, number 654, vi + 91 pages, 1 table, 2022. — The known type specimens of Caudata and Gymnophiona in the collection of the Division of Amphibians and Reptiles, National Museum of Natural History, Smithsonian Institution, published through 2021, represent 288 names of taxa. The list is arranged alphabetically by family within Caudata and Gymnophiona and alphabetically by genus and species, as described originally within family. Each entry provides both original and current accepted genus and species names, author(s), date of publication, abbreviated type citation, page of original description, current type status, USNM (U.S. National Museum) catalog number, number of specimens, locality, collector, and date collected. Also included for each taxon are 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.

Key words: Caudata; Gymnophiona; type specimens; catalogs; National Museum of Natural History

Recommended citation:

Tighe, Kenneth A. 2022. Catalog of Type Specimens of Recent Caudata and Gymnophiona in the National Museum of Natural History, Smithsonian Institution. *Smithsonian Contributions to Zoology*, No. 654. Washington, D.C.: Smithsonian Institution Scholarly Press.

Cover images: Dorsal (left) and ventral (right) views of the lectotype of *Pseudotriton montanus*. Photo by James A. Poindexter II.

Published by
SMITHSONIAN INSTITUTION SCHOLARLY PRESS
P.O. Box 37012, MRC 957, Washington, D.C. 20013-7012
<https://scholarlypress.si.edu>

This publication is a work of the U.S. Government and is therefore not eligible for copyright protection.

Library of Congress Control Number: 2022944191

ISSN: 1943-6696 (online); 0081-0282 (print)

ZooBank registration: 18 November 2022
LSID: urn:lsid:zoobank.org:pub:426D2BE1-85F7-48B1-B6C6-64EBD0B4F1B9

Publication date (online): 9 December 2022

© 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
FORMAT	3
CATALOG OF TYPE SPECIMENS	5
ORDER CAUDATA	5
Family Ambystomatidae	5
Family Cryptobranchidae	17
Family Hynobiidae	17
Family Plethodontidae	19
Family Proteidae	65
Family Rhyacotritonidae	66
Family Salamandridae	66
Family Sirenidae	68
ORDER GYMNOPTIONA	69
Family Caeciliidae	69
Family Dermophiidae	70
Family Herpelidae	71
Family Ichthyophiidae	71
Family Indotyphlidae	72
Family Rhinatrematidae	72
Family Scolecomorphidae	73
ACKNOWLEDGMENTS	75
REFERENCES	77
INDEX OF TAXA	87

Catalog of Type Specimens of Recent Caudata and Gymnophiona in the National Museum of Natural History, Smithsonian Institution

Kenneth A. Tighe

INTRODUCTION

This volume is the second in a series of publications listing the type specimens of various groups of recent amphibians and reptiles in the Division of Amphibians and Reptiles, National Museum of Natural History, Smithsonian Institution. The first annotated catalog produced was of the type specimens of extant crocodilians and turtles (Reynolds et al., 2007).

The collection of type specimens in the Division of Amphibians and Reptiles is among the largest in the world and is particularly important for early descriptions of taxa from the Western Hemisphere. There are currently around 3,017 names of taxa and more than 14,270 specimens in the amphibian and reptile type collection, including 2,352 primary types (holotype, lectotype, neotype, or syntype) representing 1,759 nominal taxa.

The first comprehensive listing of all type specimens of amphibians and reptiles in the National Museum of Natural History was done by Doris Cochran (1961). That treatment dealt with 1,742 names of taxa. Since that publication, new types have been deposited in the collection as researchers both within the museum and from other institutions have described new species. In addition, new information on older type specimens has accumulated. This type catalog follows the decision made by Reynolds et al. (2007) that type catalogs for subunits (orders) of the collection would be more manageable. Following that decision, this catalog documents the type specimens of the orders Caudata and Gymnophiona, totaling 288 nominal taxa and more than 2,670 specimens. Table 1 summarizes the number of taxa treated here and by Cochran (1961).

Primary type specimens of salamanders and caecilians were digitally photographed for this project. In addition to their value in documenting taxonomic vouchers, the photographs will also provide a visual record of specimen condition and will be useful for future evaluation of specimen conservation practices. Eventually, the digital images will be linked to specimen records in the National Museum of Natural History electronic catalog database and made available to researchers throughout the world.

The change in the official title from the “United States National Museum” (USNM) to the current official name of “National Museum of Natural History” (NMNH) has caused some confusion regarding the correct abbreviation for citing specimens cataloged in the Division of Amphibians and Reptiles (Reynolds et al., 2007). Although no longer reflecting the official name of the museum, USNM has always been and still remains the

Department of Vertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Museum Support Center, MRC 534, 4210 Silver Hill Road, Suitland, Maryland 20746, USA.

Correspondence: TigheK@si.edu

Manuscript received 7 March 2022; accepted 11 May 2022.

TABLE 1. Comparison of the number of taxa included in the present catalog versus Cochran (1961).

Taxa and total	Present catalog	Cochran (1961)	Published after 1961
Order Caudata			
Ambystomatidae	47	38	6
Cryptobranchidae	1	1	0
Hynobiidae	7	5	0
Plethodontidae	189	112	65
Proteidae	7	7	0
Rhyacotritonidae	1	1	0
Salamandridae	10	8	1
Sirenidae	4	4	0
Order Gymnophiona			
Caeciliidae	7	2	5
Dermophiidae	4	3	0
Herpeliidae	1	0	1
Ichthyophiidae	5	5	0
Indotyphlidae	2	1	1
Rhinatreumatidae	2	0	1
Scolecomorphidae	1	1	0
Total in both orders	288	188	80

correct abbreviation for referencing the cataloged holdings in the NMNH.

There is a series of double entries in the museum ledgers for the Division of Amphibians and Reptiles that affects how some salamander types have been cited, particularly in Cochran (1961). Catalog numbers in the range of USNM 4684 to USNM 4737 had double entries. The first series of entries started on 22 January 1861 and was completed before 28 January 1861. It is not clear when the second set of entries was made. However, the entries must have been made before 1868 because the holotype of *Plethodon croceator* Cope, 1868 was originally entered under a different name and then annotated to the new name after it was published in early 1868.

In some instances, specimens originally cataloged with USNM numbers 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 of repositories are noted with the appropriate collection abbreviation in the accounts for each species. In addition, the location of type material listed in the original description but not deposited in the NMNH is indicated under “Other Type Material” using the museum abbreviations as originally published. The present location of this material (if known) is indicated in the remarks using the abbreviations for museum collections recommended by Sabaj (2020), except for abbreviations that changed or were not provided by those authors.

For private collections and institutions that were not listed in Sabaj (2020), the list of collections below includes the abbreviations used in original publications and the present deposition of those collections, if known.

AMNH	American Museum of Natural History, New York, New York
ANSP	Academy of Natural Sciences, Philadelphia, Pennsylvania
BCB	Bryce C. Brown Private Collection (now at BU-MMC)
BU-MMC	Baylor University, Mayborn Museum Complex (formerly Strecker Museum), Waco, Texas
BYU	Brigham Young University, Provo, Utah
CAS	Chicago Academy of Sciences, Chicago, Illinois (now CHAS)
CAS-SU	California Academy of Sciences, San Francisco, California (formerly SU, Stanford University collections, colocated with CAS)
CHAS	Chicago Academy of Sciences, Chicago, Illinois
ChM	Charleston Museum, Charleston, South Carolina
CFW	Charles F. Walker, private collection (deposition unknown)
CJG	Coleman J. Goin, private collection (now at CM)
CM	Carnegie Museum of Natural History, Pittsburgh, Pennsylvania
CMC	Cincinnati Museum Center, Cincinnati, Ohio
CNHM	Chicago Natural History Museum, Chicago, Illinois (now FMNH)
CNHS	Cincinnati Natural History Society, Cincinnati, Ohio (now at CMC)
CRBIIAP	Colección Referencial de Biodiversidad del Instituto de Investigaciones de la Amazonía, Peru
CSB	Clement S. Brimley, private collection (deposition unknown)
CSNH	Cincinnati Society of Natural History, Cincinnati, Ohio (now at CMC)
CU	Cornell University, Ithaca, New York (now CUMV)
CUMV	Cornell University Museum of Vertebrates, Ithaca, New York
DBUF	Department of Biology, University of Florida, Gainesville, Florida (now UF)
DMS	David M. Sever Herpetological Collection (now at UMMZ)
EDB	Estación Biológica de Doñana, Sevilla, Spain
EHT-HMS	Edward H. Taylor – Hobart M. Smith Collection (now deposited at FMNH, UIMNH, or USNM)
ERA-WTN	E. Ross Allen – Wilfred T. Neill Collection (now at UF)

FAS	Frederick A. Shannon Herpetological Collection (now at UIMNH)	PV	Percy Viosca Jr., private collection (deposition unknown)
FMNH	Field Museum of Natural History, Chicago, Illinois	SCB	Sherman C. Bishop, personal collection (now at FMNH)
FP	Floyd E. Potter Jr., private collection (deposition unknown)	SDNHM	San Diego Natural History Museum, San Diego, California
IRSNB	Institut royal des Sciences naturelles de Belgique, Brussels, Belgium	SIUC	Southern Illinois University Carbondale, Illinois
JWC	John W. Crenshaw, personal collection (deposition unknown)	SMF	Senckenberg Forschungsinstitut und Naturmuseum, Frankfurt, Germany
KU	University of Kansas, Lawrence, Kansas	SNHM	Stanford University Natural History Museum (now CAS-SU)
LACM	Natural History Museum of Los Angeles County, Los Angeles, California	SU	Stanford University, Stanford, California
LSUMZ	Louisiana State University Museum of Natural Science, Baton Rouge, Louisiana	TC	Trapido–Clausen field numbers (now at CU)
MBM	Milton B. Mittleman, private collection (deposition unknown)	TCWC	Texas Cooperative Wildlife Collection, College Station, Texas
MCZ	Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts	TNHC	Texas Natural History Collection, Texas Memorial Museum, Austin, Texas
MNHN	Muséum national d'Histoire naturelle, Paris, France	TU	Tulane University, New Orleans, Louisiana
MNSS	Museum of Natural and Social Sciences, Southern Illinois Normal University, Carbondale, Illinois	UA	Department of Biological Sciences, The University of Alabama, Tuscaloosa, Alabama
MPEG	Museu Paraense “Emílio Goeldi,” Belém, Brazil	UAZ	University of Arizona, Tucson, Arizona
MVZ	Museum of Vertebrate Zoology, University of California, Berkeley, California	UCM	University of Colorado Museum of Natural History, Boulder, Colorado
MZUF	Museo di Storia Naturale, collezioni della Sezione di Zoologia “La Specola,” Università di Firenze, Florence, Italy	UCR	University of Costa Rica, San José, Costa Rica
MZUSP	Museu de Zoologia da Universidade de São Paulo, São Paulo, Brazil	UF	University of Florida, Florida Museum of Natural History, Gainesville, Florida
NCSM	North Carolina Museum of Natural Sciences, Raleigh, North Carolina	UIMNH	University of Illinois Museum of Natural History, Urbana, Illinois
NMF Mag.	Undefined acronym listed in Eiselt and Lanza (1956)	UMMZ	University of Michigan, Museum of Zoology, Ann Arbor, Michigan
NMW	Naturhistorisches Museum Wien, Vienna, Austria	UR	University of Rochester, Museum of Natural History (now at FMNH)
OMNH	Osaka Museum of Natural History, Osaka, Japan	USNM	National Museum of Natural History (formerly the U.S. National Museum), Washington, D.C.
OSU	Oregon State University, Corvallis, Oregon (now OSUMNH)	UTA	University of Texas, Arlington, Texas
OSUM	Museum of Biological Diversity, Ohio State University, Columbus, Ohio	WCAB	Werner C. A. Bowerman Herpetological Collection (now at MZUSP)
OSUS	Oklahoma State University, Department of Zoology, Stillwater, Oklahoma		
OUVC	Ohio University, Vertebrate Collection, Athens, Ohio		
OUZ	Department of Zoology, Ohio University (now OUVC)		
PA	Undefined acronym listed in Mittleman (1947)		
PSM	Slater Museum of Natural History, University of Puget Sound, Tacoma, Washington		

FORMAT

The accounts are alphabetized by family within Caudata and Gymnophiona. The species within each family are presented in alphabetical order, and each is given exactly as the name appeared in its original description, except that diacritical marks have been deleted as recommended by the International Commission on Zoological Nomenclature (1999), Article 27. Following Reynolds et al. (2007), each entry in the catalog of types is formatted as follows, with the original name as published and 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, specific page or pages on which name appears.

Primary Type(s): USNM catalog number, locality data, collector(s), date collected.

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

Secondary Types: USNM catalog number, locality data, collector(s), date collected. This section will precede type locality when there are no USNM primary types.

Other Type Material: All known type specimens of the taxon at other institutions as listed in the original description.

Etymology: Derivation of the name (if known).

Remarks: Any additional data concerning the original description or type specimens.

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, followed by the first citation to use the currently accepted combination. If the species is currently accepted with the original name as described, that is indicated by the phrase "currently accepted" followed by the citation (or citations) that indicated that the species was valid. 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, the actual year of publication is followed by the year stated on the publication enclosed

in brackets. A list of the type material in the NMNH collection appears below the citation. The USNM specimens referenced are in the museum's fluid collections at present unless otherwise indicated in the Remarks. 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 by collection data, including locality, collector(s), and date of collection. If the date of collection is unknown, the date the specimen was cataloged at the USNM is indicated. The exact type locality as given in the original description is enclosed in quotation marks. It may be followed by additional explanatory locality information or subsequent restrictions or corrections of the type locality.

The section "Other Type Material" lists all known type specimens at other institutions as listed in the original description. The etymology provided for each scientific name is based on either the original description or an interpretation of how the name was derived. Remarks may include contradictory data about particular specimens, corrections of originally cited USNM catalog numbers or a listing of how the specimen was originally cited if not by USNM catalog number, information on specimens exchanged to other institutions, a listing of how type specimens from other institutions are presently cataloged (change in museum acronym or catalog number), and information pertaining to lost or destroyed type specimens.

Catalog of Type Specimens

Arranged alphabetically by order, family, genus, species, and subspecies

ORDER CAUDATA

FAMILY AMBYSTOMATIDAE

Amblystoma annulatum Cope, 1886

[= *Ambystoma annulatum* Cope, 1886; *fide*, Stejneger and Barbour, 1917: 8]

Cope, 1886, *Proc. Am. Philos. Soc.*, 23: 525.

Holotype: USNM 11564, no locality data, collector and date unknown, cataloged 16 Oct 1881.

Type Locality: “Unknown”; restricted to “vicinity of Hot Springs, Arkansas” by Schmidt (1953: 18).

Etymology: The name *annulatum* is from the Latin *annulus*, “ring,” and refers to the ringed color pattern of the species.

Amblystoma aterrimum Cope, 1868

[= *Dicamptodon aterrimus* (Cope, 1868); *fide*, Dunn, 1923b: 39; confirmed by Daugherty et al., 1983: 679]

Cope, 1868a [1867], *Proc. Acad. Nat. Sci. Philadelphia*, 19: 201.

Holotype: USNM 5242, North Rocky Mountains, Montana, collected by S. P. Hildreth and J. Mullan, 1860.

Type Locality: “North Rocky Mountains.” Cochran (1961) recorded the locality as “crossing of Bitter Root River, North Rocky Mountains (Montana),” but the source of this locality is unknown since the original ledger entry gives the locality only as “N. Rocky Mts.”

Etymology: The name *aterrimum* is from the Latin *ater*, “black,” and *-imus*, “having the quality of,” and refers to the black coloration of the dorsum of the specimen.

Amblystoma cingulatum Cope, 1868

[= *Ambystoma cingulatum* Cope, 1868; *fide*, Stejneger and Barbour, 1917: 8]

Cope, 1868a [1867], *Proc. Acad. Nat. Sci. Philadelphia*, 19: 205.

Holotype: USNM 3786, Grahamville, Jasper County, South Carolina, collected by Bailey, date unknown, cataloged 2 Aug 1858.

Type Locality: “Grahamville, S. Ca.”

Other Type Material: Neotype: USNM 129396, Robertsville, Jasper County, South Carolina, collected by Wilfred T. Neill, 17 Nov 1947. Neotype designation by Goin, 1950, *Ann. Carnegie Mus.*, 31: 308.

Etymology: The name *cingulatum* is from the Latin *cingulum*, “girdle,” and apparently refers to the coloration of the intercostal grooves mentioned in the original description.

Remarks: Goin (1950), in the belief that the holotype was lost, designated USNM 129396 as the neotype of *Amblystoma cingulatum* Cope, 1868, and it was listed as such in Cochran (1961). However, USNM 3786 was only misplaced within the collection. Since the holotype is still in existence, the neotype designation is invalid.

***Amblystoma copeianum* Hay, 1885**

[= *Ambystoma tigrinum* (Green, 1825); *fide*, Dunn, 1940: 156] Hay, 1885, *Proc. U.S. Natl. Mus.*, 8: 209.

Holotype: USNM 14112, Irvington, Marion County, Indiana, collected by G. H. Clark, 7 Apr 1885.

Type Locality: “Irvington, near Indianapolis.”

Etymology: The name *copeianum* is a patronym honoring Edward D. Cope, American herpetologist.

Remarks: The holotype was not listed by USNM number in the original description.

***Amblystoma decorticaum* Cope, 1886**

[= *Ambystoma gracile* (Baird, 1859); *fide*, Titus, 1990: 110] Cope, 1886, *Proc. Am. Philos. Soc.*, 23: 522.

Holotype: USNM 14493, Port Simpson, British Columbia, Canada, collected by T. H. Streets, 9 Dec 1885.

Type Locality: “Port Simpson, Alaska”; corrected to “Port Simpson, British Columbia” by Bishop (1943: 126).

Etymology: The name *decorticaum* is from the Latin *decoratus*, “adorned,” apparently in reference to the color pattern of the specimen.

***Amblystoma lepturum* Cope, 1886**

[= *Ambystoma cingulatum* Cope, 1868; *fide*, Schmidt, 1953: 18] Cope, 1886, *Proc. Am. Philos. Soc.*, 23: 524.

Holotype: USNM 14583, no locality data, collector and date of collection unknown, cataloged 1 Jul 1886.

Type Locality: “Unknown”; designated as “Jasper County, South Carolina” by Schmidt (1953: 18).

Etymology: The name *lepturum* is from the Greek *leptos*, “thin,” apparently in reference to the thin tail of this specimen mentioned in the original description.

***Amblystoma obscurum* Baird, 1868**

[= *Ambystoma tigrinum* (Green, 1825); *fide*, Garman, 1884: 36; confirmed by Dunn, 1940: 156]

Baird, 1868a, in Cope, 1868a [1867], *Proc. Acad. Nat. Sci. Philadelphia*, 19: 192.

Holotype: USNM 3994, Des Moines, Polk County, Iowa, collected by W. E. Moore, date unknown, cataloged 2 Aug 1858.

Type Locality: “Fort Des Moines, Iowa.”

Etymology: The name *obscurum* is from the Latin *obscurus*, “dark” or “indistinct,” apparently in reference to the dark, blotchy coloration of the type mentioned in the original description.

***Amblystoma paroticum* Baird, 1868**

[= *Ambystoma gracile* (Baird, 1859); *fide*, Dunn, 1926b: 135–136; confirmed by Dunn, 1944: 129]

Baird, 1868b, in Cope, 1868a [1867], *Proc. Acad. Nat. Sci. Philadelphia*, 19: 200.

Holotype: USNM 4708, Chilliwack, British Columbia, Canada, collected by A. Campbell, 1859.

Type Locality: “Chiloweyuck, W. T.”; corrected to “Chilliwack Lake, British Columbia” by Snyder (1963).

Paratypes: USNM 4709 (= USNM 248869), Puget Sound, Washington, collector unknown, date of collection and cataloging unknown; USNM 6634, Vancouver Island, coal mines, British Columbia, Canada, collected by A. W. Hewson, date of collection and cataloging unknown; USNM 7021, Puget Sound, Washington, collector and date of collection unknown, cataloged in 1867; USNM 4708 (in error, see Remarks), near Simiahmoo, collected by A. Campbell.

Etymology: The name *paroticum* is derived from the Latin *parotis*, “near the ear,” in reference to the enlarged parotid glands mentioned in the original description.

Remarks: USNM 4709 and USNM 6634 were not listed in Cochran (1961). USNM 4709 (now cataloged as USNM 248869 because of the double entries mentioned in the Introduction) was not listed in the table of specimens examined in the original description, but it was clearly mentioned and compared to the type within the text of the description. USNM 4707 was also mentioned near the end of the description, but this was probably a lapsus for USNM 4709 because USNM 4707 was actually an *Ambystoma* from Racine, Wisconsin, well outside of the range of *Ambystoma gracile*. The identification of USNM 4707 could not be checked as the specimen is apparently now lost and could not be found at the National Museum of Natural History. USNM 6634 is also lost; remarks in the original ledger at top of the page above USNM 7001 read “6601–7000 assigned to Mr. Cope in Phila, March 1867.” Apparently, the specimen with this catalog number was not returned upon Cope’s death.

In the original description, there were an additional two specimens listed under the number USNM 4708, but with the data of “near Simiahmoo, A. Campbell.” There is no indication in the original ledger entry for USNM 4708 of any additional specimens with different locality data.

There are no other specimens of *Ambystoma gracile* collected by A. Campbell at the National Museum of Natural History. There was a single specimen, USNM 6287, cataloged from “Simiahmoo, Puget Sound” and collected by C. B. R. Kennerly, that might possibly be one of these two specimens, but it is also lost.

Cochran (1961) listed USNM 4708 as USNM 4708a because of the double entry in the catalog ledger mentioned in the Introduction. This problem has now been solved, and this specimen retains the number as published. Also, Cochran (1961) listed USNM 4708a and USNM 7021 as cotypes (i.e., syntypes). It is very clear in the list of material in the original description that USNM 4708 was considered the “type” (i.e., holotype). Therefore, USNM 4709 (= USNM 248869), USNM 6634, USNM 7021, and the additional specimens listed as USNM 4708 must be considered paratypes.

***Amblystoma platineum* Cope, 1868**

[= *Amblystoma jeffersonianum* (Green, 1827); *fide*, Lazell, 1971: 54] Cope, 1868a [1867], *Proc. Acad. Nat. Sci. Philadelphia*, 19: 198. Possible Syntypes: USNM 3998 and USNM 39444 (recataloged from USNM 3988), Cleveland, Cuyahoga County, Ohio, collected by J. P. Kirtland, date unknown, cataloged 2 Aug 1858. (See Remarks.)

Type Locality: “Cleveland, Ohio.”

Other Type Material: Syntype: ANSP 1299. (See Remarks.)

Etymology: The name *platineum* is derived from the Latin *platina*, “silver,” in reference to the light gray coloration.

Remarks: In the original description, Cope (1868 [1867]) listed USNM 7145 and USNM 4688 in the list of material examined. In the text of the description, Cope identified USNM 7145 as the “type,” whereas USNM 4688 is contrasted with the type in three characters: distance between adpressed toes, length of tail, and coloration. However, the original ledger entry for USNM 7145 is a *Cnemidophorus* from Laredo, Texas, collected by W. Butcher. Neither USNM 4688 nor USNM 7145 can be found at the National Museum of Natural History. Cochran (1961) listed USNM 3998 and USNM 39444 (recataloged from USNM 3998) as syntypes of *Amblystoma platineum*, but there is little evidence to support this. In fact, Cope (1868 [1867]) did list USNM 3998 in the list of material examined for *A. jeffersonianum*, although he indicated that there were 12 specimens and that one of those was USNM 7145. Cope (1889) again listed USNM 3998 in his list of material for *A. jeffersonianum* but this time indicated that there were two specimens. He also listed USNM 7145 and 4688 in the list of material examined for *A. jeffersonianum platineum* in the 1889 publication. It is possible that both specimens are now lost and that the specimens listed by Cochran (1961) are, in fact, not part of the types. Fowler and Dunn (1917) listed ANSP 1299 as the “type” of *A. platineum*. However, other than having the same locality and collector as the data listed for USNM 7145 in Cope (1868 [1867]), there is no evidence that this specimen is part of the type series. Uzzell (1964) examined all the pertinent material and summarized the history of this problem. He examined ANSP 1299 and reidentified it as an *Amblystoma tremblayi* (= *A. laterale*?). He also examined both USNM 3998 and 39444 and determined that they were *A. jeffersonianum* or *A. platineum* (in his usage,

this name applied to triploid females associated with diploid *A. jeffersonianum*). He also felt that USNM 3998 originally contained two specimens, not 12 as listed by Cope (1868 [1867]), and that one of the two was to be recataloged as USNM 7145 to be the holotype, but the specimen was never recataloged. None of the evidence or Uzzell’s conjectures on the evidence show definitively that either of the two extant USNM specimens is the syntype of *A. platineum*.

***Amblystoma proserpine* Baird and Girard, 1852**

[= *Amblystoma mavortium* Baird, 1850; *fide*, Shaffer and McKnight, 1996: 430]

Baird and Girard, 1852b, *Proc. Acad. Nat. Sci. Philadelphia*, 6: 173.

Alleged Syntypes: USNM 4082 (three specimens), Tamaulipas, Mexico, no further locality data, collected by L. A. Edwards, date of collection unknown, cataloged 2 Aug 1858. (See Remarks.)

Type Locality: “At Salado, four miles from San Antonio, Texas” (six specimens) and “on the route from Montgomery, Mexico” (specimens). Restricted to “Salado River. 4 miles east of San Antonio, Bexar County,” Texas, by Smith and Taylor (1950: 360).

Other Type Material: Syntypes: six specimens collected “at Salado, four miles from San Antonio, Texas” and additional specimens collected “on the route from Montgomery, Mexico.” (See Remarks.)

Etymology: The name *proserpine* is derived from the name of the Latin goddess Proserpina, wife of Pluto and queen of the underworld. The name as originally published may have been a lapsus for *proserpina* as Baird (1859b) used the name *Amblystoma proserpina*, B. & G.

Remarks: The syntypes were not listed by number in the original description. No specimens with the original locality data presently exist at the National Museum of Natural History. The data for USNM 4082 do not match any locality mentioned in the original description, although Cope (1889) presented measurements of one specimen of USNM 4082 and indicated that it was the type of *Amblystoma proserpine*. In addition, one specimen of USNM 4082 is clearly the specimen illustrated in Baird (1859b: plate 35, figures 7–14). It is likely that Cope (1889) was misled into thinking that the illustrated specimen in Baird (1859b) was the type and that USNM 4082 specimens are not syntypes. Apparently, the syntypes of *Amblystoma proserpine* are no longer in existence.

***Amblystoma tenebrosus* Baird and Girard, 1852**

[= *Dicamptodon tenebrosus* (Baird and Girard, 1852); *fide*, Good, 1989: 728]

Baird and Girard, 1852c, *Proc. Acad. Nat. Sci. Philadelphia*, 6: 174.

Holotype: USNM 4710, Oregon, no further locality data, collector unknown, collected in 1841.

Type Locality: “Oregon.”

Etymology: The name *tenebrosus* is from the Latin *tenebrosus*, “dark” or “gloomy,” apparently in reference to the brown and nearly black marbled coloration mentioned in the original description.

Remarks: The holotype was not listed by USNM number in the original description, but USNM 4710 is the “type” according to Yarrow (1882: 152) and Cope (1868 [1867]: 204).

***Amblystoma trisruptum* Cope, 1868**

[= *Amblystoma mavortium* Baird, 1850; *fide*, Dunn, 1940: 158] Cope, 1868a [1867], *Proc. Acad. Nat. Sci. Philadelphia*, 19: 194. Holotype: USNM 4068, Ocate Creek, New Mexico, collected by J. Potts, date unknown, cataloged 2 Aug 1858.

Type Locality: “Ocate River, N. M.”

Etymology: The name *trisruptum* is derived from the Latin *tres*, “three,” and *ruptus*, “break,” apparently in reference to the intertooth intervals between the four groups of palatine teeth mentioned in the original description.

***Amblystoma xiphias* Cope, 1868**

[= *Amblystoma tigrinum* (Green, 1825); *fide*, Dunn, 1940: 156] Cope, 1868a [1867], *Proc. Acad. Nat. Sci. Philadelphia*, 19: 192. Holotype: USNM 14470, Columbus, Franklin County, Ohio, collected by L. Lesquereux, date unknown, cataloged 6 Mar 1886.

Type Locality: “Columbus, Ohio.”

Etymology: The name *xiphias* is from the Greek *xiphos*, “sword,” apparently in reference to the long tail mentioned in the original description.

Remarks: The holotype was erroneously published as USNM 4135 (USNM 4135 was actually an *Eumeces fasciatus* from “Eastern U.S.” and is now apparently lost). The holotype was cataloged as USNM 14470 on 6 Mar 1886 with a remark written in “Type.” Later, someone wrote in “= 4135,” and then later someone crossed that out and wrote in “Old no. illegible, but not 4135.”

***Amblystoma andersoni* Krebs and Brandon, 1984**

[currently accepted; *fide*, Liner, 1994: 8]

Krebs and Brandon, 1984, *Herpetologica*, 40: 238.

Paratypes: USNM 206926–206935, ditch leading from Laguna de Zacapu, Michoacan, Mexico, collected by R. Brandon and R. Altig, 24 May 1970.

Type Locality: “Laguna de Zacapu, 2000 m elevation, Michoacan, Mexico.”

Other Type Material: Holotype: AMNH A100096. Paratypes: AMNH A100095, A100097–A100108, A100820–A100827, A101541–A101545; TU 29068–29084.

Etymology: The name *andersoni* is a patronym honoring James D. Anderson, American herpetologist and the first to recognize the uniqueness of this taxon.

***Amblystoma cingulatum bishopi* Goin, 1950**

[= *Amblystoma bishopi* Goin, 1950; *fide*, Pauly et al., 2007: 424]

Goin, 1950, *Ann. Carnegie Mus.*, 31: 300.

Paratypes: USNM 42861, 57389, 57390, Mobile, Mobile County, Alabama, collected by J. Hurter, 15 Mar 1910.

Type Locality: “About five miles north of Pensacola, Escambia County, Florida.”

Other Type Material: Holotype: CM 29137. Paratypes: AMNH 54742; ANSP 26274, 26275; CAS 15550, 15551; CJG 1869; CM 29138–29144; DBUF 344, 2627; ERA-WTN 14004 (32 specimens); JWC 293; MCZ 26754, 26755; SCB 1546, 1547; TU 11824; UMMZ 73989, 77062, 100695, 100982, 100983.

Etymology: The name *bishopi* is a patronym honoring Sherman C. Bishop, American herpetologist.

Remarks: AMNH 54742 is presently cataloged as AMNH A-54742. CAS 15550 and 15551 are presently cataloged as CA 15550 and 15551. The paratype CM 29143 was exchanged to Werner C. A. Bokermann and cataloged as WCAB 38032 (presently at Museu de Zoologia da Universidade de São Paulo). The paratype CJG 1869 was listed as alive in the original description. That specimen and JWC 293 could not be located, and their final deposition is unknown. DBUF 344 (now UF 344) was published (in error) as DBUF 34 in the list of paratypes but was correctly listed as DBUF 344 in the table of counts and measurements in the original description; DBUF 34 (now UF 34) is actually a *Lithobates catesbeianus* from Alachua County, Florida (Kenneth L. Krysko, Florida Museum of Natural History, personal communication, 14 Jan 2010). Twenty-nine out of 32 specimens from ERA-WTN 14004 are now cataloged as UF 17521–17549. Then, UF 17530, 17538, and 17542 were later exchanged to the Museum of Comparative Zoology, where they are presently cataloged as MCZ A-44653–44655. Apparently, the additional three specimens out of ERA-WTN 14004 were sent to the American Museum of Natural History, where they are presently cataloged as AMNH A-108453–108455. SCB 1546 and 1547 are now cataloged as FMNH 84171 and 84172.

***Amblystoma episcopus* Baird, 1850**

[= *Amblystoma tigrinum* (Green, 1825); *fide*, Cope, 1868a [1867]: 179]

Baird, 1850 [1849], *J. Acad. Nat. Sci. Philadelphia*, ser. 2, 1: 293.

Holotype: USNM 43, Kemper County, Mississippi, collected by D. C. Lloyd, date of collection unknown, cataloged at USNM in 1856.

Type Locality: “Kemper County, Mississippi.”

Etymology: The name *episcopus* is from the Latin *episcopus*, “overseer” or “bishop.”

Remarks: The holotype was not listed by USNM number in the original description. However, USNM 43 is the probable holotype, as the locality data and collector do match the original description. Unfortunately, this specimen cannot be compared to the original description as it has been lost. The specimen may have been available to Hallowell (1858b)

as his account of this species includes details that were not mentioned in the original description.

***Ambystoma fluvinatum* Taylor, 1941**

[= *Ambystoma rosaceum* Taylor, 1941; *fide*, Smith and Taylor, 1948: 13]

Taylor, 1941d, *Copeia*, 1941: 144.

Paratype: USNM 137205, Mojarachic, Chihuahua, Mexico, collected by I. W. Knobloch, 1940. (See Remarks.)

Type Locality: “Mojarachic, Chihuahua, Mexico.”

Other Type Material: Holotype: EHT-HMS 25383. Paratypes: EHT-HMS 25384–25395. (See Remarks.)

Etymology: The name *fluvinatum* is derived from the Latin *fluvius*, “river,” and the Latin suffix *-atus*, “having the nature of,” apparently in reference to the stream habitat of the type specimens.

Remarks: USNM 137205 (formerly UIMNH 27234) was received in exchange from the University of Illinois Museum of Natural History and cataloged on 27 Oct 1955. It was listed as EHT-HMS 25392 in the original description. The holotype, EHT-HMS 25383, is presently in the Field Museum of Natural History, where it is now cataloged as FMNH 100108. Some of the paratypes EHT-HMS 25384–25395 are now cataloged as FMNH 100324–100331. Additional paratypes from EHT-HMS 25384–25395 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27231–27234. UIMNH 27234 was later exchanged to the U.S. National Museum (see above), and UIMNH 27233 was later exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-29616.

***Ambystoma granulosum* Taylor, 1944**

[currently accepted; *fide*, Tihen, 1958: 35]

Taylor, 1944a, *Univ. Kansas Sci. Bull.*, 30: 57.

Paratypes: USNM 116633–116647, 11 km W of Toluca, México State, México, collected by H. M. Smith, 10 Sep 1939; USNM 116648–116653, 15 km W of Toluca, México State, México, collected by H. M. Smith, 11 Sep 1939; USNM 137206, same locality data as holotype, collected Aug 1939. (See Remarks.)

Type Locality: “km. 74, about 12 miles northwest of Toluca, México, México.”

Other Type Material: Holotype: EHT-HMS 29805. Paratypes: EHT-HMS 24042–24250, 29804.

Etymology: The name *granulosum* is from the Latin *granum*, “seed,” and the Latin suffix *-osus*, “nature of,” in reference to the granular nature of the skin mentioned in the original description.

Remarks: USNM 137206 (formerly UIMNH 27230) was received in exchange from the University of Illinois Museum of Natural History and cataloged on 27 Oct 1955. It was listed as EHT-HMS 29804 in the original description. The original description states “collected with type”; however,

the collection date of the holotype in the original description was 10 Sep 1939, not Aug 1939 as recorded in the original ledger entry for USNM 137206. The holotype, EHT-HMS 25805, is presently in the Field Museum of Natural History, where it is now cataloged as FMNH 100106. Some of the paratypes EHT-HMS 24042–24250 are presently cataloged as FMNH 98784, 100278–100283, 102749, 102750–102837, 103720, 103756, 103764, 103771, 103772, 103775, 113817–113846, and 126498. Additional paratypes from EHT-HMS 24042–24250 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 22821–22835 and 27227–27230. Later, UIMNH 22831 was exchanged to the Carnegie Museum of Natural History, where it is presently cataloged as CM 39980; UIMNH 22833 was exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-29615; UIMNH 22835 was exchanged to the University of Michigan Museum of Zoology, where it is presently cataloged as UMMZ 117244; and UIMNH 27229 was exchanged to the Field Museum of Natural History, where it is presently cataloged as FMNH 75761. As mentioned above, UIMNH 27230 was exchanged to the U.S. National Museum, where it is presently cataloged as USNM 137206. However, this does not account for all of the paratypes from EHT-HMS 24042–24250; 64 specimens could not be located and must be considered missing.

***Ambystoma lacustris* Taylor and Smith, 1945**

[= *Ambystoma velasci* (Dugès, 1888); *fide*, Brandon, 1988: 428]

Taylor and Smith, 1945, *Proc. U.S. Natl. Mus.*, 95: 532.

Holotype: USNM 117410, Lake Texcoco, Mexico, Mexico, collected by H. M. Smith, 2 Mar 1939.

Type Locality: “Lake Zumpango, México” (in error, verified against H. M. Smith’s field ledger); corrected to “Lake Texcoco, Mexico, Mexico” by Cochran (1961: 6); this change was also verified by Brandon (1988: 428).

Paratype(s): USNM 116736–116749, 116751, 116753–116755, Zumpango, México State, México, collected by H. M. Smith, 3 Mar 1939; USNM 116750, 116752, Zumpango, México State, México, collected by H. M. Smith, 6 Sep 1939.

Other Type Material: Paratypes: EHT-HMS 22894–22910.

Etymology: The name *lacustris* is derived from the Latin *lacus*, “body of standing water,” in reference to the lake habitat of this species.

Remarks: USNM 116745 was not listed in Cochran (1961), although it was listed in the original description. Apparently, this is because the specimen was not present at the U.S. National Museum in 1961. An annotation in H. M. Smith’s field catalog for his field number 6294 reads “Sent to E. H. Taylor” and also that it was cataloged as USNM 116745. It appears that this specimen may actually have been sent to Taylor prior to the entry into the USNM catalog ledger. There is a specimen at the Field Museum of Natural History (FMNH 118801) with the same field number (S 6294) as the

one that was recorded in Smith's field catalog and the USNM catalog ledger, but there is no indication in Taylor's collection catalog that the specimen was ever cataloged at the U.S. National Museum or was a paratype of *Ambystoma lacustris* (Alan Resetar, Field Museum of Natural History, personal communication, 12 Jan 2010). It is possible that this resulted from a cataloging error at the U.S. National Museum and that this specimen was never actually cataloged there. The paratypes EHT-HMS 22895, 22897, 22900, 22901, 22903, 22904, 22906, 22907, and 22910 are presently cataloged as FMNH 126693–126701, whereas EHT-HMS 22894, 22898, 22902, 22905, and 22909 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27307–27311. Later, UIMNH 27308 was exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-29614; UIMNH 27310 was exchanged to the University of Michigan Museum of Zoology, where it is presently cataloged as UMMZ 117246; and UIMNH 27311 was exchanged to the American Museum of Natural History, where it is presently cataloged as AMNH A-59524. The paratypes EHT-HMS 22896, 22899, and 22908 could not be located and must be considered missing.

Ambystoma mabeei Bishop, 1928

[currently accepted; *fide*, Hardy and Anderson, 1970: 1]

Bishop, 1928b, *J. Elisha Mitchell Sci. Soc.*, 43: 157.

Holotype: USNM 75058, low grounds of Black River near Dunn, Harnett County, North Carolina, collected by W. Mabee, 12 May 1923.

Type Locality: "Low grounds of the Black River near Dunn, N. C."

Etymology: The name *mabeei* is a patronym honoring W. Mabee, the collector of the holotype.

Remarks: Bishop (1928b) mentioned a second specimen, a larva 63 mm in length collected by C. S. Brimley at Andrews, North Carolina, May 1908. However, he only tentatively identified this specimen to his new species, and it should probably be considered a referred specimen rather than a paratype. The present whereabouts of this specimen are unknown.

Ambystoma macrodactyla Baird, 1850

[= *Ambystoma macrodactylum macrodactylum* Baird, 1850; *fide*, Mittleman, 1948: 92]

Baird, 1850 [1849], *J. Acad. Nat. Sci. Philadelphia*, ser. 2, 1: 292.

Syntype: USNM 4042, Astoria, Clatsop County, Oregon, collected by J. K. Townsend, date unknown, cataloged 2 Aug 1858.

Type Locality: "Astoria, Oregon."

Other Type Material: Syntypes: "Specimens in the Academy of Natural Sciences of Philadelphia," according to the original description.

Etymology: The name *macrodactyla* is from the Greek *macro*, "long," and *daktylos*, "toe," in reference to the long toes mentioned in the original description.

Remarks: The original description was based on "Specimens in the Academy of Natural Sciences of Philadelphia"; however,

Malnate (1971) does not list any syntypes. There is no mention of any USNM specimens in the original description. USNM 4042 was received from the Academy of Natural Sciences, Philadelphia, and cataloged as "*Amblystoma macrodactyla*" with a locality of "Astoria." Later, the remark "Cotype" and the collector's name, "Dr. J. K. Townsend," were written in the ledger. According to Ferguson (1963), USNM 4042 may be the only surviving syntype.

Ambystoma macrodactylum columbianum Ferguson, 1961

[currently accepted; *fide*, Ferguson, 1963: 1]

Ferguson, 1961, *Am. Midl. Nat.*, 65: 313.

Holotype: USNM 142228, near a small lake 0.5 mile N of Anthony Lakes, Union County, Oregon.

Type Locality: "Near a small lake located 0.5 miles N. Anthony Lakes (SW 1/4 Sec. 7, R37E, T7S), Union Co., Oregon, (Elev. 7100 feet)."

Paratypes: USNM 142229–142246, same data as holotype. (See Remarks.)

Etymology: The name *columbianum* is derived from the distribution of this taxon within the Columbia River drainage basin.

Remarks: USNM 142241 was exchanged to the Museum of Comparative Zoology on 15 Nov 1961 and is presently cataloged as MCZ A-35562.

Ambystoma macrodactylum sigillatum Ferguson, 1961

[currently accepted; *fide*, Ferguson, 1963: 2]

Ferguson, 1961, *Am. Midl. Nat.*, 65: 316.

Holotype: USNM 142212, Crater Lake National Park, edge of Crater Lake, ~100 yards W of boat landing in Eagle Cove, Klamath County, Oregon, elevation 6170 feet, collected by D. E. Ferguson and O. W. Johnson, 28 Jul 1956.

Type Locality: "100 yards W. of the boat landing in Eagle Cove of Crater Lake, Klamath Co., Oregon, (Elev. 6170 feet)."

Paratypes: USNM 142213–142227, same data as holotype. (See Remarks.)

Etymology: The name *sigillatum* is from the Latin *sigillatus*, "adorned with figures," apparently in reference to the broken dorsal stripe and dorsal spots referred to in the original description.

Remarks: USNM 142222 was exchanged to the Museum of Comparative Zoology on 15 Nov 1961 and is presently cataloged as MCZ A-35563.

Ambystoma maculatum Hallowell, 1858

[= *Ambystoma mavortium* Baird, 1850; *fide*, Cope, 1868a [1867]: 184]

Hallowell, 1858a [1857], *Proc. Acad. Nat. Sci. Philadelphia*, 9: 215. Also described as new by Hallowell, 1858b, *J. Acad. Nat. Sci. Philadelphia*, ser. 2, 3: 355.

Possible Holotype: USNM 14481, New Mexico, no further locality data, collected by A. McClellan, date of collection unknown, cataloged 6 Mar 1886.

Type Locality: "New Mexico."

Etymology: The name *maculatum* is from the Latin *maculatus*, “spotted,” in reference to the spotted coloration.

Remarks: The holotype was probably originally in the collection of the Academy of Natural Sciences, Philadelphia, although that is not clearly indicated in the original description. Cope (1868 [1867]) indicated that the type was in the “Mus. Academy.” However, Malnate (1971) did not list any specimens of *Ambystoma maculatum* Hallowell, 1858. Gehlbach (1966) questioned whether USNM 14481 was the holotype, despite the match of locality and collector. His examination of the specimen revealed that it is slightly longer than reported by Hallowell (1858a [1857]): total length of $3\frac{7}{8}$ inches versus $3\frac{1}{2}$ inches, which brings into question whether USNM 14481 is the holotype or not. In addition, the Academy of Natural Sciences, Philadelphia, lists ANSP 1300 as the probable holotype of this taxon.

Ambystoma mavortia Baird, 1850

[= *Ambystoma mavortium mavortium* Baird, 1850; *fide*, Irschick and Shaffer, 1997: 44–45]

Baird, 1850 [1849], *J. Acad. Nat. Sci. Philadelphia*, ser. 2, 1: 292. Holotype: USNM 3990, New Mexico, no further locality data, collected by J. Le Conte, date of collection unknown, cataloged 2 Aug 1858.

Type Locality: “New Mexico” (probably the Rio Grande valley between Santa Fe, New Mexico, and El Paso, Texas; see Gehlbach, 1967: 2).

Etymology: The name *mavortia* is derived from the Latin god Mars (derivative *mavortial*, “warlike”).

Remarks: The holotype was not listed by number in the original description, although the type was recorded as “one specimen procured in New Mexico by Dr. Wislizenus while attached to Col. Doniphan’s expedition.” USNM 3990 was first listed as the type by Yarrow (1882: 149). The type status of this specimen was questioned by Cochran (1961), apparently because of the difference in collector between the original description and the original ledger entry.

Ambystoma nebulosum Hallowell, 1853

[= *Ambystoma mavortium nebulosum* Hallowell, 1853; *fide*, Irschick and Shaffer, 1997: 44–45]

Hallowell, 1853, *Proc. Acad. Nat. Sci. Philadelphia*, 6: 209.

Lectotype: USNM 4702, San Francisco Mountain, Coconino County, Arizona, collected by S. W. Woodhouse, date of collection unknown. Lectotype designation by Lowe (1955: 244).

Type Locality: “New Mexico”; corrected by Hallowell (1854: 144, 1858b: 352) to “San Francisco mountain, New Mexico” (near Flagstaff, Coconino County, Arizona; at the time, New Mexico Territory encompassed this region).

Other Type Material: Paralectotype: ANSP 1294. (See Remarks.)

Etymology: The name *nebulosum* is derived from the Latin *nebulosus*, “cloudy” or “dark,” in reference to the dark coloration of the body mentioned in the original description.

Remarks: The syntypes were not mentioned by number in the original description. The syntypes were USNM 4702 and ANSP 1294 according to Lowe (1955), who selected USNM 4702 as the “lectoholotype.” Cochran (1961) cited USNM 4702a as the holotype. Whether she was misled by Lowe’s designation of a lectoholotype or whether she felt that the USNM specimen was the one that had its measurements recorded in the original description and therefore was the “type” is not clear. What is clear is that Hallowell recorded two specimens without clearly designating either as the type, and therefore, Lowe’s selection of USNM 4702 as lectotype is valid.

Ambystoma ordinaria Taylor, 1940

[= *Ambystoma ordinarium* Taylor, 1940; *fide*, Smith and Taylor, 1948: 13]

Taylor, 1940a [1939], *Univ. Kansas Sci. Bull.*, 26: 422

Paratype: USNM 134276, 4 miles west of El Mirador, near Puerto Hondo, Michoacán, Mexico, collected by E. H. Taylor, 3 Sep 1938. (See Remarks.)

Type Locality: “Small stream at an elevation of about 9,000 feet, four miles west of El Mirador, near Puerto Hondo, Michoacán, Mexico.”

Other Type Material: Holotype: EHT-HMS 16367. Paratypes: EHT-HMS 16364–16366, 16367A, 16368–16370, 16372–16382, 16384–16386.

Etymology: The name *ordinaria* is from the Latin *ordinarius*, “of regular or usual manner,” apparently in reference to the ordinary or regular color pattern of this species.

Remarks: USNM 134276 (formerly UIMNH 27321) was received in exchange from the University of Illinois Museum of Natural History and was cataloged on 10 Mar 1954. It was listed as EHT-HMS 16384 in the original description. The holotype, EHT-HMS 16367, is presently in the Field Museum of Natural History, where it is now cataloged as FMNH 100055. Some of the paratypes EHT-HMS 16364–16366, 16367A, 16368–16370, 16372–16382, and 16384–16386 are presently cataloged as FMNH 126572–126578. Additional paratypes from EHT-HMS 16364–16366, 16367A, 16368–16370, 16372–16382, and 16384–16386 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27315–27321, 30653, 30654, and 32581. UIMNH 27321 was later exchanged to the U.S. National Museum (see above). UIMNH 27319 was exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-29613. UIMNH 27320 was exchanged to the Field Museum of Natural History, where it is presently cataloged as FMNH 75762. UIMNH 27318 was exchanged to the Senckenberg Forschungsinstitut und Naturmuseum, where it is presently cataloged as SMF 53180. However, this does not account for all of the paratypes; EHT-HMS 16377, 16381, and 16382 could not be located and must be considered missing. In addition to the above specimens, EHT-HMS 16363 was

cataloged as UIMNH 27314 and was listed as a paratype by Smith et al. (1964). This specimen was then exchanged to the Carnegie Museum of Natural History, where it is presently cataloged as CM 39982 and listed in their database as a paratype. However, EHT-HMS 16363 was not in the list of paratypes in the original description.

***Ambystoma rosaceum nigrum* Shannon, 1951**

[= *Ambystoma rosaceum* Taylor, 1941; *fide*, Anderson, 1961: 375] Shannon, 1951, *Proc. U.S. Natl. Mus.*, 101: 466.

Holotype: USNM 123581, ~0.5 mile E of El Salto, ~3 miles below 75 foot falls in El Salto Creek, Durango, Mexico, collected by R. Miller, 8 May 1946.

Type Locality: “El Salto, Durango.”

Etymology: The name *nigrum* is from the Latin *nigrum*, “black” or “dark,” in reference to the dark coloration of the holotype mentioned in the original description.

***Ambystoma rosaceum sonoriensis* Shannon, 1951**

[= *Ambystoma rosaceum* Taylor, 1941; *fide*, Anderson, 1961: 375] Shannon, 1951, *Proc. U.S. Natl. Mus.*, 101: 468.

Holotype: USNM 17253, 32 miles S of Nogales, Pinetos Camp, Mexico, Sonora, collected by P. Jouy, 14 Jun 1891.

Type Locality: “Sonora, Mexico, 32 miles south of the Arizona border.”

Paratypes: USNM 17254–17256, same data as holotype, except USNM 17256 was collected 17 Jun 1891. (See Remarks.)

Etymology: The name *sonoriensis* is derived from the type locality of Sonora, Mexico. Frost (2021) pointed out the incorrect gender of the subspecies name, which should be *sonoriense*.

Remarks: USNM 17254 was exchanged to the Museum of Comparative Zoology on 7 Aug 1958 and is presently cataloged as MCZ A-30598. USNM 17256 was exchanged to the University of Illinois Museum of Natural History (Smith et al., 1964: 6), where it is now cataloged as UIMNH 34758. However, the details of this exchange were apparently lost prior to 1961 since there was no mention of the specimen in Cochran (1961).

***Ambystoma stejnegeri* Ruthven, 1912**

[= *Ambystoma macrodactylum krausei* Baird, 1850; *fide*, Mittleman, 1948: 92]

Ruthven, 1912, *Proc. U.S. Natl. Mus.*, 41: 517.

Holotype: USNM 48598, Bloomfield, Davis County, Iowa, collected by G. H. Berry, 27 Jul 1906.

Type Locality: “Bloomfield, Davis County, Iowa.”

Paratype: USNM 48599, same data as holotype.

Other Type Material: Paratypes: UMMZ 41971, 41972.

Etymology: The name *stejnegeri* is a patronym for Leonhard Stejneger, American herpetologist and former curator of herpetology at the U.S. National Museum.

Remarks: Mittleman (1948) and Ferguson (1963) questioned the type locality of “Bloomfield, Davis County, Iowa.” However, Ruthven (1912) indicated that he wrote to the

collector to verify the locality record and the collector sent an additional three specimens and habitat data, indicating that it was unlikely an error in recording the locality. Reeve Bailey examined the type specimens and verified that they were indistinguishable from western *Ambystoma macrodactylum* (Gregory Schneider, University of Michigan Museum of Zoology, personal communication, 19 Aug 2009). Bailey also visited the type locality, and although he did not manage to collect additional specimens, he did come up with a reasonable explanation for the presence of this northwestern species in Iowa. The type locality is adjacent to a railroad where logs and lumber were off-loaded. Bailey believes that specimens were introduced with logs carried by rail from the Northwest.

***Ambystoma subsalsum* Taylor, 1943**

[currently accepted; *fide*, Smith and Taylor, 1948: 11; confirmed by Webb, 2004: 125–131]

Taylor, 1943a, *Copeia*, 1943: 152.

Paratypes: USNM 116702, Alchichica, Puebla, México, collected by H. M. Smith, 21 Mar 1940; USNM 116703, 116704, 134277, Laguna Alchichica, Puebla, México, collected by E. H. Taylor and D. M. Forbes, 14–15 Aug 1942. (See Remarks.)

Type Locality: “Lake Alchichica, Puebla.”

Other Type Material: Holotype: EHT-HMS 22139. Paratypes: EHT-HMS 24013, 24014, 28357–28390. (See Remarks.)

Etymology: The name *subsalsum* is from the Latin prefix *sub-*, “under,” and *salsus*, “salty,” in reference to the brinish water of Lake Alchichica, the type locality.

Remarks: USNM 116702 was listed as “U. S. National Museum No. 12989”; this number is actually an H. M. Smith field number. The correct number was listed in the heading for figure 1 in Taylor (1943a). USNM 116703 and 116704 were listed as EHT-HMS 28366 and 28379, respectively. USNM 134277 was received in exchange from the University of Illinois Museum of Natural History (formerly UIMNH 27326) and cataloged on 10 Mar 1954. It was listed as EHT-HMS 28367 in the original description. USNM 116702–116704 were not listed in Cochran (1961), apparently because they were never received at the National Museum of Natural History. The specimens were at the Field Museum as FMNH 136930–126932 (Brandon et al., 1982 [1981]). They were returned to the National Museum of Natural History in 1981. The holotype, EHT-HMS 22139, is presently in the Field Museum of Natural History, where it is cataloged as FMNH 100007. Some of the paratypes EHT-HMS 24013, 24014, and 28357–28390 are now cataloged as FMNH 126514–126536 and 126930–126932. Additional paratypes from EHT-HMS 24013, 24014, and 28357–28390 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27323–27333. UIMNH 27326 was later exchanged to the U.S. National Museum (see above). UIMNH

27325 was exchanged to the Carnegie Museum of Natural History, where it is now cataloged as CM 39981. UIMNH 27329 was exchanged to the Museum of Comparative Zoology, where it is now cataloged as MCZ A-29612. UIMNH 27330 was exchanged to the University of Michigan Museum of Zoology, where it is now cataloged as UMMZ 117245. UIMNH 27331 was exchanged to the American Museum of Natural History, where it is now cataloged as AMNH A-59525. UIMNH 27332 was exchanged to the Field Museum of Natural History, where it is now cataloged as FMNH 75763.

***Ambystoma taylori* Brandon, Maruska, and Rumph, 1982**

[currently accepted; *fide*, Liner 1994: 9]

Brandon, Maruska, and Rumph, 1982 [1981], *Bull. S. California Acad. Sci.*, 80: 116.

Paratypes: USNM 116702, Alchichica, Puebla, México, collected by H. M. Smith, 21 Mar 1940. USNM 116703, 116704, 134277, Laguna Alchichica, Puebla, México, collected by E. H. Taylor and D. M. Forbes, 14–15 Aug 1942; USNM 336886–336896, Laguna Alchichica, 19°25'N, 71°24'W, Puebla, México, collected by R. Altig, 21 Dec 1970. (See Remarks.)

Type Locality: “Laguna Alchichica, Puebla, México, ca. 24 km SW Perote.”

Other Type Material: Holotype: FMNH 212392. Paratypes: CM 39981; FMNH 75763, 126514–126536, 126930–126932; MCZ 29612; UIMNH 27323, 27324, 27327, 27328, 27333, 48988; UMMZ 117425.

Etymology: The name *taylori* is a patronym for Edward H. Taylor, American herpetologist and original describer of the Lake Alchichica population.

Remarks: USNM 116702–116704 were listed as FMNH 126930–126932 in the original description. USNM 336886–336896 were listed as SIUC H-3207–3220 in the original description.

***Ambystoma tigrinum diaboli* Dunn, 1940**

[= *Ambystoma mavortium diaboli* Dunn, 1940; *fide*, Irschick and Shaffer, 1997: 44–45]

Dunn, 1940, *Copeia*, 1940: 160.

Paratype: USNM 13394, Ottawa, Ontario, Canada, collected by R. Bell, 21 Apr 1883.

Type Locality: “Devil’s Lake, North Dakota.”

Other Type Material: Holotype: UMMZ 50156. Paratypes: UMMZ 50157. Original description lists “69 adults from North Dakota (10 from Devil’s Lake) . . . Twenty larvae from North Dakota . . . From Canada I have seen 18.”

Etymology: The name *diaboli* is from the Latin *diabolis*, “devil,” in reference to the type locality, Devil’s Lake.

Remarks: According to the original description, Dunn saw a total of 107 specimens (including USNM 13394, although he doubted the locality data for that specimen). He gave no indication where most of these specimens were deposited, and many may not agree that all the materials examined are

paratypes. However, in the original description, he discussed variation in size and coloration and gave a geographic range for this taxon. By the definition in Article 72 of the International Code of Zoological Nomenclature (International Commission on Zoological Nomenclature, 1999), all the specimens examined must be considered part of the type series and are therefore paratypes. Only one other possible paratype was found by querying other museums. MCZ A-15047 is listed in their database as a possible paratype.

***Ambystoma tigrinum slateri* Dunn, 1940**

[= *Ambystoma mavortium melanostictum* Baird, 1850; *fide*, Irschick and Shaffer, 1997: 44–45]

Dunn, 1940, *Copeia*, 1940: 159.

Holotype: USNM 108982, 5 miles SE of Coulee Dam, Grant County, Washington, collected by J. R. Slater, date of collection unknown, cataloged 9 Apr 1940.

Type Locality: “Five miles southeast of Coulee Dam, Grant County, Washington.”

Etymology: The name *slateri* is a patronym for Professor James R. Slater, collector of the holotype.

Remarks: USNM 108982 was listed as College of Puget Sound 2489 in the original description. According to the original description, Dunn saw a total of 205 specimens. He gave no indication where most of these specimens were deposited, and many may not agree that all the materials examined are paratypes. However, in the original description, he discussed the geographic distribution and life history stages of the specimens examined as well as variation in coloration and gave a geographic range for this taxon. By the definition in Article 72 of the International Code of Zoological Nomenclature (International Commission on Zoological Nomenclature, 1999), all the specimens examined must be considered part of the type series and are therefore paratypes. No paratypes were found by querying other museums.

***Ambystoma tigrinum stebbinsi* Lowe, 1954**

[= *Ambystoma mavortium stebbinsi* Lowe, 1954; *fide*, Irschick and Shaffer, 1997: 44–45]

Lowe, 1954, *Proc. Biol. Soc. Washington*, 67: 243.

Paratype: USNM 134131, J. A. Jones Ranch, mouth of Parker Canyon, Huachuca Mountains, Santa Cruz County, Arizona, collected by C. H. Lowe Jr., 4 Nov 1950.

Type Locality: “J.A. Jones Ranch, in Parker Canyon, southwest side of the Huachuca Mountains, ca. 5,000 feet, Santa Cruz County, Arizona.”

Other Type Material: Holotype: UA 665. Paratypes: UA 666–671; “one each to each of the following: F. A. Shannon Herpetological Collection, Wickenburg, Arizona; University of California, Museum of Vertebrate Zoology, Berkeley; Chicago Natural History Museum; U. S. National Museum.” (See Remarks.)

Etymology: The name *stebbinsi* is a patronym honoring Robert C. Stebbins, American herpetologist.

Remarks: The holotype UA 665 is presently cataloged at the University of Arizona, Museum of Natural History, as UAZ 53728. The six paratypes UA 666–671 are presently cataloged as UAZ 21204 and 53723–53727. The paratype deposited at the U.S. National Museum is listed above. The paratypes deposited at the Museum of Vertebrate Zoology and the Chicago Natural History Museum are presently cataloged as MVZ 57057 and FMNH 72597, respectively. The one paratype deposited in the F. A. Shannon Herpetological Collection was later deposited at the University of Illinois Museum of Natural History, where it is presently cataloged as UIMNH 66936.

***Dicamptodon copei* Nussbaum, 1970**

[currently accepted; *fide*, Nussbaum, 1983: 1]

Nussbaum, 1970, *Copeia*, 1970: 506.

Holotype: USNM 166784, Maratta Creek, 85 m upstream from bridge on State Highway 504, SW Quarter Sec. 3, T.9 N, R.4 E., 46°17'N, 122°18'W, 840 m elevation, Cowlitz County, Washington, collected 20 Jun 1969.

Type Locality: “Mar(r)atta Creek, 85 m upstream from bridge on state highway 504, SW 1/4 Sec. 3, T. 9 N., R. 4 E., 46° 17'N, 122° 18'W, 840 m elevation, Cowlitz County, Washington.”

Paratypes: USNM 166785, 166789, 166792, 166793, 166795, same locality and collector as holotype, except collected 21 Aug 1967; USNM 166786, 166787, same locality and collector as holotype, except collected 22 Aug 1968; USNM 166786, 166794, 166796–166798, 166801, 166804, 166808, 166809, 166813, same locality and collector as holotype, except collected 10 Jun 1963; USNM 166790, 166791, 166799, 166800, 166802, 166803, 166805–166807, 166810–166812, 166814, same locality and collector as holotype, except collected 17 Sep 1967. (See Remarks.)

Etymology: The name *copei* is a patronym honoring Edward D. Cope, American herpetologist.

Remarks: USNM 166799, 166802, and 166809 were exchanged to the Field Museum of Natural History on 14 Jan 1974 and are now cataloged as FMNH 196741–196743, respectively. USNM 166786, 166807, and 166811 were exchanged to the Natural History Museum of Los Angeles County on 14 Jan 1974 and are now cataloged as LACM 99480–99482, respectively. USNM 166810 was exchanged to the Museum of Comparative Zoology on 19 Apr 1976 and is presently cataloged as MCZ A-89457.

***Rhyacosiredon leorae* Taylor, 1943**

[= *Ambystoma leorae* (Taylor, 1943); *fide*, Brandon, 1989: 18; confirmed by Reilly and Brandon, 1994: 656–662]

Taylor, 1943b, *Univ. Kansas Sci. Bull.*, 29: 345.

Paratypes: USNM 116629–116632, 24 km W of Texmelucan, Puebla, México, collected by D. M. Forbes, 7 Oct 1939.

Type Locality: “Mountain stream near Río Frío, México, either in the state of Puebla or México (Balsas River drainage system).”

Other Type Material: Holotype: EHT-HMS 22560. Paratype: EHT-HMS 22561. (See Remarks.)

Etymology: The name *leorae* is a matronym for Leora T. Forbes, wife of the collector of the type series.

Remarks: The holotype, EHT-HMS 22560, is presently in the Field Museum of Natural History, where it is now cataloged as FMNH 100041, whereas the paratype, EHT-HMS 22561, is presently cataloged as FMNH 100739.

***Rhyacosiredon rivularis* Taylor, 1940**

[= *Ambystoma rivulare* (Taylor, 1940); *fide*, Brandon, 1989: 18; confirmed by Reilly and Brandon, 1994: 658]

Taylor, 1940b, *Herpetologica*, 1: 171.

Paratype: USNM 137209, 8 miles W of Villa Victoria, México, México, collected by E. H. Taylor, 11 Sep 1938.

Type Locality: “About 13 km. west of Villa Victoria, México, in a small stream in pine forest.”

Other Type Material: Holotype: EHT-HMS 16388. Paratypes: EHT-HMS 16387, 16389–16393. (See Remarks.)

Etymology: The name *rivularis* is derived from the Latin *rivulus*, “small stream,” in reference to the stream habitat of this species.

Remarks: USNM 137209 was received in exchange from the University of Illinois Museum of Natural History (formerly UIMNH 27241) and cataloged on 27 Oct 1955. It was listed as EHT-HMS 16390 in the original description. The holotype, EHT-HMS 16388, is presently in the Field Museum of Natural History, where it is cataloged as FMNH 100003, whereas the paratypes EHT-HMS 16389, 16391, and 16392 are presently cataloged as FMNH 100837–100839. The paratype EHT-HMS 16387 is presently cataloged as UIMNH 27240, EHT-HMS 16390 was cataloged as UIMNH 27241 and then later exchanged to the U.S. National Museum (see above), and EHT-HMS 16393 was cataloged as UIMNH 27242 and then later exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-29617.

***Rhyacosiredon zempoalaensis* Taylor and Smith, 1945**

[= *Ambystoma altamirani* Dugès, 1895; *fide*, Reilly and Brandon, 1994: 657]

Taylor and Smith, 1945, *Proc. U.S. Natl. Mus.*, 95: 527.

Holotype: USNM 116617, Lakes of Zempoala, Morelos, México, collected by H. M. Smith, 22 Feb 1939.

Type Locality: “At the Lakes of Zempoala, Morelos, México, in a nearly dry lake bed, elevation about 10,000 feet.”

Paratypes: USNM 116614, same locality and collector as holotype, collected 21 Feb 1939; USNM 116615, 116616, 116618–116623, same data as holotype; USNM 116624–116628, same locality and collector as holotype, collected 24 Feb 1939.

Other Type Material: Paratypes: EHT-HMS 22172–22190, 24630–24634.

Etymology: This species was named for the Lakes of Zempoala, the type locality.

Remarks: The date of collection of the holotype, USNM 116617, was published as 24 Feb 1939, but H. M. Smith's field notes

give the date of collection as 22 Feb 1939. USNM 116615 was exchanged to W. C. A. Bokermann on 29 Apr 1968 (present whereabouts unknown). Some of the paratypes EHT-HMS 22172–22190 and 24630–24634 are presently cataloged as FMNH 104132–104142 and 126489–126492. Additional paratypes from EHT-HMS 22172–22190 and 24630–24634 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27245–27250. Later, UIMNH 27250 was exchanged to the Field Museum of Natural History, where it is presently cataloged as FMNH 75775. UIMNH 27249 was exchanged to Stanford University, where it was cataloged as SU 17789. It was later transferred to the California Academy of Sciences, where it is presently cataloged as CAS-SU (Amp) 17789. UIMNH 27248 was exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-29618. UIMNH 27246 was exchanged to the Senckenberg Forschungsinstitut und Naturmuseum, where it is presently cataloged as SMF 53184. The paratypes EHT-HMS 22172, 22176, and 22187 could not be located and must be considered missing.

Salamandra granulata De Kay, 1842

[= *Ambystoma jeffersonianum* (Green, 1827); *fide*, Cope, 1868a [1867]: 195]

De Kay, 1842a in Holbrook, 1842, *N. Am. Herpetol.*, 2nd ed., 5: 63.

Syntypes: USNM 3981 (two specimens), New York, no further locality data, collector and date of collection unknown, cataloged 2 Aug 1858. (See Remarks.)

Type Locality: “The northern districts of New York.”

Etymology: The name *granulata* is derived from the Latin *granum*, “seed” or “pellet,” in reference to the granulated skin mentioned in the original description.

Remarks: Adler (1976) discussed whether De Kay (1842a) in Holbrook (1842) or De Kay (1842b) was published first and concluded that De Kay (1842a) in Holbrook (1842) appeared in print first. Whichever was published first, the syntypes were not listed by number in either of the descriptions. De Kay (1842a) listed measurements of a single specimen with a total length of 6 inches, 9 lines (approximately 6¾ inches), whereas De Kay (1842b) listed the same series of measurements and then mentioned another smaller specimen (or specimens; the text switches from plural to singular) with a length of 3 inches, 3 lines (approximately 3¼ inches). Cope (1868a) listed USNM 3989 (apparently in error) as the type of *Salamandra granulata*. This was apparently a lapsus for USNM 3981 because the original ledger entry for USNM 3981 has “De Kay’s Orig.” in remarks, and the original ledger entry for USNM 3989 is blank, and no specimen with this number can be found. However, the original ledger entry had the identification of “*Amblystoma opacum*.” This was later crossed out, and the identification “*Amblystoma jeff. jeff.*” (= *Ambystoma jeffersonianum jeffersonianum*) was entered above the original entry. This confusion is

probably due to the fact that there were apparently two jars with specimens tagged USNM 3981. Yarrow (1882) listed one specimen of “*Amblystoma opacum*” and two specimens of “*Ambystoma jeffersonianum jeffersonianum*” under the number USNM 3981. The specimen of *Ambystoma opacum* was recataloged as USNM 39440 on 19 Feb 1910 but still has its original catalog tag numbered 3981 attached. At this time, there are two specimens of *Ambystoma jeffersonianum* presently tagged as USNM 3981. The larger one is approximately 6 inches in total length, and the smaller is ~2¾ inches. Both have had the tip of the tail broken off, but the pieces are still present, enabling the measurements recorded above. The discrepancies between the measurements recorded in De Kay (1842b) and the recent measurements are probably due to shrinkage during the approximately 150 years that the specimens have been in preservative.

Salamandra jeffersoniana Green, 1827

[= *Ambystoma jeffersonianum* (Green, 1827); *fide*, Dunn, 1918: 458]

Green, 1827, *Contrib. Maclurian Lyc. Arts Sci.*, 1: 4.

Possible Holotype: USNM 3968, western Pennsylvania, collected by J. Green, date unknown, cataloged 2 Aug 1858.

Type Locality: “Near Chartier’s creek in the vicinity of Jefferson College at Cannonsburg,” Washington County, Pennsylvania.

Etymology: The species is named after Jefferson College.

Remarks: The type was not listed in the original description, but it is clear from the original description that it was based on a single specimen. USNM 46 was a specimen of *Ambystoma jeffersonianum* collected at Canonsburg, Pennsylvania, “from Dr. Green’s Cabinet,” and according to the remarks in the original ledger entry was the “Type of sp.” Unfortunately, no specimen can be found bearing the catalog number USNM 46. USNM 3968 was stated to be the “type” by Yarrow (1882: 150) and Cope (1889: 94). The original ledger entry for USNM 3968 gives the locality as “Western Penna.”; Cochran (1961) recorded the locality as “near Chartier’s Creek, at Canonsburg, Washington County, Pennsylvania,” and these locality data are also penciled into the ledger in Cochran’s handwriting. This was apparently based on the assumption that USNM 3968 is the holotype and therefore must be from the type locality. Pyron and Beamer (2020) compared USNM 3968 to the figure of the presumed holotype, plate 1 in Green (1927), and concluded that USNM 3968 and the figured specimen were the same and therefore USNM 3968 is actually the specimen that Green used in his original description.

Salamandra lurida Sager, 1839

[= *Ambystoma tigrinum* (Green, 1825); *fide*, Cope, 1868a [1867]: 179]

Sager, 1839, *Am. J. Sci. Arts*, 36: 323.

Holotype: USNM 39442, Detroit, Michigan, collected by A. Sager, date of collection unknown, cataloged (as USNM 3899) 2 Aug 1858. (See Remarks.)

Type Locality: None given.

Paratypes: USNM 3899, 3970, Detroit, Michigan, collected by A. Sager, date of collection unknown, cataloged 2 Aug 1858.

Etymology: The name *lurida* is from the Latin *luridus*, "pale yellow," in reference to the pale yellow ventral pigmentation.

Remarks: Sager (1839) did not indicate how many specimens he had of his new form, but he presented measurements of only one specimen. USNM 3899 (two specimens) and USNM 3970 were cataloged with the remarks "Type of *lurida* ?." The original entry for USNM 3899 had two specimens, one of which agreed in measurements with Sager's description of *Salamandra lurida*. This specimen was considered to be the holotype and was recataloged on 23 Feb 1910 as USNM 39442. It is not clear whether that specimen should be considered the holotype or whether all three specimens should be considered syntypes.

Siredon dumerilii Dugès, 1870

[= *Ambystoma dumerilii* (Dugès, 1870); *fide*, Brandon, 1992: 1] Dugès, 1870, *Naturaleza*, 1: 241.

Syntypes: USNM 16201–16202, Lake Patzcuaro, Michoacan, Mexico, collected by A. Dugès, date of collection unknown, cataloged 30 Jun 1890.

Type Locality: "Laguna de Patzcuaro," Michoacán, Mexico.

Other Type Material: Syntypes: ANSP 13862; unnumbered specimen in the Alfredo Dugès Museum, University of Guanajuato.

Etymology: The name *dumerilii* is a patronym for Auguste Dumeril, French herpetologist.

Siredon gracilis Baird, 1859

[= *Ambystoma gracile* (Baird, 1859); *fide*, Dunn, 1926b: 136] Baird, 1859a [1857], *Rep. Explor. Surv. Route Railroad Mississippi-Pacific Ocean*, 10 (Part 4, no. 4): 13.

Syntypes: USNM 4080 (two specimens), Cascade Mountains, near latitude 44°N, Oregon, collected by J. S. Newberry and R. S. Williamson, date of collection unknown, cataloged 2 Aug 1858.

Type Locality: "Cascade Mountains, near latitude 40°."

Etymology: The name *gracilis* is from the Latin *gracilis*, "slender" or "thin," in reference to the slender body mentioned in the original description.

Remarks: The syntypes were not listed by number in the original description.

Siredon lermaensis Taylor, 1940

[= *Ambystoma lermaense* (Taylor, 1940); *fide*, Tihen, 1958: 3, 37] Taylor, 1940a [1939], *Univ. Kansas Sci. Bull.*, 26: 427.

Paratype: USNM 134297, Lake Lerma, E of Toluca, México, México, collected by E. H. Taylor and H. M. Smith, 1939. (See Remarks.)

Type Locality: "Lake Lerma, east of Toluca, México."

Other Type Material: Holotype: EHT-HMS 22578. Paratypes: EHT-HMS 15436–15440, 22571–22577, 22579–22586.

Etymology: The species was named after Lake Lerma, the type locality.

Remarks: USNM 134297 (formerly UIMNH 27236) was received in exchange from the University of Illinois Museum of Natural History and cataloged on 27 Oct 1955. It was listed as EHT-HMS 22574 in the original description. The holotype, EHT-HMS 22578, is presently in the Field Museum of Natural History, where it is cataloged as FMNH 100029. Some of the paratypes EHT-HMS 14536–14540, 22571–22577, and 22579–22586 are presently cataloged as FMNH 126553, 126642–126645, and 126893–126900. Additional paratypes from EHT-HMS 22571–22577 and 22579–22586 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27235–27239. Later, UIMNH 27236 was exchanged to the U.S. National Museum (see above). UIMNH 27237 was exchanged to Stanford University, where it was cataloged as SU 17788. It was later transferred to the California Academy of Sciences, where it is presently cataloged as CAS-SU (Amp) 17788. UIMNH 27238 was exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-29619. Paratypes EHT-HMS 15436 and 22582 could not be located and must be considered missing.

Siredon lichenoides Baird and Girard, 1852

[= *Ambystoma mavortium* Baird, 1850; *fide*, Fowler and Dunn, 1917: 8]

Baird and Girard, 1852a, *Proc. Acad. Nat. Sci. Philadelphia*, 6: 68.

Syntypes: USNM 4061 (two specimens), Santa Fe Creek, Santa Fe County, New Mexico, collected by R. H. Kern, date of collection unknown, cataloged 2 Aug 1858.

Type Locality: "In a lake at the head of Santa Fé Creek, in New Mexico."

Etymology: The name *lichenoides* is from the Greek *leichen*, "lichen," and is in reference to the variegated, lichenous color pattern of this species.

Siredon melanosticta Baird, 1859

[= *Ambystoma mavortium* Baird, 1850; *fide*, Bishop, 1942: 256] Baird, 1859c, in Cooper and Suckley, 1859, *The Natural History of Washington*, 306.

Holotype: USNM 4073, "100 miles E of Fort Union," North Dakota, collected by G. Suckley, date of collection unknown, cataloged 2 Aug 1858.

Type Locality: "Between Fort Union and Fort Benton, Nebraska"; restricted to "100 miles west of Fort Union, North Dakota; this is in the Missouri River valley near Frazer, Valley County, Montana," by Gehlbach (1966: 881).

Other Type Material: USNM 7043, 100 miles west of Fort Union, collected by G. Suckley, date of collection unknown, cataloged in 1867 (holotype according to Gehlbach, 1966: 881; see Remarks).

Etymology: The name *melanosticta* is from the Greek *melanos*, "black," and *stictos*, "spotted," in reference to the dark, spotted color pattern of the type specimen.

Remarks: The holotype was not listed by number in the original description. USNM 7043 was considered by Gehlbach

(1966) to be the holotype of *Siredon melanosticta*. However, Baird (1859) cited USNM 4073, which was cataloged in 1858 (prior to publication); USNM 7043 was not cataloged until 1867 (well after publication). No specimen with the number USNM 4073 could be found. Possibly, the original metal specimen tag was misstamped, and then the locality data were entered a second time (although with the difference of east versus west in the locality).

Bishop (1942) and Gehlbach (1966, 1967) consider Baird (1860), in Cooper (1860), to be the original description for this taxon. However, the evidence indicates that Cooper and Suckley (1859) was published first, and Baird (1859c), in Cooper (1859), should be considered the original description.

It is not clear from the original description whether the author meant to name this as a subspecies, *Siredon lichenoides melanosticta*, or a full species, *Siredon melanosticta*. To quote the original description “it is difficult to say if this animal be really distinct from *lichenoides*; but it may, at any rate, be considered as a well marked variety, *S. melanosticta*.”

FAMILY CRYPTOBRANCHIDAE

Cryptobranchus bishopi Grobman, 1943

[= *Cryptobranchus alleganiensis bishopi* Grobman, 1943; *fide*, Schmidt, 1953: 12; confirmed by Dundee and Dundee, 1965: 370]

Grobman, 1943, *Occas. Pap. Mus. Zool. Univ. Michigan*, 470: 6. Paratypes: USNM 57042, Oregon County, Missouri, no further locality data, collected by J. Hurter, 1900; USNM 94356, Current River, Big Spring State Park, Carter County, Missouri, collected by A. Heinze, 19 May 1931; USNM 99751, Montauk State Park, Dent County, Missouri, collected by A. Heinze, 5 Sep 1932.

Type Locality: “Current River at Big Spring Park, Carter County, Missouri.”

Other Type Material: Holotype: UMMZ 68930. Paratypes: UMMZ 68415, 68916, 68929, 68931, 69932; AMNH 23053, 23054.

Etymology: The name *bishopi* is a patronym honoring Sherman C. Bishop, American herpetologist.

Remarks: AMNH 23053 and 23054 are presently cataloged as AMNH A-23053 and A-23054.

FAMILY HYNOBIIDAE

Batrachuperus karlschmidti Liu, 1950

[currently accepted; *fide*, Zhao and Jiang, 1988: 49; confirmed by Fu et al., 2001: 1103]

Liu, 1950, *Feldiana, Zool. Mem.*, 2: 87.

Paratypes: USNM 124581–124582, Lu Ho Hsien, Sikang, China, collected by C. C. Liu, date of collection unknown, cataloged 30 Jul 1947.

Type Locality: “Chiala (11,000 feet altitude), Luhohsien, Sikang.”

Other Type Material: Holotype: FMNH 49379. Paratypes: UMMZ 92318; numerous specimens are mentioned by

locality and collection date. In addition, 60 specimens are listed in the table of measurements on page 90 of the original description.

Etymology: The name *karlschmidti* is a patronym for Karl P. Schmidt, American herpetologist and former curator of herpetology at the Chicago Museum of Natural History.

Remarks: With the exception of UMMZ 92318, paratypes were not listed by number in the original description, but the two specimens listed above were received from the author as paratypes. In addition, FMNH 49380–49383 are listed as paratypes in the Field Museum of Natural History online database. The additional specimens mentioned by locality or listed in the table of measurements must also be considered paratypes, but their whereabouts could not be determined.

Batrachuperus yenyuanensis Liu, 1950

[currently accepted; *fide*, Zhao and Jiang, 1988: 49; confirmed by Fu et al., 2001: 1103]

Liu, 1950, *Feldiana, Zool. Mem.*, 2: 99.

Paratypes: USNM 124583, 124584, Yen Yuan, Sikang, China, collected by H. W. Chang and Y. W. Kao, 6 Jul 1942.

Type Locality: “Peilinshan, Yenyuanhsien, Sikang, China, 14,500 feet altitude.”

Other Type Material: Holotype: FMNH 49370. Paratypes: “Fifty-nine specimens” from “large pond on Peilinshan at an altitude of 15,000 feet between Yenyuanhsien and Yenpienhsien, Sikang,” collected by H. W. Chang and Y. W. Kao, 6 Jul 1942.

Etymology: The name *yenyuanensis* is derived from the type locality.

Remarks: Paratypes were not listed by number in the original description, but the two specimens listed above were received from the author as paratypes. In addition, FMNH 49371–49376 are listed as paratypes in the Field Museum of Natural History online database, and MCZ A-26486 is listed as a paratype in the Museum of Comparative Zoology online database. The additional 50 specimens mentioned as paratypes could not be located, and their present whereabouts could not be determined.

Dermodactylus pinchonii David, 1872

[= *Batrachuperus pinchonii* (David, 1872); *fide*, Stejneger, 1925: 5] David, 1872 [1871], *Nouv. Arch. Mus. Natl. Hist. Nat. Paris*, 7: 95. Syntype: USNM 10995, Kiang-si, China, collected by A. David, date of collection unknown, cataloged 29 Jul 1881.

Type Locality: “Moupin.”

Other Type Material: Syntypes: MNHNP 5060 (four specimens) and 5061 (four specimens); BMNH 1946.9.6.57, 1946.9.6.58; IRSNB 1002. (See Remarks.)

Etymology: The name *pinchonii* is a patronym honoring Monsignor Pinchon, vicar of Upper Sichuan, because of the services rendered to David.

Remarks: The syntypes were not listed by number in the original description. Likewise, the number of specimens examined was not indicated. David sent a total of 32 specimens to the Muséum national d'Histoire naturelle, where they were

originally accessioned as MNHN 1870.65 (Annemarie Ohler, MNHN, personal communication, 22 Oct 2008). The Muséum national d'Histoire naturelle presently has four larvae (MNHN 5060), four adults (MNHN 5061), and two skeletons (MNHN 1992.176, 1992.177) that are presently considered to be syntypes. Many of the remaining specimens were sent out on exchange by the Muséum national d'Histoire naturelle, including the USNM specimen, the BM specimens, and the IRSNB specimen mentioned above. However, the records of those exchanges are not clear, and the present whereabouts of the remaining 19 syntypes are unknown. This species was listed (in error) as *Salamandrella sinensis* Sauvage by Cochran (1961). Sauvage (1876) based that species on the same series of specimens collected by A. David that David (1872 [1871]) used to describe *Dermodactylus pinchonii*, making this species a junior objective synonym.

Hynobius retardatus Dunn, 1923

[currently accepted; *fide*, Matsui et al., 1992: 414]

Dunn, 1923a, *Proc. California Acad. Sci.*, Ser. 4, 12: 27.

Paratypes: USNM 64902, Kutara Lake, Iburi, Hokkaido, Japan, collected by M. Oshima, date of collection unknown, cataloged 21 Apr 1922; USNM 64903, estuary of Shirisetsunai River, near Lake Shikotsu, Iburi, Hokkaido, Japan, collected by M. Oshima, date of collection unknown, cataloged 21 Apr 1922.

Type Locality: "Noboribetsu, Iburi Province, Hokkaido," Japan.

Other Type Material: Holotype: CAS 35928. Paratypes: CAS 25982–25990, 35927; MCZ 5122. (See Remarks.)

Etymology: The name *retardatus* is from the Latin *retardatus*, "delayed" or "hindered," although what the author was thinking is not clear from the original description.

Remarks: In the original description, Dunn (1923a) listed only the holotype with no indication of any additional specimens. However, he indicated that complete descriptions would appear in his revision of the family Hynobiidae (Dunn, 1923c). In that paper, he gave detailed descriptions of the two USNM paratypes as well as the additional CAS specimens and the MCZ specimen. Obviously, these specimens were used as a basis for the description and should be considered paratypes.

Hynobius shihi Liu, 1950

[= *Liua shihi* (Liu, 1950); *fide*, Zhao, 1984: 40]

Liu, 1950, *Feldiana*, Zool. Mem., 2: 77.

Paratype: USNM 124580, Ta Pa Shan, Sichuan, China, collected by C. C. Liu.

Type Locality: "Chihsinling, Tachangsz, eastern Szechwan, China."

Other Type Material: Holotype: FMNH 49384. Paratypes: "Three males, two females and three larvae (Liu coll.)," although the text lists three females (Nos. 371, 382, and 397), two males (Nos. 383 and 387), and three larvae (Nos. 344, 377, and 380).

Etymology: The name *shihi* is a patronym for Pei-nan Shih, collector of the holotype.

Remarks: USNM 124580 was listed as Liu No. 380 in the original description. Although only eight paratypes are mentioned in the original description, the Field Museum of Natural History presently has eight catalog records listed as paratypes in their online database. Liu No. 371 is presently cataloged as FMNH 170700, Liu No. 382 is FMNH 49386, Liu No. 383 is FMNH 211243, Liu No. 387 is FMNH 170702, and Liu No. 377 is FMNH 49385. In addition, the Field Museum lists FMNH 49387 (14 specimens, no original Liu number), FMNH 170701 (Liu No. 394), and FMNH 211242 (Liu No. 374). It is not clear whether Liu No. 344 and Liu No. 397 (both mentioned in the original description) are represented by FMNH 170701 and 211242 with some error in the original numbers or whether these specimens cannot be accounted for. Also, there is no indication in the original description of the additional 14 specimens presently cataloged as FMNH 49687.

Hynobius stejnegeri Dunn, 1923

[currently accepted; *fide*, Sato, 1937: 40]

Dunn, 1923a, *Proc. California Acad. Sci.*, Ser. 4, 12: 28.

Holotype: USNM 23901, Kumamoto, Higo Province, Kumamoto Prefecture, Kyushu, collected by Nakagawa, 1884.

Type Locality: "Kumamoto, Higo Province, Kyushu."

Etymology: This species is named after Leonhard Stejneger, former curator of herpetology at the U.S. National Museum.

Salamandrella sinensis Sauvage, 1876

[= *Batrachuperus pinchonii* (David, 1872 [1871]); *fide*, Stejneger, 1925: 5]

Sauvage, 1876, *L'Institut*, Paris, 4: 275.

Syntype: USNM 10995, Kiang-si, China, collected by A. David, date of collection unknown, cataloged 29 Jul 1881.

Type Locality: "Moupin."

Other Type Material: Syntypes: MNHNP 5060 (four specimens) and 5061 (four specimens); BMNH 1946.9.6.57, 1946.9.6.58; IRSNB 1002. (See Remarks.)

Etymology: The name *sinensis* is derived from the country China, where the type locality is found.

Remarks: Sauvage (1876) based this species on the same series of specimens collected by A. David that David (1872 [1871]) used to describe *Dermodactylus pinchonii*, making this species a junior objective synonym. The syntypes were not listed by number in the original description. Sauvage (1876) gave measurements for a single specimen but did not say how many specimens he examined. David sent a total of 32 specimens to the Muséum national d'Histoire naturelle, where they were originally accessioned as MNHN 1870.65 (Ohler, pers. comm.). The Muséum national d'Histoire naturelle presently has four larvae (MNHN 5060), four adults (MNHN 5061), and two skeletons (MNHN 1992.176, 1992.177) that are considered to be syntypes. Many of the

remaining specimens were sent out on exchange by the Muséum national d'Histoire naturelle, including the USNM specimen, the BMNH specimens, and the IRSNB specimen mentioned above. However, the records of those exchanges are not clear, and the present whereabouts of the remaining 19 syntypes are unknown.

FAMILY PLETHODONTIDAE

Anaides ferreus Cope, 1869

[= *Aneides ferreus* Cope, 1869; *fide*, Grinnell and Camp, 1917: 135]

Cope, 1869, *Proc. Acad. Nat. Sci. Philadelphia*, 21: 109.

Holotype: USNM 14451 (formerly USNM 6794), Fort Umpqua, Douglas County, Oregon, collected by E. P. Vollum, date of collection unknown, cataloged (as USNM 14451) 6 Mar 1886.

Type Locality: "Fort Umpqua, Oregon."

Etymology: The name is from the Latin *ferreus*, "iron colored," apparently in reference to the metallic dorsal coloration of this species.

Remarks: The holotype was published as USNM 6794 in the original description. However, Dunn (1926a) considered USNM 14451 to be the holotype without comment. Apparently, USNM 6794 may have been renumbered as USNM 14451 on 6 Mar 1886. USNM 14451 measures just over 3.5 inches in total length, which comes close to matching the length of 3.65 inches reported in the original description.

Batrachoseps catalinae Dunn, 1922

[= *Batrachoseps major* Camp, 1915; *fide*, Dunn, 1926a: 239; confirmed by Wake and Jockusch, 2000: 110]

Dunn, 1922b, *Copeia*, 109: 62.

Holotype: USNM 57335, Santa Catalina Island, Los Angeles County, California, collected by J. Hurter, 23 Jan 1908.

Type Locality: "Santa Catalina Island."

Paratypes: USNM 38361, 38362, 57334, 57336, same data as holotype.

Etymology: The name *catalinae* is derived from the type locality. Remarks: USNM 38361 was exchanged to the Museum of Comparative Zoology in 1944 and is presently cataloged as MCZ A-25763.

Batrachoseps caudatus Cope, 1889

[= *Batrachoseps attenuatus* (Eschscholtz, 1833); *fide*, Wake et al., 1998: 13]

Cope, 1889, *Bull. U.S. Natl. Mus.*, 34: 126.

Holotype: USNM 13561, Hassler Harbor, Annette Island, Alaska, collected by H. E. Nichols, Dec 1881.

Type Locality: "Hassler Harbor, Alaska."

Etymology: The name *caudatus* is from the Latin *cauda*, "tail," in reference to the long tail mentioned in the original description.

Batrachoseps leucopus Dunn, 1922

[= *Batrachoseps major* Camp, 1915; *fide*, Dunn, 1926a: 239; confirmed by Brame and Murray, 1968: 22]

Dunn, 1922b, *Copeia*, 109: 61.

Holotype: USNM 64319, Islas Coronados, North Island, Baja California Norte, Mexico, collected by A. W. Armstrong, 4 Aug 1921.

Type Locality: "Los Coronados, North Island, Lower California."

Etymology: The name *leucopus* is from the Greek *leukos*, "white," and *pous*, "foot," in reference to the light whitish-gray line above the insertions of the legs mentioned in the original description.

Batrachoseps nigriventris Cope, 1869

[currently accepted; *fide*, Jockusch et al., 1998: 15; confirmed by Jockusch and Wake, 2002: 363]

Cope, 1869, *Proc. Acad. Nat. Sci. Philadelphia*, 21: 98.

Syntype: USNM 6734, Fort Tejon, Kern County, California, collected by G. H. Horn, date of collection unknown, cataloged 1881.

Type Locality: "Fort Tejon, California."

Other Type Material: Syntypes: ANSP 1865. (See Remarks.)

Etymology: The name *nigriventris* is derived from the Latin *niger*, "black," and *venter*, "belly," in reference to the black belly of this species mentioned in the original description.

Remarks: USNM 6734 cannot be located at the National Museum of Natural History; it was apparently lost prior to Dunn (1926a) since he did not mention having seen the USNM syntype. According to Dunn (1926a) and Malnate (1971), the syntypes are ANSP 481 and 482, although Cope (1869) cited ANSP 1865 and Smithsonian Mus. (USNM) 6734 in the original description.

Bolitoglossa arborea Taylor, 1941

[= *Chiropterotriton arboreus* (Taylor, 1941); *fide*, Taylor, 1944c: 216; confirmed by Brame, 1967: 19]

Taylor, 1941a, *Herpetologica*, 2: 62.

Paratype: USNM 134278, near Tianguistengo, Hidalgo, Mexico, collected by E. H. Taylor and R. Roberts, 13 Aug 1938.

Type Locality: "Near Tianguistengo, Hidalgo," Mexico.

Other Type Material: Holotype: EHT-HMS 16743. Paratypes: EHT-HMS 16734–16742, 16744–16756.

Etymology: The name *arborea* is from the Latin *arboreus*, "of trees," in reference to the habitat of this species, living in bromeliads in trees.

Remarks: USNM 134278 was received in exchange from the University of Illinois Museum of Natural History (formerly UIMNH 27078) and was cataloged on 10 Mar 1954. It was listed as EHT-HMS 16752 in the original description. The holotype, EHT-HMS 16743, is presently in the Field Museum of Natural History, where it is now cataloged as FMNH 100022. Some of the paratypes EHT-HMS 16734–16742 and 16744–16756 are presently cataloged as FMNH 100034, 100226–100230, 100740, 126341, 126349,

126765, 196161, and 196222. Additional paratypes from EHT-HMS 16734–16742 and 16744–16756 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27073–27078. Later, UIMNH 27078 was exchanged to the U.S. National Museum (see above), and UIMNH 27077 was exchanged to Brigham Young University, where it is presently cataloged as BYU 13253. The paratype EHT-HMS 16741 is presently in the Museum of Comparative Zoology, where it is cataloged as MCZ A-24546. The paratypes EHT-HMS 16734, 16738, and 16755 could not be located and must be considered missing.

***Bolitoglossa borburata* Trapido, 1942**

[currently accepted; *fide*, Parra-Olea et al., 2004: 336]

Trapido, 1942, *Bol. Soc. Venezol. Cienc. Nat.*, 8: 297.

Holotype: USNM 115509, Valle del Río Borburata, Carabobo, Venezuela, 1,200 m, collected by P. Anduze, Mar 1940.

Type Locality: “Valle del Río Borburata, Estado Carabobo, Venezuela, 1200 m.”

Etymology: This species is named for the Río Borburata, the type locality of the species.

***Bolitoglossa cephalica rubrimembris* Taylor and Smith, 1945**

[= *Aquileurycea cephalica* (Cope, 1865); *fide*, Rovito et al., 2015: 185]

Taylor and Smith, 1945, *Proc. U.S. Nat. Mus.* 95: 539.

Holotype: USNM 110661, Santa Anita, 6 km S of (40 km N of Jacala) [*sic*], Hidalgo, Mexico, collected by H. M. Smith and R. Smith, 10 Oct 1939.

Type Locality: “6 km. south of Santa Anita, Hidalgo, elevation about 4,500 feet,” Mexico.

Paratypes: USNM 110659, 110660, same data as holotype.

Other Type Material: Paratypes: EHT-HMS 12495, 23007, 25411–25413, 29831. (See Remarks.)

Etymology: The name *rubrimembris* is from the Latin *rubrum*, “reddish,” and *membrum*, “part,” in reference to the reddish pigment on the tip of the tail.

Remarks: The paratype EHT-HMS 12495 is presently cataloged as FMNH 114429, EHT-HMS 29831 is presently cataloged as FMNH 114444, and EHT 25411 and 25413 are presently cataloged as FMNH 126632 and 100169, respectively. The paratype EHT-HMS 25412 is presently cataloged as UIMNH 27299. The paratype EHT-HMS 23007 is presently cataloged as UIMNH 30910.

***Bolitoglossa chica* Brame and Wake, 1963**

[currently accepted; *fide*, Parra-Olea et al., 2004: 336]

Brame and Wake, 1963, *Contrib. Sci. Nat. Hist. Mus. Los Angeles Co.*, 69: 16.

Holotype: USNM 196347, Hotel Saracay, 2 km E of Santo Domingo de los Colorados, Pichincha, Ecuador, 671 m, collected by P. D. Spoecker and R. K. Mullen, 15 Jun 1962.

Type Locality: “Grounds of the Hotel Zaracay, 2 km. E of Santo Domingo, 670 meters (2200 feet), Provincia de Pichincha, Ecuador.”

Other Type Material: Paratype: EPN 2411.

Etymology: The name *chica* is from the Spanish word *chica*, “small.”

Remarks: USNM 196347 was cited as JAP 4366 in the original description.

***Bolitoglossa chondrostega* Taylor, 1941**

[= *Chiropterotriton chondrostega* (Taylor, 1941); *fide*, Taylor, 1944c: 216; confirmed by Darda, 1994: 173]

Taylor, 1941c, *Univ. Kansas Sci. Bull.*, 27: 113.

Paratype: USNM 134279, Durango, Hidalgo, 5,000 to 6,000 feet elevation, Mexico, collected by E. H. Taylor, 12 Sep 1938.

Type Locality: “Durango, Hidalgo, 5,000 to 6,000 feet elevation.”

Other Type Material: Holotype: EHT-HMS 17304. Paratypes: EHT-HMS 17283–17303, 17305–17310.

Etymology: The name *chondrostega* is from the Greek *chondros*, “cartilage,” and *stegos*, “roof,” in reference to the mostly cartilaginous dorsum of the skull.

Remarks: USNM 134279 was received in exchange from the University of Illinois Museum of Natural History (formerly UIMNH 27045) and cataloged on 10 Mar 1954. It was listed as EHT-HMS 17310 in the original description. The holotype, EHT-HMS 17304, is presently in the Field Museum of Natural History, where it is cataloged as FMNH 100076. Some of the paratypes EHT-HMS 17283–17303 and 17305–17310 are presently cataloged as FMNH 100157–100161, 104618, 126642, 126781–126783, 189885, 189886, 191447, and 196227. Additional paratypes from EHT-HMS 17283–17303 and 17305–17310 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27041–27045 and 32651. Later, UIMNH 27045 was exchanged to the U.S. National Museum (see above). UIMNH 27044 was exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-30867. The paratypes EHT-HMS 17283, 17284, 17288–17291, 17296, 17300, 17302, and 17303 could not be located and must be considered missing.

***Bolitoglossa cochranae* Taylor, 1943**

[= *Pseudoeurycea cochranae* (Taylor, 1943); *fide*, Taylor, 1944c: 209; confirmed by Bogert, 1967: 3–5]

Taylor, 1943b, *Univ. Kansas Sci. Bull.*, 29: 343.

Paratypes: USNM 116386, Cerro San Felipe, Oaxaca, Mexico, collected by H. M. Smith, 10 Jul 1940; USNM 134289, Cerro San Felipe, Oaxaca, Mexico, collected by E. H. Taylor and R. C. Taylor, Jul 1940.

Type Locality: “Cerro San Felipe, Oaxaca, México at an elevation of about 8,800 feet.”

Other Type Material: Holotype: EHT-HMS 24594. Paratypes: EHT-HMS 17726, 17727, 24589–24593, 24595–24599.

Etymology: The name *cochranae* is a matronym for Doris M. Cochran, former curator of amphibians and reptiles at the U.S. National Museum.

Remarks: USNM 116386 was erroneously listed as USNM 19483 in the original description; 19483 is actually the HMS field number. Also, in the original description, the collectors

were listed as E. H. Taylor and R. C. Taylor with a date of Jul 1940, whereas the USNM records show the collector as H. M. Smith, 10 Jul 1940. It is not clear whether the original description or the USNM records are correct. USNM 134289 was received in exchange from the University of Illinois Museum of Natural History (formerly UIMNH 27183) and cataloged on 10 Mar 1954. It was listed as EHT-HMS 24593 in the original description. The holotype, EHT-HMS 24594, is presently in the Field Museum of Natural History, where it is cataloged as FMNH 100091. The paratypes EHT-HMS 24592, 24599, 24591, 24596, and 24595 are presently cataloged as FMNH 100741–100744 and 100804, respectively. The paratypes EHT-HMS 24589, 24593, and 24597 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27182–27184. UIMNH 27183 was later exchanged to the U.S. National Museum (see above). UIMNH 27184 was exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-29625. The paratypes EHT-HMS 17726, 17727, 24590, and 24598 could not be located and must be considered missing.

***Bolitoglossa cuna* Wake, Brame, and Duellman, 1973**

[currently accepted; *fide*, Parra-Olea et al., 2004: 336]

Wake, Brame, and Duellman, 1973, *Contrib. Sci. Nat. Hist. Mus. Los Angeles Co.*, 248: 2.

Paratypes: USNM 150035, 150036, Armila, San Blas, Panama, collected by C. O. Handley Jr. and F. Greenwell, 23 Feb 1963.

Type Locality: “Camp Sasardi, 12 m (39 ft) elevation, Territorio de San Blas, eastern Panamá.”

Other Type Material: Holotype: KU 116519.

Etymology: The name *cuna* is derived from the name of the Indigenous people of the eastern Caribbean lowlands of Panama.

***Bolitoglossa decora* McCranie and Wilson, 1997**

[currently accepted; *fide*, Parra-Olea et al., 2004: 336]

McCranie and Wilson, 1997, *Proc. Biol. Soc. Washington*, 110: 367.

Holotype: USNM 500000, Parque Nacional La Muralla, along the trail to Cerro Enmedio near the Monte Escondido campground, Olancho, Honduras, 15°05'N, 86°44'W, elevation 1,440 m, collected by J. R. McCranie, L. D. Wilson, and D. Almendarez, 29 Jul 1996.

Type Locality: “Along the trail to Cerro Enmedio near the Monte Escondido campground (15° 05'N, 86° 44'W), Parque Nacional La Muralla, 1440 m elev., Departamento de Olancho, Honduras.”

Paratypes: USNM 497533, same data as holotype, except elevation 1,510 m; USNM 497534, same data as holotype, except elevation 1,550 m; USNM 497535, same data as holotype.

Etymology: The name *decora* is from the Latin *decorus*, “ornamented” or “beautiful,” in reference to the color pattern of the females of this taxon.

***Bolitoglossa diaphora* McCranie and Wilson, 1995**

[currently accepted; *fide*, Parra-Olea et al., 2004: 336]

McCranie and Wilson, 1995b, *J. Herpetol.*, 29: 448.

Paratypes: USNM 335045–335048, Sierra de Omoa, El Cusuco on Cerro Cusuco, 5.6 km WSW of Buenos Aires, Parque Nacional El Cusuco, Cortés, Honduras, elevation 1,550 m, collected by J. R. McCranie, 18–21 Aug 1992.

Type Locality: “Above the visitors center of Parque Nacional El Cusuco, Cerro Cusuco (15° 31'N, 88° 12'W), 5.6 km WSW Buenos Aires, 1550 m elevation, Sierra de Omoa, Departamento de Cortés, Honduras.”

Other Type Material: Holotype: MVZ 221178. Paratypes: MVZ 186764, 221179, 221180.

Etymology: The name *diaphora* is from the Greek *diaphoros*, “different,” in reference to the sexually dimorphic coloration exhibited by this taxon.

***Bolitoglossa dimidiata* Taylor, 1940**

[= *Chiropterotriton dimidiatus* (Taylor, 1940); *fide*, Taylor, 1944c: 216; confirmed by Rabb, 1958: 32]

Taylor, 1940a [1939], *Univ. Kansas Sci. Bull.*, 26: 408.

Paratype: USNM 134280, El Chico National Park, Hidalgo, Mexico, collected by E. H. Taylor, 1938.

Type Locality: “Guerrero, near Mineral del Monte, Southern Hidalgo, Mexico.”

Other Type Material: Holotype: EHT-HMS 17677. Paratypes: EHT-HMS 17671–17676, 17678, 17689, 17691, 17692, 17694–17705.

Etymology: The name *dimidiata* is derived from the Latin *dimidiat*, “halved,” in reference to the small size of this taxon.

Remarks: USNM 134280 was received in exchange from the University of Illinois Museum of Natural History (formerly UIMNH 27071) and cataloged on 10 Mar 1954. It was listed as EHT-HMS 17701 in the original description. The holotype, EHT-HMS 17677, is presently in the Field Museum of Natural History, where it is cataloged as FMNH 100023. Some of the paratypes EHT-HMS 17671–17676, 17678, 17689, 17691, 17692, and 17694–17705 are presently cataloged as FMNH 100024, 100729–100738, 126780, and 169705. Additional paratypes from EHT-HMS 17671–17676, 17678, 17689, 17691, 17692, and 17694–17705 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27065–27072 and 32644. Later, UIMNH 27071 was exchanged to the U.S. National Museum (see above). UIMNH 27070 was exchanged to the Field Museum of Natural History, where it is presently cataloged as FMNH 75764. UIMNH 27069 was exchanged to the Senckenberg Forschungsinstitut und Naturmuseum, where it is presently cataloged as SMF 53178. UIMNH 27068 was exchanged to the Carnegie Museum of Natural History, where it is presently cataloged as CM 39984. The paratypes EHT-HMS 17678–17680 and 17702 are in the American Museum of Natural History, where they are presently cataloged as AMNH A-49963–49966. The paratype EHT-HMS 17705 is presently in the Museum of Comparative Zoology, where it is cataloged as MCZ A-24543. The paratypes EHT-HMS

17673, 17676, 17689, 17691, and 17692 could not be located and must be considered missing.

***Bolitoglossa galaenae* Taylor, 1941**

[= *Aquiloerycea galeanae* (Taylor, 1941); *fide*, Rovito et al., 2015: 185]

Taylor, 1941b, *Proc. Biol. Soc. Washington*, 54: 83.

Paratype(s): USNM 110642–110658, 15 miles W of Galeana, Nuevo Leon, Mexico, collected by H. M. Smith, 13–14 Oct 1939.

Type Locality: “Near Galeana, N. L., 7,000 ft. elevation.”

Other Type Material: Holotype: EHT-HMS 17146. Paratypes: EHT-HMS 17145, 25762, 25763.

Etymology: This species is named after the type locality of Galeana.

Remarks: The original name *galaenae* was an incorrect original spelling as evidenced by comparison with type locality name Galeana. The name was corrected to *galeanae* by Taylor (1944b: 121), which was a justified emendation allowed by Article 32.5 of the International Code of Zoological Nomenclature (International Commission on Zoological Nomenclature, 1999). USNM 110647 was exchanged to the Museum of Comparative Zoology on 21 Feb 1944 and is presently cataloged as MCZ A-25764. USNM 110650 was exchanged to the University of Michigan Museum of Zoology on 27 Nov 1944 and is presently cataloged as UMMZ 92423. The holotype, EHT-HMS 17146, is presently in the Field Museum of Natural History, where it is cataloged as FMNH 100113. The paratype EHT-HMS 17145 is presently cataloged as FMNH 100284. The paratypes EHT-HMS 25762 and 25763 could not be located and must be considered missing. UIMNH 38035 (EHT-HMS 26122) was listed as a paratype by Smith et al. (1964), but this specimen was not listed in the original description.

***Bolitoglossa (Eladinea) gomezi* Wake, Savage, and Hanken, 2007**

[currently accepted; *fide*, García-Paris et al., 2008: 23]

Wake, Savage, and Hanken, 2007, *Copeia*, 2007: 557.

Holotype: USNM 219116, Finca las Cruces, OTS Field Station, 6 km (by road) S of San Vito de Java, Puntarenas, Costa Rica, 8°47'35"N, 82°57'30"W, elevation 1,250 m, collected by R. W. McDiarmid, 22 May 1971.

Type Locality: “Costa Rica, Provincia Puntarenas, Las Cruces Biological Station, 8° 47'35" N, 82° 57'30" W, 1250 m.”

Other Type Material: Paratypes: LACM 146323; MVZ 97811, 97812; UMMZ 173548; MVUP 929; SMF 85062.

Etymology: The name *gomezi* is a patronym for Luis Diego Gomez, Costa Rican botanist.

***Bolitoglossa lavae* Taylor, 1942**

[= *Chiropterotriton lavae* (Taylor, 1942); *fide*, Taylor, 1944c: 216] Taylor, 1942, *Univ. Kansas Sci. Bull.*, 28: 295.

Paratype(s): USNM 134281–134283, 2 miles W of La Joya, Veracruz, Mexico, collected by E. H. Taylor, D. M. Forbes, and G. Garcia, 16–17 Aug 1940. (See Remarks.)

Type Locality: “2 miles west of La Joya, Veracruz.”

Other Type Material: Holotype: EHT-HMS 28937. Paratypes: EHT-HMS 28930–28936, 28938–29064.

Etymology: The name *lavae* is derived from the habitat of the type locality, “stunted forest of the lava fields west of La Joya.”

Remarks: USNM 134281–134283 (formerly UIMNH 27103–27105) were received in exchange from the University of Illinois Museum of Natural History and cataloged on 10 Mar 1954. They were listed as EHT-HMS 29005, 29008, and 29011, respectively, in the original description. The holotype, EHT-HMS 28937, is presently in the Field Museum of Natural History, where it is cataloged as FMNH 100118. Some of the paratypes EHT-HMS 28930–28936 and 28938–29064 are presently cataloged as FMNH 100429, 100546–100569, 100648–100683, 100728, 100750, 100765, 100805, 126346, 126879, 126880, 169723–169727, and 189427. Additional paratypes from EHT-HMS 28930–28936 and 28938–29064 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27080–27121. Later, UIMNH 27103–27105 were exchanged to the U.S. National Museum (see above). UIMNH 27101 was exchanged to the Carnegie Museum of Natural History, where it is presently cataloged as CM 39983. UIMNH 27121 was exchanged to the University of Colorado Museum of Natural History, where it is presently cataloged as UCM 13633. The paratypes EHT-HMS 28975 and 28977 were deposited at the Museum of Comparative Zoology, where they are presently cataloged as MCZ A-25603 and A-25604. The paratypes EHT-HMS 28932, 28998, 29015, and 29064 could not be located and must be considered missing.

***Bolitoglossa melanomolga* Taylor, 1941**

[= *Pseudoeurycea melanomolga* (Taylor, 1941); *fide*, Taylor, 1944c: 209]

Taylor, 1941b, *Proc. Biol. Soc. Washington*, 54: 81.

Paratypes: USNM 110640, 17 km NE of Limón, Veracruz, Mexico, collected by H. M. Smith, 23 Mar 1940; USNM 110641, near Tezuitlan, Veracruz, Mexico, collected by H. M. Smith, 25 Jun 1940. (See Remarks.)

Type Locality: “About 20 km. north of San Antonio Limón (Totalco), Veracruz,” Mexico.

Other Type Material: Holotype: EHT-HMS 24626.

Etymology: The name *melanomolga* is derived from the Greek *melanos*, “black,” and *molgos*, “skin,” in reference to the dark pigmentation mentioned in the original description.

Remarks: In the original description, USNM 110641 was listed as having been collected at the type locality by E. H. Taylor on 24 Jun 1940, whereas USNM records show the locality as “near Tezuitlan,” collected by H. M. Smith on 25 Jun 1940. It is not clear whether the original description or the USNM records are correct. The holotype, EHT-HMS 24626, is presently in the University of Illinois Museum of Natural History, where it is cataloged as UIMNH 25041.

***Bolitoglossa moreleti* Smith, 1945**

[= *Bolitoglossa mexicana* Duméril, Bibron, and Duméril, 1854; *fide*, García-París et al., 2002: 63]

Smith, 1945, *Herpetologica*, 3: 17.

Holotype: USNM 116079, Palenque, Chiapas, Mexico, collected by H. M. Smith, 12 Jul 1939.

Type Locality: "From a bromeliad in the vicinity of Palenque, Chiapas," Mexico.

Paratypes: USNM 116070, Piedras Negras, Peten, Guatemala, collected by H. M. Smith, 24 May 1939; USNM 116071–116078, 116080–116098, Palenque, Chiapas, Mexico, collected by H. M. Smith, 7–23 Jul 1939.

Other Type Material: Paratypes: Field Numbers (Walter Rathbone Bacon Collection) of H. M. Smith, Nos. 8529–8534, 8632, 8634–8653, 8698–8732, 8741–8744, 8764–8767, 8828–8830, of which 28 are presently cataloged as USNM 116071–116098. (See Remarks.)

Etymology: The name *moreleti* is a patronym honoring M. Morelet, early herpetological collector in Peten, Guatemala, and collector of the first recorded specimens of this species.

Remarks: A total of 73 specimens were listed by Smith field numbers under the heading of paratypes in the original description. However, the holotype, USNM 116079, was also listed by both field number (No. 8651) and USNM number as part of the sequence of USNM catalog numbers listed as paratypes. Therefore, a total of 72 paratypes were listed, and 27 of those were also listed as USNM 116071–116078 and 116080–116098. The paratypes 8704, 8711, 8718, 8828, and 8645 were deposited at the Field Museum of Natural History, where they are presently cataloged as FMNH 91455–91457, 98727, and 190591, respectively. An additional 18 specimens were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 13571–13588. Later, UIMNH 13574 and 13575 were exchanged to F. A. Shannon (final deposition unknown). UIMNH 13587 and 13588 were exchanged to the University of Colorado Museum of Natural History, where they are presently cataloged as UCM 22125 and 22126. Examination of H. M. Smith's ledgers of the Walter Rathbone Bacon Collection showed that 18 specimens were sent to E. H. Taylor. Eventually, those specimens were deposited at the Field Museum of Natural History, where they are presently cataloged as FMNH 179731–179748. That accounts for 68 of the 72 paratypes listed by number in the original description. Paratypes 8638, 8641, 8642, and 8653 could not be located and must be considered missing.

***Bolitoglossa nigroflavescens* Taylor, 1941**

[= *Bolitoglossa franklini nigroflavescens* (Schmidt, 1936); *fide*, Wake and Lynch, 1982: 266]

Taylor, 1941e, *Univ. Kansas Sci. Bull.*, 27: 150.

Holotype: USNM 111169, Mount Obando (= Cerro Ovando), Chiapas, Mexico, elevation 5,000–6,000 feet, collected by H. M. Smith and R. Smith, 16 Apr 1940.

Type Locality: "Cerro Ovando, at an elevation between 5,000 to 6,000 feet," Chiapas, Mexico.

Paratypes: USNM 111153–111168, 111170–111192, 134288, same data as holotype.

Other Type Material: Paratypes: EHT-HMS 36784–36799. (See Remarks.)

Etymology: The name *nigroflavescens* is from the Latin *nigrum*, "black," and *flavus*, "yellow," in reference to the grayish-black and yellow coloration mentioned in the original description.

Remarks: USNM 134288 (formerly UIMNH 27187) was received in exchange from the University of Illinois Museum of Natural History and cataloged on 10 Mar 1954. It was listed as EHT-HMS 26795 in the original description. USNM 111160 and 111186 were exchanged to University of Michigan Museum of Zoology on 27 Nov 1944 and are presently cataloged as UMMZ 92419 and 92420. The paratypes EHT-HMS 26792 and 26798 were deposited at the Museum of Comparative Zoology, where they were cataloged as MCZ A-25607 and A-25608. Some of the paratypes EHT-HMS 36784–36799 are presently cataloged as FMNH 98732, 100333–100336, 126342, 126778, and 126779. Additional paratypes from EHT-HMS 36784–36799 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27185–27188. Later, UIMNH 27187 was exchanged to the U.S. National Museum (see above). UIMNH 27185 was exchanged to the Senckenberg Forschungsinstitut und Naturmuseum, where it is presently cataloged as SMF 53174. The paratypes EHT-HMS 26788 and 26794 could not be located and must be considered missing.

***Bolitoglossa nigromaculata* Taylor, 1941**

[= *Pseudoeurycea nigromaculata* (Taylor, 1941); *fide*, Taylor, 1944c: 209]

Taylor, 1941e, *Univ. Kansas Sci. Bull.*, 27: 141.

Holotype: USNM 110635, Cuautlapan, Veracruz, Mexico, collected by H. M. Smith, Jan 1940.

Type Locality: "Cuautlapan, Veracruz," Mexico.

Paratypes: USNM 110631–110634, 110636–110638, same data as holotype; USNM 110639, same data as holotype, except collected 7 Aug 1940.

Other Type Material: Paratypes: EHT-HMS 24600–24641. (See Remarks.)

Etymology: The name *nigromaculata* is from the Latin *nigrum*, "black," and *macula*, "spot," in reference to the black spots mentioned in the original description.

Remarks: USNM 110632 was exchanged to the University of Michigan Museum of Zoology on 27 Nov 1944 and is presently cataloged as UMMZ 92422. USNM 110634 was exchanged to the Museum of Comparative Zoology on 21 Feb 1944 and is presently cataloged as MCZ A-25765. Some of the paratypes EHT-HMS 24600–24641 are presently cataloged as FMNH 100532–100538, 100726, 100891, and 196220. Additional paratypes from EHT-HMS 24600–24641 were deposited at the University of Illinois Museum

of Natural History, where they were cataloged as UIMNH 27165–27171. Later, UIMNH 27171 was exchanged to the Field Museum of Natural History, where it is presently cataloged as FMNH 75766. UIMNH 27169 was exchanged to the Senckenberg Forschungsinstitut und Naturmuseum, where it is presently cataloged as SMF 53175. UIMNH 27170 was exchanged to the University of Colorado Museum of Natural History, where it is presently cataloged as UCM 13643. The paratypes EHT-HMS 24608, 24613, 24614, and 24616 could not be located and must be considered missing.

***Bolitoglossa occidentalis* Taylor, 1941**

[currently accepted; *fide*, Parra-Olea et al., 2004: 335]

Taylor, 1941e, *Univ. Kansas Sci. Bull.*, 27: 145.

Holotype: USNM 111085, La Esperanza, Chiapas, Mexico, elevation 500 feet, collected by H. M. Smith, 28 Apr 1940.

Type Locality: “La Esperanza, Chiapas, Mexico, elevation 500 feet.”

Paratypes: USNM 111068–111074, same data as holotype except collected 6 Apr 1940; USNM 111075–111079, same data as holotype except collected 7 Apr 1940; USNM 111080–111082, same data as holotype except collected 9 Apr 1940; USNM 111083, 111084, same data as holotype except collected 23 Apr 1940; USNM 111086–111091, same data as holotype; USNM 111092, 111093, same data as holotype except collected 13 May 1940.

Other Type Material: Paratypes: EHT-HMS 24049, 26561, 27176–27180; FMNH 20330 (five specimens), 20397, 20399, 20712, 20713, 20760 (four specimens). (See Remarks.)

Etymology: The name *occidentalis* is from the Latin *occidentalis*, “from the west.”

Remarks: USNM 111068 was exchanged to the University of Michigan Museum of Zoology on 27 Nov 1944 and is presently cataloged as UMMZ 92421. The paratype EHT-HMS 24049 is presently cataloged as MCZ A-25609. Although published in the original description as EHT-HMS 24049, this specimen is actually EHT-HMS 27049 and is listed as such in Taylor’s collection catalog; EHT-HMS 24049 is an *Ambystoma* presently cataloged as FMNH 113833 (Reseta, pers. comm., 24 Feb 2010). The paratypes EHT-HMS 26561 and 27177 are presently cataloged as UIMNH 27189 and 27190, respectively. The paratypes EHT-HMS 27176, 27178, and 27180 are presently cataloged as FMNH 100185–100187, respectively. The paratype EHT-HMS 27179 could not be located and must be considered missing.

***Bolitoglossa oresbia* McCranie, Espinal, and Wilson, 2005**

[currently accepted; *fide*, McCranie, 2008: 1]

McCranie, Espinal, and Wilson, 2005, *J. Herpetol.*, 39: 108.

Holotype: USNM 560001, Cerro El Zarcadero, Comayagua, Honduras, 14°43.662’N, 87°53.925’W, elevation 1,880 m, collected by M. Espinal, 3 Jul 2003.

Type Locality: “Cerro El Zarcadero, 14° 43.662’N, 87° 53.925’W, 1880 m elevation, Departamento de Comayagua, Honduras.”

Paratype: USNM 560002, same data as holotype.

Etymology: The name *oresbia* is from the Greek *oresbios*, “living in or on mountains,” in reference to the montane habitat of this taxon.

***Bolitoglossa porrasorum* McCranie and Wilson, 1995**

[currently accepted; *fide*, Parra-Olea et al., 2004: 336]

McCranie and Wilson, 1995a, *Herpetologica*, 51: 132.

Holotype: USNM 329584, east slope of Pico Pijol, Montaña de Pijol, northwest of Tegucigalpa, Departamento de Yoro, Honduras (15°10’N, 87°33’W), elevation 1,860–1,900 m, collected by J. R. McCranie, L. D. Wilson, and K. Williams, 10 Aug 1991.

Type Locality: “East slope of Pico Pijol (15° 10’N, 87° 33’W), Montaña de Pijol northwest of Tegucigalpa, 1860–1900 m elevation, Departamento de Yoro, Honduras.”

Paratypes: USNM 329585–329604, same locality and collectors as holotype, collected 7–10 Aug 1991; USNM 329605–329607, 329614, 329615, Cordillera Nombre de Dios, 2.5 km (airline) NNE of La Fortuna, Yoro, Honduras, collected by J. R. McCranie, L. D. Wilson, and K. Williams, 14–16 Aug 1991; USNM 329608–329613, Cordillera Nombre de Dios, 2.5 km (airline) NNE of La Fortuna, Yoro, Honduras, collected by J. R. McCranie, L. D. Wilson, and K. Williams, 29–31 Jul 1993.

Etymology: The name *porrasorum* is a patronym for Jorge Porras Zúniga and Jorge Porras Orellana, for their friendship and assistance over the years.

***Bolitoglossa savagei* Brame and Wake, 1963**

[currently accepted; *fide*, Parra-Olea et al., 2004: 336]

Brame and Wake, 1963, *Contrib. Sci. Nat. Hist. Mus. Los Angeles Co.*, 69: 31.

Paratypes: USNM 36693–36700, Rio Frio Mountains, Sierra Nevada de Santa Marta, Magdalena, Colombia, collected by H. Pittier, Jul 1906.

Type Locality: “Cerro San Lorenzo, 1400–2100 meters (4500–7000 feet), Sierra Nevada de Santa Marta, Departamento de Magdalena, Colombia.”

Other Type Material: Holotype: UMMZ 54595. Paratypes: UMMZ 45615–45620, 45622–45626, 45628–45630, 48195, 45213, 54592, 54593, 63334, 63335 (22 specimens); ANSP 19723, 19724; CNHM 1815; MCZ 3894, 3895.

Etymology: The name *savagei* is a patronym for Jay M. Savage, American herpetologist.

Remarks: CNHM 1815 is presently cataloged as FMNH 1815.

***Bolitoglossa tapajonica* Brcko, Hoogmoed, and Neckel-Oliveira, 2013**

[currently accepted; *fide*, Frost, 2021]

Brcko, Hoogmoed, and Neckel-Oliveira, 2013, *Zootaxa*, 3686: 416.

Paratype: USNM 288553, Itaituba, ~65 km SW of Parque Nacional da Amazonia, Rio Tapajos, Para, Brazil, collected by R. I. Crombie, 28 Jan 1979.

Type Locality: “Barroso region, 02° 28’18” S, 56° 00’44” W, Municipality of Juruti, state of Pará, Brazil, 90 m elevation.”

Other Type Material: Holotype: MPEG 22176. Paratypes: MPEG 22176–22178, 27470, 31686–31695, 33293–33297, 34629; MZUSP 52837.

Etymology: The name *tapajonica* is taken from the lower Tapajós river region, the type locality.

***Bolitoglossa terrestris* Taylor, 1941**

[= *Chiropterotriton terrestris* (Taylor, 1941); *fide*, Taylor, 1944c: 216; Darda, 1994: 176]

Taylor, 1941c, *Univ. Kansas Sci. Bull.*, 27: 115.

Paratypes: USNM 116319, 5–6 miles N of Zacualtipan, collected by E. H. Taylor and R. C. Taylor, 10 Aug 1938; USNM 116322, 116323, 139717, 4–10 miles S of Tianguistengo, Hidalgo, Mexico, collected by E. H. Taylor and R. C. Taylor, 1 Jul 1940. (See Remarks.)

Type Locality: “About six miles south of Tianguistengo, Hidalgo, Mexico, at an elevation of about 5,000 feet.”

Other Type Material: Holotype: EHT-HMS 23354. Paratypes: EHT-HMS 17311–17359, 23244–23405. (See Remarks.)

Etymology: The name *terrestris* is from the Latin *terrestris*, “of the earth,” apparently in reference to the terrestrial habitat of this species.

Remarks: USNM 116319, 116322, and 116323 were listed as EHT-HMS 17353, 23372, and 23367, respectively, in the original description. USNM 139717 (formerly UIMNH 26927) was received in exchange from the University of Illinois Museum of Natural History and cataloged on 8 Oct 1957. It was listed as EHT-HMS 23397 in the original description. USNM 116320 and 116321 were erroneously listed as paratypes of *Bolitoglossa terrestris* Taylor, 1941 by Cochran (1961). Paratypes are listed by EHT-HMS number in the original description, but EHT-HMS 17706 and 17711 were not listed. The holotype, EHT-HMS 23354, is presently in the Field Museum of Natural History, where it is cataloged as FMNH 100121. Some of the paratypes EHT-HMS 17311–17359 and 23244–23405 are presently cataloged as FMNH 98670, 98671, 98841, 100778–100782, 104638, 104639, 112767–112869, 114839–114843, 126324, 126325, 126329–126333, 126773, 126868–126872, 126874, and 178244. Additional paratypes from EHT-HMS 17311–17359 and 23244–23405 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 26868–26927 and 30918. Later, UIMNH 26927 was exchanged to the U.S. National Museum (see above). UIMNH 26923 and 26924 were exchanged to the Carnegie Museum of Natural History, where they are presently cataloged as CM 39985 and 39986. UIMNH 26925 was exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-30886. UIMNH 26926 was exchanged to the Senckenberg Forschungsinstitut und Naturmuseum, where it is presently cataloged as SMF 53179. However, this does not account for all the paratypes from EHT-HMS 17311–17359 and 23244–23405; 22 specimens could not be located and must be considered missing.

***Bolitoglossa unguidentis* Taylor, 1941**

[= *Pseudoeurycea unguidentis* (Taylor, 1941); *fide*, Taylor, 1944c: 209]

Taylor, 1941a, *Herpetologica*, 2: 57.

Paratype: USNM 134292 (formerly UIMNH 27175), Cerro San Felipe, Oaxaca, Mexico, collected by E. H. Taylor, 19 Aug 1938.

Type Locality: “Cerro San Felipe, about 15 kilometers north of Oaxaca, Oaxaca, Mexico, at an elevation of 2200 meters in mixed forest, containing much pine.”

Other Type Material: Holotype: EHT-HMS 17102. Paratypes: EHT-HMS 17103–17113, 17115, 15616, 15630, 15642, 15643, 15647A, 15649A, 15651.

Etymology: The name *unguidentis* is from the Latin *unguis*, “nail” or “claw,” and *dentis*, “tooth,” in reference to the premaxillary teeth mentioned and illustrated in the original description.

Remarks: USNM 134292 (formerly UIMNH 27175) was received in exchange from the University of Illinois Museum of Natural History and cataloged on 10 Mar 1954. It was listed as EHT-HMS 15649A in the original description. The holotype, EHT-HMS 17102, is presently in the Field Museum of Natural History, where it is cataloged as FMNH 100045. Some of the paratypes EHT-HMS 17103–17113 and 17115 are presently cataloged as FMNH 124413, 126475–126477, and 190592. Additional paratypes from EHT-HMS 17103–17113 and 17115 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27176–27180. Later, UIMNH 27176 was exchanged to the Senckenberg Forschungsinstitut und Naturmuseum, where it is presently cataloged as SMF 53176, and UIMNH 27180 was exchanged to the Field Museum of Natural History, where it is presently cataloged as FMNH 75768. The paratypes EHT-HMS 15630 and EHT-HMS 17104 are presently cataloged as MCZ A-25615 and A-25616, respectively. The paratypes EHT-HMS 15643, 15651, and 15647A are presently cataloged as FMNH 126478–126480, respectively. The paratypes EHT-HMS 15642 and 15649A were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27174 and 27175. Later, UIMNH 27175 was exchanged to the U.S. National Museum (see above). The paratype EHT-HMS 15616 was also listed as a paratype of *Oedipus smithi* Taylor, 1939 and is presently cataloged as FMNH 126482 under that name. It is not clear from the original descriptions whether this was a simple error on Taylor’s part or a typographical error or he recognized that this specimen was actually a different species from *O. smithi* and included it without comment as a paratype of *B. unguidentis*. The paratype EHT-HMS 17110 could not be located and must be considered missing.

***Bolitoglossa xolocalcae* Taylor, 1941**

[= *Dendrotriton xolocalcae* (Taylor, 1941); *fide*, Wake and Elias, 1983: 11]

Taylor, 1941e, *Univ. Kansas Sci. Bull.*, 27: 148.

Holotype: USNM 111371, Cerro Ovando, Chiapas, Mexico, collected by H. M. Smith and R. Smith, 16 Apr 1940.

Type Locality: "Cerro Ovando, Chiapas, Mexico, between 6,800–8,000 feet elevation."

Paratypes: USNM 111372–111470, same data as holotype.

Other Type Material: Paratypes: EHT-HMS 25311–25341, 26749–26783, 27264–27271. (See Remarks.)

Etymology: The name *xolocalcae* is derived from Xolocalca, the Indigenous name for Cerro Ovando.

Remarks: USNM 111372–111399 were not mentioned in any way in Cochran (1961). USNM 111394–111399 were returned to Hobart M. Smith and were cataloged as UINMH 10094–10099. Also, USNM 111388–111393 cannot be found in the USNM collection, and there is no record of them having been exchanged or any explanation of their loss. Some of the paratypes EHT-HMS 25311–25341 and 26749–26783 are presently cataloged as FMNH 100019, 100146, 100147, 100193–100223, 126334, 126335, 126784, and 169718–169722. Additional paratypes from EHT-HMS 25311–25341 and 26749–26783 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27191–27209. Later, UIMNH 10099 was exchanged to the Field Museum of Natural History, where it is presently cataloged as FMNH 75769. UIMNH 27203 and 27204 were exchanged to the Carnegie Museum of Natural History, where they are presently cataloged as CM 39987 and 39988. UIMNH 27205 was exchanged to the University of Michigan Museum of Zoology, where it is presently cataloged as UMMZ 114070. The paratypes EHT-HMS 25327, 26750, and 27264–27271 could not be located and must be considered missing.

Chiropterotriton ceronorum Parra-Olea, Garcia-Castillo, Rovito, Maisano, Hanken and Wake, 2020

[currently accepted; *fide*, Frost, 2021]

Parra-Olea, García-Castillo, Rovito, Maisano, Hanken, and Wake, 2020, *PeerJ*, 8(e8800): 13.

Holotype: USNM 224212, ~1 km NE Santa Cruz Texmalaquilla (4.7 miles by road NE of Atzitzintla), on south slope of Pico de Orizaba, Puebla, Mexico, 18°56'54"N, 97°16'48"W, elevation 3,110 m. Collected by R. W. McDiarmid, 3 Sep 1975.

Type Locality: "ca. 1 km NE Santa Cruz Texmalaquilla (4.7 mi by road NE of Atzitzintla), on south slope of Pico de Orizaba, Puebla, Mexico."

Paratypes: USNM 224202, 224207–224208, 224211, 224218–224220, 224230, 224236, 224240–224241, 224247, 224250, 224252–224253, 224257, 224259, 224275–224276, same data as holotype.

Other Type Material: Paratype: MVZ 201393.

Etymology: The name is a patronym honoring members of the Ceron family of Cuautlalpan, Veracruz, who have assisted generations of herpetologists in collecting salamanders in the general region of Pico de Orizaba.

Desmognathus aeneus Brown and Bishop, 1947

[currently accepted; *fide*, Harrison, 1992: 1]

Brown and Bishop, 1947, *Copeia*, 1947: 163.

Holotype: USNM 123977, 0.5 mile SE of Peachtree, Cherokee County, North Carolina, collected by J. C. Nicholls Jr., 22 Oct 1946.

Type Locality: "Seepage branch 100 feet north of Peachtree Creek, 1/2 mile S. S. E. of Peachtree, Cherokee County, North Carolina."

Other Type Material: Paratypes were "deposited in the S. C. Bishop collection; W. C. Brown collection; American Museum of Natural History, New York; Carnegie Museum, Pittsburgh; Museum of Comparative zoology, Cambridge, Massachusetts, and the Chicago Natural History Museum." The total number of specimens was 10 adults and 2 juveniles. (See Remarks.)

Etymology: The name *aeneus* is from the Latin *aeneous*, "made of bronze or copper," apparently because of the reddish bronze dorsal band mentioned in the original description.

Remarks: The paratype deposited with the American Museum of Natural History is AMNH A-53509, the paratype deposited with the Carnegie Museum of Natural History is CM 27105, the paratype deposited with the Museum of Comparative Zoology is MCZ A-26367, and the paratype deposited with the Chicago Museum of Natural History is presently cataloged as FMNH 48745. The S. C. Bishop collection paratypes were later deposited at the Field Museum of Natural History, where they were cataloged as FMNH 93386–93390. FMNH 93390 was later exchanged to the University of Illinois Museum of Natural History, where it is presently cataloged as UIMNH 39924. In addition, there are two specimens at the Museum of Comparative Zoology that are listed as topotypes (MCZ A-26368, A-26369), but they were received and cataloged with the paratype and apparently represent the last of the 11 paratypes mentioned in the original description.

Desmognathus apalachicolae Means and Karlin, 1989

[currently accepted; *fide*, Means, 1993: 1]

Means and Karlin, 1989, *Herpetologica*, 45: 38.

Holotype: USNM 269079, Big Sweetwater Creek steephead, at junction of Florida Routes 12 and 271, T1N, R7W, Sec. 11, SE Quarter, elevation 60 m, Liberty County, Florida, collected by D. B. Means and G. H. Means, 11 Jul 1973.

Type Locality: "Big Sweetwater Creek steephead . . . , 60 m elevation, in SE 1/4 Section 11, Township 1 N, Range 7 W, Liberty County, Florida."

Paratypes: USNM 269080–269163, same data as holotype; USNM 269164–269232, tributary creek draining the eastern wall escarpment of the Apalachicola River, 0.3 mile NE of Aspalaga Landing, T3N, R7W, Sec. 35, NW 1/4 of NE 1/4, collected by D. B. Means, 27 May 1976.

Other Type Material: Paratypes: UF 67233–67283.

Etymology: The species is named after the Apalachicola River.

Desmognathus aureatagulus Weller, 1930

[= *Desmognathus imitator* Dunn, 1927; *fide*, Weller, 1931: 8] Weller, 1930b, *Proc. Junior Soc. Nat. Hist. Cincinnati*, 1: 3rd page (not numbered).

Paratype: USNM 93686, Mount Le Conte, Sevier County, Tennessee, collected by R. Dury, H. Wyss, A. Loring, S. Loring, and W. Weller, 23 Jun 1930.

Type Locality: "Trail between Newfound Gap and Indian Pass, 4400 to 5000 feet," Great Smoky Mountain National Park, Mount LeConte, Sevier County, Tennessee.

Other Type Material: Holotype: CSNH 656. Paratypes: CSNH 646–655, 657–695, 601a–k (all listed as "Cotypes"), CSNH 696–725 (listed as "Paratypes"). (See Remarks.)

Etymology: The name *aureatagulus* is derived from the Latin *aureus*, "golden," and apparently the Latin *jugulum*, "throat," in reference to the yellow cheek patches mentioned in the original description.

Remarks: USNM 93686 (formerly CSNH Herp 569) was received in exchange and cataloged on 2 Dec 1933. In the original description, Weller (1930b) stated, in reference to the material examined, "sixty specimens, including the type, were used in preparation of the description. Thirty additional specimens were examined . . . making a total type series of ninety specimens." He then listed a "type," "cotypes," and paratypes with CSNH numbers that totaled 91 specimens (see list above). However, the CSNH number of USNM 93686 (CSNH 569) was not included. Then Weller (1931) synonymized this species with *Desmognathus imitator* and listed the type series with a totally different series of numbers (CSNH 546–625, 501a–k), which included the USNM specimen. Apparently, the numbers as published in the original description were wrong. The entries in the original CSNH catalog show that the numbers as published in Weller (1931) were correct (John Ferner, Cincinnati Museum Center, personal communication, 15 Feb 2009). CSNH Herp 501a–k and 10 specimens out of CSNH 605–622 are presently cataloged as CMC 501a–k and 605–622. The rest of the type series, including the holotype, cannot be located at the Cincinnati Museum Center.

Desmognathus brimleyorum Stejneger, 1895

[currently accepted; *fide*, Valentine, 1963: 130]

Stejneger, 1895 [1894], *Proc. U.S. Natl. Mus.*, 17: 597.

Holotype: USNM 22157, Hot Springs, Garland County, Arkansas, collected by B. L. Combs, Oct 1894.

Type Locality: "Hot Springs, Ark."

Paratypes: USNM 22158–22171, same data as holotype. (See Remarks.)

Etymology: The name *brimleyorum* is a patronym honoring Herbert H. Brimley and Clement S. Brimley, American naturalists and zoologists.

Remarks: Paratypes were not listed by number in the original description. USNM 22170 and 22171 were exchanged to the Museum of Comparative Zoology on 4 Dec 1909 and are presently cataloged as MCZ A-2598 and A-119776.

Desmognathus chermocki Bishop and Valentine, 1950

[= *Desmognathus aeneus* Brown and Bishop, 1947; *fide*, Mount, 1975: 112]

Bishop and Valentine, 1950, *Copeia*, 1950: 39.

Paratypes: USNM 129267–129268, Hurricane Creek, Tuscaloosa County, Alabama, collected by B. O. Valentine, 30 Mar 1948.

Type Locality: "Hurricane Creek, Tuscaloosa County, Alabama, 1 1/8 miles ENE of bridge crossing creek on Alabama State Route 116."

Other Type Material: Holotype: CMNH 59232. Paratypes: CMNH 59233; other paratypes were "deposited in collections of The American Museum of Natural History, New York; Carnegie Museum, Pittsburgh; Museum of Comparative Zoology, Cambridge. Other paratypes retained in the collections of R. L. Chermock and S. C. Bishop." (See Remarks.)

Etymology: The name *chermocki* is a patronym honoring R. L. Chermock, one of the collectors of the type specimens.

Remarks: The USNM paratypes listed above were received from Sherman C. Bishop after publication of the original description. The holotype and paratype published under CNHM numbers are now FMNH 59232 and 59233. Other than an additional eight specimens listed by SCB numbers in the table of measurements in the original description, none of the approximately 40 additional paratypes were listed by number. Those eight specimens, SCB 1286–1293, are presently cataloged as FMNH 86745–86752. The paratypes deposited at the American Museum of Natural History are cataloged as AMNH A-54706 and A-54707, those deposited at the Carnegie Museum of Natural History are cataloged as CM 29157 and 29158, and those deposited at the Museum of Comparative Zoology are cataloged as MCZ A-26746 and A-26747. CNHM 86747 was exchanged to the University of Illinois Museum of Natural History, where it is presently cataloged as UIMNH 39925. Other than the 17 paratypes listed above, the deposition of the remaining specimens is unknown.

Desmognathus folkertsi Camp, Tilley, Austin, and Marshall, 2002

[currently accepted; *fide*, Camp, 2004: 1]

Camp, Tilley, Austin, and Marshall, 2002, *Herpetologica*, 58: 477.

Holotype: USNM 536397, 11.2 km S of Blairsville, upper tributary of West Fork of Wolf Creek, south of Wolf Creek Road, Union County, Georgia, 34°46'05"N, 83°56'37"W, elevation 834 m, collected by C. D. Camp, S. Bailey, M. Elliott, and S. Smith, 27 Sep 1999.

Type Locality: "South of Wolf Creek Road (34° 46'05" N latitude; 83° 56'37 W longitude) on an upper tributary of the West Fork of Wolf Creek at an elevation of 834 m, Union County, Georgia."

Paratypes: USNM 536398–536402, same data as holotype. (See Remarks.)

Etymology: The name *folkertsi* is a patronym honoring George W. Folkerts, professor of biological sciences at Auburn University.

Remarks: All the type series were cited with the erroneous acronym “USMNH” (see discussion in the Introduction). In addition, USNM 536399–536402 were erroneously published under the numbers USMNH 546399–546402.

***Desmognathus fuscus imitator* Dunn, 1927**

[= *Desmognathus imitator* Dunn, 1927; *fide*, Tilley et al., 1978: 100]

Dunn, 1927, *Copeia*, 164: 84.

Holotype: USNM 72762, Great Smoky Mountains, near Indian Gap, Swain County, North Carolina, collected by J. E. Benedict, 9 Jun 1927.

Type Locality: “Indian Pass, Great Smoky Mts., N. C.”

Paratypes: USNM 72761, 72763–72765, same data as holotype. (See Remarks.)

Etiymology: The name *imitator* is from the Latin *imitatus*, “copy” or “mimic,” in reference to the mimicry between this species and *Plethodon jordani* mentioned in the original description.

Remarks: USNM 72765 was exchanged to the University of Michigan Museum of Zoology on 27 Nov 1944 and is presently cataloged as UMMZ 92409.

***Desmognathus fuscus welteri* Barbour, 1950**

[= *Desmognathus welteri* Barbour, 1950; *fide*, Rubenstein, 1971: 329; confirmed by Juterbock, 1984: 240]

Barbour, 1950, *Copeia*, 1950: 277.

Holotype: USNM 129312, North Fork of Looney Creek, near Lynch, Harlan County, Kentucky, elevation 2,300 feet, collected by R. W. Barbour, 14 Jun 1948.

Type Locality: “At an elevation of 2300 feet above sea level, at Looney Creek, near Lynch, Harlan County, Kentucky.”

Paratypes: USNM 129313–129354, same data as holotype.

Other Type Material: Paratypes: University of Louisville Nos. 3600–3605; CM 29121–29136; CNHM 61141–61166; AMNH 54711–54741; CU 5495–5508; personal collection of Roger W. Barbour Nos. BM 1–23. (See Remarks.)

Etiymology: The name *welteri* is a patronym honoring Wilfred A. Welter, American zoologist and professor of biology at Morehead State College.

Remarks: The CMNH specimens are presently cataloged as FMNH 61141–61166. FMNH 61154 was exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-28276, and FMNH 61155 was exchanged to the University of Illinois Museum of Natural History, where it is presently cataloged as UIMNH 39926. AMNH 54711–54741 are presently cataloged as AMNH A-54711–54741. The Cornell University paratypes were exchanged to the American Museum of Natural History, where they are presently cataloged as AMNH A-83854–83867. The paratypes deposited at the University of Louisville and Barbour’s personal collection could not be located and must be considered missing.

***Desmognathus gvnigeusgwotli* Pyron and Beamer, 2022**

[currently accepted; *fide*, Frost, 2021]

Pyron and Beamer, 2022, *Bionomia*, 27: 21.

Holotype: USNM 596068, Great Smoky Mountains National Park, Straight Fork, near Round Bottom Campground, Swain County, North Carolina, 35°37′48″N, 83°12′55″W, elevation 973 m, collected by R. A. Pyron and Todd W. Pierson on 14 Aug 2019.

Type Locality: “Straight Fork in Great Smoky Mountains National Park, Swain Co., North Carolina.”

Paratypes: USNM 596066–596067, same data as holotype.

Other Type Material: Paratypes: BMNH 2021.7555; MNHN 2021.0142.

Etiymology: The name *gvnigeusgwotli* is derived from the Tsalagi words for “black belly.”

***Desmognathus mavrokoilius* Pyron and Beamer, 2022**

[currently accepted; *fide*, Frost, 2021]

Pyron and Beamer, 2022, *Bionomia*, 27: 31.

Paratypes: USNM 30891–30902, Linville and Blowing Rock, between, small stream flowing in Catawba River, North Carolina, collected by Franklin Sherman Jr., Sep 1902.

Type Locality: “Dixon Creek, south slope of Grandfather Mountain (NC: Caldwell; 36.108, –81.779, 1179 m ASL).”

Other Type Material: Holotype: AMNH A-93879. Paratypes: AMNH A-93880–93883; BMNH 202.7554; MNHN 202.0.2.

Etiymology: The name *mavrokoilius* is from the Greek *mávro*s and *koiliá* for “dark belly.”

***Desmognathus monticola* Dunn, 1916**

[currently accepted; *fide*, Grobman, 1945: 40; confirmed by Regester et al., 2020: 1]

Dunn, 1916, *Proc. Biol. Soc. Washington*, 29: 73.

Holotype: USNM 38313, Elk Lodge Lake, near Brevard, Transylvania County, North Carolina, collected by R. Tipping and E. Tipping, 13 Jul 1908.

Type Locality: “Elk Lodge Lake, near Brevard, North Carolina; altitude about 3000 feet.”

Paratypes: USNM 38314–38316, 38320–38326, same data as holotype.

Other Type Material: “Specimens examined.—Sixty-three,” which were listed only by locality and number of specimens. However, when the numbers of specimens listed by each locality are totaled, the number of specimens is 56. (See Remarks.)

Etiymology: The name *monticola* is derived from the Latin *montis*, “mountain,” and *-cola*, a suffix meaning “dweller,” in reference to the mountain habitats of this species.

Remarks: Of the 56 specimens listed by locality and number of specimens in the original description, only 11 can be accounted for by the USNM type specimens. USNM 38313–38316, 38320, 38321, and 38323–38326 were included in table of measurements of the “type series.” USNM 38322 was not included in the table of measurements of the “type series” but was collected with the specimens of the “type series” and was certainly part of the material examined and therefore a paratype. It is not clear whether the additional 45 specimens listed by locality and number of specimens should be referred

specimens and excluded from the paratype series since it is obvious from the original description that the author based his description on additional specimens beyond those listed in the table of measurements. However, since they were not actually listed by number in the original description, their status should probably be considered to be referred specimens. The deposition of the additional 45 specimens listed only by locality in the original description is not clear, although careful examination of the list of specimens examined in Dunn (1926a) may reveal many of these unlisted specimens.

***Desmognathus monticola jeffersoni* Hoffman, 1951**

[= *Desmognathus monticola* Dunn, 1916; *fide*, Petranks, 1998: 188; confirmed by Regester et al., 2020: 1]

Hoffman, 1951, *J. Elisha Mitchell Sci. Soc.*, 67: 250.

Holotype: USNM 126891, Saddle Hollow on Jarman's Mountain (= Bucks Elbow Mountain), 2 miles W of Crozet, Albemarle County, Virginia, elevation 1,600 feet, collected by R. L. Hoffman, 11 Mar 1945.

Type Locality: "Saddle Hollow on Jarman's Mountain, 2 miles west of Crozet, Albemarle County, Virginia (elevation 1600 feet)."

Paratypes: USNM 126892–126895, same data as holotype; USNM 123759–123761, same locality and collector as holotype, except collected 27 Mar 1946; USNM 149044–149047, same locality as holotype, collected by R. L. Hoffman and Reilly, 27 Sep 1945.

Other Type Material: Paratypes: RLH 54, 55, 370–375. (See Remarks.)

Etymology: The name *jeffersoni* is a patronym honoring Thomas Jefferson.

Remarks: USNM 196896 was listed as a paratopotype of *Desmognathus monticola jeffersoni* Hoffman, 1951. However, this specimen is actually *Desmognathus monticola monticola* from Simpson Creek, Alleghany County, Virginia, and was the specimen illustrated next to the holotype in the original description to demonstrate the difference in color pattern between the two subspecies. This specimen was exchanged to the Museum of Comparative Zoology on 7 Aug 1958, where it is presently cataloged as MCZ A-30599. USNM 130192 was listed as a paratype of *Desmognathus monticola jeffersoni* Hoffman, 1951 by Cochran (1961). This specimen was listed as RLH 494 in the specimens examined section of the original description but was not listed in the list of type specimens. USNM 149044–149047 were received from R. L. Hoffman nearly 12 years after the publication of this species and were cataloged on 25 Jul 1963. They were listed as RLH 371–374 in the original description. The paratypes RLH 54, 55, and 370 could not be located and must be considered missing.

***Desmognathus ochrophaea carolinensis* Dunn, 1916**

[= *Desmognathus carolinensis* Dunn, 1916; *fide*, Tilley and Mahoney, 1996: 23]

Dunn, 1916, *Proc. Biol. Soc. Washington*, 29: 74.

Holotype: USNM 31135, Mount Mitchell, spring near top, Yancey County, North Carolina, collected by H. H. Brimley and F. Sherman Jr., 5 Oct 1902.

Type Locality: "Spring near top of Mt. Mitchell, North Carolina, altitude 'over 6500 feet.'"

Paratypes: USNM 31136–31138, same data as holotype; USNM 31133, 31134, same data as holotype, except collected 1902.

Other Type Material: "Specimens examined. – Sixty-one," which were listed only by locality and number of specimens. However, when the numbers of specimens listed by each locality are totaled, the number of specimens is 66. (See Remarks.)

Etymology: The name *carolinensis* is derived from the state of North Carolina, where the type locality is found.

Remarks: Of the 66 specimens listed by locality and number of specimens in the original description, only 6 can be accounted for by the USNM type specimens. The six specimens listed above as the holotype and paratypes were clearly listed by their USNM number as the "type series" in a table of measurements in the original description. It is not clear whether the additional 60 specimens listed by locality and number of specimens should be referred specimens and excluded from the paratype series since it is obvious from the original description that the author based his description on additional specimens beyond those listed in the table of measurements. However, since they were not actually listed by number in the original description, their status should probably be considered to be referred specimens. The deposition of the 60 additional specimens listed only by locality in the original description is not clear, although careful examination of the list of specimens examined in Dunn (1926a) may reveal many of these unlisted specimens.

***Desmognathus ocoee* Nicholls, 1949**

[currently accepted; *fide*, Tilley and Mahoney, 1996: 25]

Nicholls, 1949, *J. Tennessee Acad. Sci.*, 24: 127.

Holotype: USNM 128007, Ship's Prow Rock, Ocoee Gorge, 9 miles (air) west of Ducktown, Polk County, Tennessee, collected by J. C. Nicholls Jr., 14 Nov 1948.

Type Locality: "On the surface and in crevices of cliffs at Ship's Prow Rock, in Ocoee Gorge, beside U.S. Highway 64, nine miles airline west of Ducktown, in Polk County, Tennessee."

Paratype: USNM 128008, same data as holotype.

Other Type Material: The original description was "based upon a series of 28 adult specimens." "Paratypes are deposited as follows: in the J. C. Nicholls, Jr. collection; S. C. Bishop Collection, . . . ; American Museum of Natural History, . . . ; Carnegie Museum, . . . ; Museum of Comparative Zoology, . . . ; Chicago Natural History Museum, . . . ; and Emory University." (See Remarks.)

Etymology: The species is named after the Ocoee Gorge, location of the type locality.

Remarks: Types were not listed by museum number in the original description. Of the 28 adult specimens on which the description was based, 5 specimens, including the holotype, were listed in a table of measurements and other characteristics

by the JCN number. USNM 128007 was listed as JCN 1001, and USNM 128008 was listed as JCN 1004. A search of online museum databases found the following paratypes: AMNH A-54385 and A-54386; CM 29290 and 29291; FMNH 57313, 57314, 90034, and 90035 (FMNH 90035 exchanged to MCZ); and MCZ A-26589, A-26590, and A-28307 (formerly FMNH 90035). These specimens, plus the USNM specimens, account for 12 of the original 28 specimens. The whereabouts of the additional 16 paratypes are unknown.

***Desmognathus pascagoula* Pyron, O'Connell, Lamb, and Beamer, 2022**

[currently accepted; *fide*, Frost, 2021]

Pyron, O'Connell, Lamb, and Beamer, 2022, *Zootaxa*, 5133: 66. Holotype: USNM 596040, Ward Bayou, Ward Bayou Wildlife Management Area, Jackson County, Mississippi, collected by R. A. Pyron on 11 Dec 2019.

Type Locality: "A small seep feeding into Ward Bayou at Ward Bayou WMA, Jackson Co., Mississippi (30.56, -88.62; 3m ASL)."

Paratypes: USNM 596041–596043, tributary seep of Sweetwater Creek, Perry County, Mississippi, collected by R. A. Pyron, D. A. Beamer, and N. Akers, 3 Jan 2022; USNM 596044, Franklin Creek at Number 12 Swamp, Mobile County, Alabama (30.45, -88.35, 9 m above sea level [ASL]), collected by R. A. Pyron, D. A. Beamer, and N. Akers, 4 Jan 2022.

Other Type Material: Paratypes: AMNH 193779; ANSP 38808; ANSP 38810; AUM 45885; AUM 45896, 45897; BMNH 2021.7559; MCZ A-153479; MMNS 19623; MMNS 19997; MNHN-RA 2021.0149.

Etymology: The name *pascagoula* refers to the Pascagoula River drainage that comprises much of the known range of the species. The river was named after the Pascagoula tribe, one of the Indigenous peoples that lived in what is now southern Mississippi.

***Desmognathus planiceps* Newman, 1955**

[currently accepted; *fide*, Tilley et al., 2008: 115–130]

Newman, 1955, *J. Washington Acad. Sci.*, 45: 83.

Holotype: USNM 143559 (formerly WBN 1316), near Meadows of Dan, gorge below Dan River Dam, Patrick County, Virginia, collected by R. L. Hoffman and W. B. Newman, 12 May 1951.

Type Locality: "From a portion of the stream (approximate elevation 2800 feet) dropping down into the gorge below the Dan River Dam near Meadows of Dan. Patrick County, Va."

Paratypes: USNM 143560, same data as holotype; USNM 143561–143563, same locality as holotype, collected by R. L. Hoffman, W. B. Newman, and J. P. Newman, 30 May 1951; USNM 143564–143568, 5.5 miles NW of Woolwine, stream along Route 8, Patrick County, Virginia, collected by R. L. Hoffman, W. B. Newman, and J. P. Newman, 30 May 1951; USNM 143569–143575, same locality as USNM

143564–143568, but collected by R. L. Hoffman and W. B. Newman, 27 Aug 1951.

Other Type Material: Paratypes: WBN 1318, 1322–1324, 1326–1329, 1331–1339. (See Remarks.)

Etymology: The name *planiceps* is from the Latin *planus*, "flat," and *caput*, "head," in reference to the broad, flattened head of this species.

Remarks: The holotype, USNM 143559, was cited as WBN 1316 in the original description. All the paratypes were also cited by WBN number: USNM 143560 as WBN 1318, USNM 143561–143563 as WBN 1322–1324, USNM 143564–143567 as WBN 1326–1329, USNM 143568 as WBN 1331, and USNM 143569–143575 as WBN 1333–1339. One paratype, cited as WBN 1332 in the original description, was not deposited at the U.S. National Museum. The whereabouts of this specimen are unknown.

***Desmognathus santeetlah* Tilley, 1981**

[currently accepted; *fide*, Tilley, 2000: 2]

Tilley, 1981, *Occas. Pap. Mus. Zool. Univ. Michigan*, 695: 3.

Holotype: USNM 214218, Unicoi Mountains, in headwaters of North Fork of Citico Creek, ~0.5 mile beyond end of road below Cherry Log Gap, ~4,000 feet, Monroe County, Tennessee, collected by S. G. Tilley and R. L. Jones, 26 Jun 1979.

Type Locality: "From a seepage area at ca. 1219 m (4000') in the headwaters of the N. Fork of Citico Cr. below Cherry Log Gap, Unicoi Mtns., Monroe County."

Paratypes: USNM 214219–214245, same data as holotype; USNM 214246–214262, Great Balsam Mountains, headwaters of streams draining northwest slopes of Rough Butt Bald, ~5,200–5,400 feet, Jackson County, North Carolina, collected by S. G. Tilley, J. W. Tilley, P. M. Schwerdtfeger, S. Haskell, and D. C. Wiernasz, 30 May 1978.

Other Type Material: Paratypes: UMMZ 169042–169059.

Etymology: The name *santeetlah* is derived from the name of several prominent geographic features in the vicinity of the type locality and may have been originally derived from the Cherokee word meaning "blue water."

***Desmognathus wrighti* King, 1936**

[currently accepted; *fide*, Harrison, 2000: 1]

King, 1936, *Herpetologica*, 1: 57.

Holotype: USNM 101794, Mount Le Conte, Great Smoky Mountains National Park, Sevier County, Tennessee, collected by F. W. King, 19 Jul 1934.

Type Locality: "Mount Le Conte, Sevier County, Tennessee, Great Smoky Mountains National Park."

Paratypes: USNM 101791–101793, 101795, same data as holotype; USNM 101796–101802, same data as holotype, except collected 23 Sep 1934; USNM 101803, 101804, Pecks Corner, Great Smoky Mountains National Park, Swain and Sevier Counties, North Carolina–Tennessee, collected by F. W. King, 15 Apr 1934; USNM 101805, 101806, Mount Hardison, Great Smoky Mountains National Park, Swain

County, North Carolina, collected by F. W. King, 22 Aug 1934; USNM 101807–101812, Brushy Lead, Great Smoky Mountains National Park, Tennessee, collected by F. W. King, 8 Aug 1934; USNM 101813, 101814, White Rock (= Mount Cammerer), Great Smoky Mountains National Park, Haywood and Cocke Counties, North Carolina–Tennessee, collected by F. W. King, 14 Oct 1934.

Other Type Material: Paratypes: Cincinnati Society of Natural History 789 (26 specimens). (See Remarks.)

Etymology: The name *wrighti* is a patronym honoring George M. Wright, former chief of the Wildlife Division, National Park Service.

Remarks: USNM 101803 and 101804 were listed as “USNM 10183-4” in the original description, and USNM 101805 and 101806 were listed as “USNM 10185-6.” USNM 101800 and 101801 were exchanged to the Museum of Comparative Zoology on 9 Jun 1937 and are presently cataloged as MCZ A-20943–20944. The paratypes Cincinnati Society of Natural History 789 are presently cataloged as CMC 789.

***Ensatina eschscholtzii xanthoptica* Stebbins, 1949**

[currently accepted; *fide*, Highton et al., 2017: 30]

Stebbins, 1949, *Univ. California Publ. Zool.*, 48: 407.

Paratype: USNM 93606, Berkeley, Alameda County, California, collected B. Campbell, 2 Feb 1931. (See Remarks.)

Type Locality: “4.5 miles east of Schellville, Napa County, California.”

Other Type Material: Holotype: MVZ 41726. Paratypes were listed as “Locality records” with only the locality, the number of specimens, and the museum or collection where deposited. Paratypes are listed in the collection of the Museum of Vertebrate Zoology, California Academy of Sciences; the private collection of L. M. Klauber; the Chicago Museum of Natural History; the American Museum of Natural History; and the Stanford University Natural History Museum.

Etymology: The name is derived from the Greek *xanthos*, “yellow,” and *optikos*, pertaining to sight, in reference to the yellow eyes of this taxon.

Remarks: Only the holotype was listed by museum number. All other specimens were listed only as locality records with the museum and number of specimens in parentheses after the locality. However, it is clear from the description that these other specimens were used in Stebbins’s concept of this taxon and are therefore paratypes as defined in Article 72 of the International Code of Zoological Nomenclature (International Commission on Zoological Nomenclature, 1999). USNM 93606 was not listed by number in the original description, only with the notation “USNM 1” after the locality. The rest of the paratypes that were listed only as locality records could not be located within their respective museums as those museums apparently do not recognize those specimens as paratypes.

***Ensatina klauberi* Dunn, 1929**

[= *Ensatina eschscholtzii klauberi* Dunn, 1929; *fide*, Stebbins, 1949: 467]

Dunn, 1929 [1928], *Proc. U.S. Natl. Mus.*, 74: 1.

Holotype: USNM 75337, Descanso, San Diego County, California, collected by J. Carter, 1 Apr 1928.

Type Locality: “Descanso, San Diego County, Calif.”

Paratypes: USNM 75229, 75230, Banning Water Canyon, Mill Canyon, Banning, Riverside County, California, collected by A. Gilman, 10 Oct 1926.

Etymology: The name *klauberi* is a patronym honoring L. M. Klauber, American herpetologist.

***Eurycea aquatica* Rose and Bush, 1963**

[currently accepted; *fide*, Sever, 1999: 4]

Rose and Bush, 1963, *Tulane Stud. Zool.*, 10: 121.

Holotype: USNM 147138, 2 miles W of Bessemer, along County Route 20, Jefferson County, Alabama, collected by F. L. Rose, F. M. Bush, and J. Jackson, 6 Oct 1962.

Type Locality: “Small springs and permanent streams two miles west of Bessemer, Jefferson County, Alabama, along county highway 20.”

Paratypes: USNM 147139–147141, same data as holotype.

Other Type Material: Paratypes: AMNH A-69032, A-69033; CM 38647, 38648; CNMH 134998, 134999; UF 14907–14909; TU 18765 (65 specimens); UMMZ 123349, 123350. (See Remarks.)

Etymology: The name *aquatica* is derived from the Latin *aquaticus*, “water dwelling,” in reference to the aquatic habitat of the species.

Remarks: CNMH 134998 and 134999 are presently cataloged as FMNH 134998 and 134999.

***Eurycea bislineata major* Trapido and Clausen, 1938**

[= *Eurycea bislineata* (Green, 1818); *fide*, Mittleman, 1949: 90]

Trapido and Clausen, 1938, *Copeia*, 1938: 118.

Holotype: USNM 104239, Ouatichouan River at Val Jalbert, Lake St. John County, Quebec, Canada, collected by R. Clausen and H. Trapido, 17 Sep 1937.

Type Locality: “Under limestone slabs along Ouatichouan River, Val Jalbert, Lake St. John Co., Quebec,” Canada.

Paratypes: USNM 48056, 48081, 48082, Godbout, Saguenay County, Quebec, Canada, collector and date collected unknown, cataloged 13 Jun 1911.

Other Type Material: Paratypes: CNM 1065; MCZ 240; TC 327, 336, 339. (See Remarks.)

Etymology: The name *major* is from the Latin *major*, “larger,” in reference to the larger body size mentioned in the original description.

Remarks: The paratypes USNM 48081 and 48082 were cited in error as USNM 24081 and 24082. As indicated in the original description, the paratypes published with TC field numbers were deposited at Cornell University. TC 327 is presently cataloged as CU-Amphibian 3695, TC 336 is presently

cataloged as CU-Amphibian 3702 (five specimens), and TC 339 is presently cataloged as CU-Amphibian 3705. From the original description, it is not clear how many specimens were represented in the TC field numbers, although there were at least 16 from the type locality that were measured. Apparently, there were at least 25 specimens originally cataloged as CU-Amphibian 3705, although only one specimen can be found now. At least some of the additional specimens were exchanged to the American Museum of Natural History, where 18 are presently cataloged as AMNH A-83868–83885. The whereabouts of the additional six specimens out of CU-Amphibian 3705 could not be determined.

***Eurycea bislineata rivicola* Mittleman, 1949**

[= *Eurycea bislineata* (Green, 1818); *fide*, Sever, 1972: 323]

Mittleman, 1949, *Proc. Biol. Soc. Washington*, 62: 93.

Holotype: USNM 129397, Echo Canyon, McCormick's Creek State Park, Owen County, collected by M. E. Mittleman and M. B. Mittleman, Aug 1942.

Type Locality: "Echo Canyon, McCormick's Creek State Park, Owen County, Indiana."

Paratypes: USNM 8832, Cincinnati, Hamilton County, Ohio, collected by J. N. Scarborough, date of collection unknown, cataloged 29 Mar 1877; USNM 17465–17468, Indianapolis, springs along Fall Creek, Marion County, Indiana, collected by O. P. Hay, 1891; USNM 17972–17974, Lafayette, Tippecanoe County, Indiana, collected by F. C. Test, 19 Apr 1892; USNM 76825, 76826, 5 miles ESE of Camden, Preble County, Ohio, collected by R. Greenfield, 3 Apr 1929; USNM 85686, 2 miles S of Shacklett, Cheatham County, Tennessee, collected by C. E. Burt, 5 Jun 1932; USNM 85689, 5 miles NW of Bellevue, Davidson County, Tennessee, collected by C. E. Burt, 5 Jun 1932; USNM 87615, 3 miles E of Pleasant Hill, Cumberland County, Tennessee, collected by C. E. Burt, 23 Jul 1932; USNM 88754, 4 miles SW of Bean Station, Grainger County, Tennessee, collected by C. E. Burt, 22 Jul 1932; USNM 88755, 2 miles E of Dowelltown, DeKalb County, Tennessee, collected by C. E. Burt, 23 Jul 1932; USNM 118302–118306, Marietta, Washington County, Ohio, collected by F. W. King, 21 May 1930; USNM 129398, same data as the holotype.

Other Type Material: Paratypes: CAS 1436–1464, 1573; MBM (39 specimens); OUZ 28, 29, 906, 924, 933, 945, 946, 1028, 1029, 1058.

Etymology: The name *rivicola* is from the Latin *rivus*, "stream," and *colo*, "dwell," in reference to the stream-dwelling habits of this species.

Remarks: USNM 129397 (male holotype) and USNM 129398 (female allotype) were not listed by number in the original description but were published as "my personal collection (to be deposited in the U. S. National Museum)." USNM 8832 was listed by Cochran (1961) as the female allotype, but Mittleman (1967 [1966]) corrected this to USNM 129398. The CAS specimens were from the Chicago Academy of

Science and are presently in that collection as CA 1436–1464 and 1573. The final deposition of the MBM specimens is unknown. The OUZ paratypes were apparently deposited at the University of Illinois Museum of Natural History, where they are presently cataloged as UIMNH 34549–34588. UIMNH 34562 and 34563 were later exchanged to the Carnegie Museum of Natural History, where they are presently cataloged as CM 39992 and 39993.

***Eurycea chamberlaini* Harrison and Guttman, 2003**

[currently accepted; *fide*, Highton et al., 2017: 30]

Harrison and Guttman, 2003, *Southeast. Nat.*, 2: 163.

Holotype: USNM 547846, Sesquicentennial State Park, Richland County, South Carolina, collected by J. R. Harrison and A. E. Sanders, 3 Aug 1974.

Type Locality: "Sesquicentennial State Park, Richland County, South Carolina."

Paratypes: USNM 547847, 547848, same data as holotype.

Other Type Material: Paratypes: ChM CA4566–4577; NCSM 14805 (three specimens), 14947 (five specimens), 15788, 17103 (three specimens), 17335, 17470 (two specimens), 17556 (two specimens), 17579, 19159, 19783, 36021 (eight specimens), 36022, 36023 (three specimens), 36024.

Etymology: The name *chamberlaini* is a patronym honoring E. B. Chamberlain, former curator of vertebrate zoology at the Charleston Museum.

Remarks: USNM 547848 is a cleared and stained specimen presently stored in glycerin.

***Eurycea griseogaster* Moore and Hughes, 1941**

[= *Eurycea tynnerensis* Moore and Hughes, 1939; *fide*, Bonett and Chippindale, 2004: 1198]

Moore and Hughes, 1941, *Copeia*, 1941: 139.

Paratypes: USNM 113231–113235, Swimmer's Creek, tributary of Illinois River, 10 miles NE of Gore, Sequoyah County, Oklahoma, collected by G. A. Moore and A. Seamster, 11 Apr 1941. (See *Remarks*.)

Type Locality: "Swimmer's Creek, near its junction with the Illinois River, 10 miles north of Gore, Sequoyah County, Oklahoma."

Other Type Material: Holotype: FMNH 37832. Paratypes: FMNH 37833–37839, 37843; UMMZ 89427–89435; other paratypes were deposited at the Carnegie Institute, University of Oklahoma, Oklahoma Agricultural and Mechanical College, and the University of Rochester. There was a total of 84 paratypes. (See *Remarks*.)

Etymology: The name *griseogaster* is from the Latin *griseus*, "gray," and the Greek *gaster*, "stomach" or "belly," in reference to the gray coloration mentioned in the original description.

Remarks: The five USNM specimens were not listed by number in the original description. The paratypes deposited at the Field Museum of Natural History and the University of Michigan Museum of Zoology are still cataloged under the numbers as originally cataloged, except for UMMZ 89435, which

was later exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-25534. The paratypes deposited at the Carnegie Institute (= Carnegie Museum of Natural History) are presently cataloged as CM 20080–20082. The paratypes deposited at the University of Oklahoma and Oklahoma Agricultural and Mechanical College could not be located, whereas the paratypes deposited at the University of Rochester were apparently part of the collection of Sherman C. Bishop, which was eventually deposited at the Field Museum of Natural History, where they were cataloged as FMNH 90818–90824. Later, FMNH 90818 was exchanged to the University of Illinois Museum of Natural History, where it is presently cataloged as UIMNH 39927. In addition to the paratypes as published, there are three specimens at the Museum of Comparative Zoology (MCZ A-25527–25529) that are listed in their database as paratypes. The specimens listed above account for 36 of the original 84 paratypes. The whereabouts of the additional 58 paratypes mentioned in the original description, including those deposited at the University of Oklahoma and Oklahoma Agricultural and Mechanical College, are unknown.

***Eurycea junaluska* Sever, Dundee, and Sullivan, 1976**

[currently accepted; *fide*, Sever, 1983: 1]

Sever, Dundee, and Sullivan, 1976, *Herpetologica*, 32: 26.

Holotype: USNM 198421, 3.2–11.2 km SE of Tapoco, on US Route 129, Graham County, North Carolina, collected by C. D. Sullivan, 12 Sep 1973.

Type Locality: “U.S. Route 129, 3.2–11.2 km SE Tapoco, Graham County, North Carolina.”

Paratypes: USNM 198422–198426, same data as holotype.

Other Type Material: Paratypes: DMS 1865, 1866, 2077, 2114, 2128–2138; NCSM 14128, 14129. (See Remarks.)

Etymology: The name *junaluska* is a patronym honoring the Cherokee chief Junaluska.

Remarks: DMS 2077, 2114, and 2128–2138 were deposited at the University of Michigan Museum of Zoology and are presently cataloged as UMMZ 142790, 142791, and 142792–142802, respectively. The paratypes DMS 1835 and 1866 could not be located and must be considered missing.

***Eurycea latitans* Smith and Potter, 1946**

[currently accepted; *fide*, Chippindale et al., 2000: 27]

Smith and Potter, 1946, *Herpetologica*, 3: 106.

Holotype: USNM 123594, Cascade Cavern, 4.6 miles SE of Boerne, Kendall County, Texas, collected by F. E. Potter Jr., 15 May 1946.

Type Locality: “The first large pool deep within the recesses of Cascade Cavern, 4.6 miles by road (3½ miles airline) southeast of Boerne, Kendall County, Texas.”

Other Type Material: Paratypes: A total of 18 paratypes all from the type locality: TCWC 1195–1197; A338–A340, A345–A356 (personal collection of Floyd E. Potter Jr.); 3024–3026 (personal collection of Bryce C. Brown). (See Remarks.)

Etymology: The name *latitans* is derived from the Latin *latito*, “to hide, conceal,” apparently in reference to the cryptic cave habitat of this species.

Remarks: The final deposition of the personal collections of Floyd E. Potter Jr. and Bryce C. Brown is unknown.

***Eurycea longicauda permix* Mittleman, 1942**

[= *Eurycea longicauda longicauda* (Green, 1818); *fide*, Ireland, 1979: 2]

Mittleman, 1942b, *Proc. New England Zool. Club*, 21: 101.

Paratype: USNM 120708, Brown County State Park, 2.5 miles SE of Nashville, Brown County, Indiana; collected by M. B. Mittleman and M. E. Mittleman, 22 Aug 1942.

Type Locality: “Jimmie Strahl Creek (tributary of Salt Creek), Brown County State Park, two and five tenths miles south-east of Nashville, Brown County, Indiana.”

Other Type Material: Holotype: MCZ 25569. Paratypes: MCZ 25570 (listed as allotype); additional paratypes: “Thirty-two, to be distributed in the collections of the Museum of Comparative Zoology; United States National Museum; University of Michigan Museum of Zoology; Field Museum; Carnegie Museum; Ohio University, Department of Zoology; and M.B. Mittleman.” (See Remarks.)

Etymology: The name *permix* is from the Latin *pernix*, “nimble” or “swift,” apparently because of the swift movements of this form.

Remarks: USNM 120708 was not listed by number in the original description. Six paratypes were deposited at the Museum of Comparative Zoology, where they are presently cataloged as MCZ A-25569–25574. One paratype was deposited at the University of Michigan Museum of Zoology, where it is presently cataloged as UMMZ 91381. Apparently, no specimens were initially deposited at the Field Museum of Natural History or the Carnegie Museum of Natural History. UIMNH 20667–20672 were listed by Smith et al. (1964) as paratypes. These specimens must have been the paratypes originally deposited at the Department of Zoology, Ohio University. In 1956, UIMNH 20673 was exchanged to the Field Museum of Natural History, where it is presently cataloged as FMNH 75772. In 1965, UIMNH 20672 was exchanged to the Carnegie Museum of Natural History, where it is presently cataloged as CM 39991. This accounts for 14 of the original 34 paratypes. The remaining 20 specimens, including those in Mittleman’s personal collection, cannot be positively located. However, there are 20 specimens in the University of Illinois Museum of Natural History (UIMNH 34028–34047) that were collected in Brown County State Park by M. E. Mittleman and M. B. Mittleman on 22 Aug 1942. The data for these specimens match the data for the rest of the type series, and these specimens may be the missing paratypes.

***Eurycea neotenes* Bishop and Wright, 1937**

[currently accepted; *fide*, Chippindale et al., 2000: 25]

Bishop and Wright, 1937, *Proc. Biol. Soc. Washington*, 50: 142.

Holotype: USNM 103161, Culebra Creek, 5 miles N of Helotes, Bexar County, Texas, collected by S. C. Bishop and M. R. Wright, 1 Apr 1936.

Type Locality: "Culebra Creek, 5 miles north of Helotes, Bexar County, Texas."

Paratype: USNM 103162, same data as holotype.

Other Type Material: There were a total of nine specimens in the type series, four males, four females, and one young, according to the table in the original description. (See Remarks.)

Etymology: The name *neotenes* is from the Greek *neotes*, "youth," in reference to the neotenic reproduction of this species.

Remarks: The types were not listed by number in the original description. The holotype and paratype (allotype) whose data are given above were listed in the original description by sex and length, along with the statement "Types deposited in the U. S. National Museum." There was no indication in the original description where the remaining seven paratypes were to be deposited. Five of the paratypes are presently cataloged at the Field Museum of Natural History as FMNH 36845, 91036–91038, and 91053. A sixth paratype is presently cataloged at the Museum of Comparative Zoology as MCZ A-22350. The whereabouts of the seventh paratype are unknown.

***Eurycea tridentifera* Mitchell and Reddell, 1965**

[currently accepted; *fide*, Chippindale et al., 2000: 26]

Mitchell and Reddell, 1965, *Texas J. Sci.*, 17: 14.

Holotype: USNM 153780, Honey Creek Cave, near Spring Branch, Comal County, Texas, collected by J. R. Reddell and R. W. Mitchell, 14 Jan 1965.

Type Locality: "Waters of Honey Creek Cave, Comal County, Texas."

Paratypes: USNM 153781–153785, same data as holotype.

Other Type Material: Paratypes: TNHC 31521–31534.

Etymology: The name *tridentifera* is from the Latin *tridentifer*, "trident bearer," in reference to the trident-shaped posterior basibranchium found in this species.

***Eurycea tynerensis* Moore and Hughes, 1939**

[currently accepted; *fide*, Bonett and Chippindale, 2004: 1198]

Moore and Hughes, 1939, *Am. Midl. Nat.*, 22: 697.

Syntypes: USNM 108548 (12 specimens), Tyner Creek, 0.5 mile E of Proctor, Adair County, Oklahoma, collected by J. Mizelle and G. A. Moore, 29 May 1939.

Type Locality: "Tyner Creek, a tributary of Barron Fork Creek near Proctor, Adair County, Oklahoma."

Other Type Material: Syntypes: Total of 30 that were not designated by museum number in the original description. (See Remarks.)

Etymology: The name *tynerensis* is derived from Tyner Creek, the type locality.

Remarks: The syntypes were listed as "thirty cotype specimens . . . , 12 in the United States National Museum" in the original description. In addition to the USNM specimens

listed above, the following syntypes could be located in museum records: UMMZ 85534 (six specimens, one exchanged to the Museum of Comparative Zoology), MCZ 25533 (one specimen, formerly UMMZ 85534), OMNH 21325 (seven specimens), CAS-SU (Amp) 4778, OSUS (six specimens, now apparently lost), and CM 18525.

***Gyrinophilus dunni* Mittleman and Jopson, 1941**

[= *Gyrinophilus porphyriticus dunni* Mittleman and Jopson, 1941; *fide*, Brandon, 1966a: 50]

Mittleman and Jopson, 1941, *Smithson. Misc. Collect.*, 101: 2.

Holotype: USNM 113230, Clemson, on campus of Clemson College, Pickens County, South Carolina, collected by A. B. Grobman, 8 Apr 1941.

Type Locality: "Campus of Clemson College, Clemson, Pickens County, S.C., 700 feet altitude."

Paratypes: USNM 68168, Indian Cave, near Jefferson City, Jefferson County, Tennessee, collected by J. D. Ives, date of collection unknown, cataloged 19 Jan 1925; USNM 68820, Indian Cave, near Jefferson City, Jefferson County, Tennessee, collected by J. D. Ives, 12 Feb 1925; USNM 102440, Ceasars Head, along road between Brevard, North Carolina, and Greenville, South Carolina, Greenville County, South Carolina, collected by H. G. Jopson, 13 Apr 1934; USNM 102441, East of Rabun Gap, Rabun County, Georgia, collected by H. G. Jopson and H. P. Jopson, 6 Apr 1934.

Other Type Material: Paratypes: ChM 35.141.12, ChM 28.144.4; NCSM 4905, 7198, 7594; M. B. Mittleman 383, 384; Sherman C. Bishop collection (one specimen); Clemson College Division of Ent. and Zool. 36, 58, 105. (See Remarks.)

Etymology: The name *dunni* is a patronym honoring Emmett Reid Dunn, American herpetologist.

Remarks: The paratypes ChM 35.141.12 and ChM 28.144.4 are presently cataloged as ChM CA4582 and CA4581, respectively. M. B. Mittleman 383 could not be located and must be considered lost. However, M. B. Mittleman 384 was apparently deposited in the Carnegie Museum of Natural History, where it is presently cataloged as CM 21017. The paratype from the Sherman C. Bishop collection was deposited at the Field Museum of Natural History, where it is presently cataloged as FMNH 91137. The paratypes from the North Carolina State Museum and Clemson College Division of Entomology and Zoology could not be located and must be considered lost.

***Gyrinophilus porphyriticus inagnoscus* Mittleman, 1942**

[= *Gyrinophilus porphyriticus porphyriticus* (Green, 1827); *fide*, Brandon, 1966a: 31]

Mittleman, 1942a, *Proc. New England Zool. Club*, 20: 27.

Holotype: USNM 115520, Salt Creek, 4 miles SW of South Bloomingville, Salt Creek Township, Hocking County, Ohio, collected by M. B. Mittleman, 25 Sep 1940.

Type Locality: "Salt Creek, four miles southwest of Bloomington, Good Hope Township, Hocking County, Ohio";

corrected to “Salt Creek, 4 miles southwest of South Bloomingville, Salt Creek Township, Hocking County, Ohio” by Condit (1958: 47).

Other Type Material: Paratypes: MBM 296; OUZ 382–385, 916, 1230; OSM 331.2, 501.1, 711.1. (See Remarks.)

Etymology: Derivation unknown.

Remarks: USNM 115520 was listed as M. B. Mittleman No. 380 in the original description. OUZ 383–385, 916, and 1230 were later deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 36173–36177. Then, UIMNH 36175 was exchanged to the Carnegie Museum of Natural History, where it is presently cataloged as CM 39994. The paratype OSM 501.1 is presently in the Museum of Biological Diversity, Ohio State University, where it is presently cataloged as OSUM 501.1. The additional OSM paratypes could not be located and must be considered missing.

***Gyrinophilus subterraneus* Besharse and Holsinger, 1977**

[currently accepted; *fide*, Howard et al., 1984: 323]

Besharse and Holsinger, 1977, *Copeia*, 1977: 626.

Holotype: USNM 198533, General Davis Cave, a few kilometers NE Alderson, Greenbrier County, West Virginia, collected by J. C. Besharse, G. Dickson, and J. R. Holsinger, 12 Oct 1973.

Type Locality: “General Davis Cave, a few km NE Alderson, Greenbrier Co., West Virginia.”

Paratypes: USNM 198534, same data as holotype; USNM 198535, same locality as holotype, collected by J. C. Besharse, G. Corbett, and S. Hetrick, 19 May 1974; USNM 198536–198539, same locality as holotype, collected by J. C. Besharse, J. Besharse, D. Delzell, and E. Delzell, 19 Jul 1974; USNM 198540–198541, same locality as holotype, collected by J. R. Holsinger and D. Culver, 30 May 1975.

Other Type Material: Paratypes: JCB-E-45-13, 14, 15, 16, 18, 25, 28, 33, 35. (See Remarks.)

Etymology: The name *subterraneus* is derived from the Latin prefix *sub-*, “under,” and *terra*, “earth,” in reference to the cave habitat of this species.

Remarks: The abbreviation JCB-E in the list of paratypes is an acronym for Joseph C. Besharse’s field numbers. Four of the JCB-E paratypes were deposited at the Museum of Comparative Zoology, where they are cataloged as MCZ A-98797–98800. The remainder of the JCB-E paratypes were utilized in the senior author’s laboratory for histological study of the eyes or cleared and stained for skeletal structure. They were apparently lost during the move of the senior author from Kansas to Wisconsin in 1997 (J. C. Besharse, Medical College of Wisconsin (retired), personal communication, 3 Jun 2022).

***Hemidactylium pacificum* Cope, 1865**

[= *Batrachoseps pacificus* (Cope, 1865); *fide*, Cope, 1869: 99; Brame and Murray, 1968: 22]

Cope, 1865, *Proc. Acad. Nat. Sci. Philadelphia*, 17: 195.

Holotype: USNM 6733, Santa Barbara, Santa Barbara County, California, collected by W. Hayes, date of collection unknown, cataloged 28 Oct 1881.

Type Locality: “Santa Barbara, on the coast of Southern California”; corrected to either Santa Rosa Island or San Miguel Island by Van Denburgh (1905: 7).

Etymology: The name *pacificus* is derived from the Latin *pacificus*, “peaceful,” and comes from the name of the Pacific Ocean since the holotype was collected on the Pacific coast of North America.

Remarks: The holotype was not listed by number in the original description. USNM 6733 is the holotype according to Dunn (1926a).

***Heredia oregonensis* Girard, 1856**

[= *Ensatina eschscholtzii oregonensis* (Girard, 1856); *fide*, Stejneger and Barbour, 1933: 13; confirmed by Stebbins, 1949: 393]

Girard, 1856, *Proc. Acad. Nat. Sci. Philadelphia*, 8: 140.

Syntypes: USNM 15479–15480, Puget Sound, Washington, collected by the U.S. Exploring Expedition, date of collection unknown, cataloged 7 May 1889.

Type Locality: “Oregon”; Dunn (1926a: 194) stated that the types came from “Puget Sound,” Washington, part of Oregon Territory in the 1850s, although Girard (1858) stated that this species was collected in May 1841 at Discovery Harbor, Puget Sound (Oregon).

Etymology: The name is derived from the Oregon Territory.

Remarks: Types were not listed by number in the original description.

***Magnadigita hypacra* Brame and Wake, 1962**

[= *Bolitoglossa hypacra* (Brame and Wake, 1962); *fide*, Wake and Brame, 1963: 386; Brame and Wake, 1963: 26]

Brame and Wake, 1962, *Proc. Biol. Soc. Washington*, 75: 71.

Holotype: USNM 131481, Paramo de Frontino, Antioquia, Colombia, collected by M. A. Carriker Jr., 18 Aug 1951.

Type Locality: “Páramo Frontino, 11,850 ft. (3,610 meters), Departamento de Antioquia, Colombia.”

Etymology: The name *hypacra* is derived from the Greek *hypo*, “less than” or “almost,” and *akros*, “highest,” apparently in relation to the high-altitude habitat of this species.

***Manculus quadridigitatus paludicolus* Mittleman, 1947**

[= *Eurycea paludicola* (Mittleman 1947); *fide*, Wray et al., 2017: 36]

Mittleman, 1947, *Herpetologica*, 3: 220.

Holotype: USNM 123979, Pollock, Grant Parish, Louisiana, collected by P. Viosca Jr., 6 Sep 1937.

Type Locality: “Pollock, Grant Parish, Louisiana.”

Paratypes: USNM 17700, Neches River, 14 miles E of Palestine, Anderson County, Texas, collected by B. W. Evermann, 24 Nov 1891; USNM 99176, 99177, 4 miles SW of Many, Sabine Parish, Louisiana, collected by C. E. Burt, 16 Jun 1934;

USNM 99762, 0.5 mile SE of Hillister, Tyler County, Texas, collected by C. E. Burt, 6 Jul 1934; USNM 99773–99776, 5 miles SW of Pendleton Ferry, Sabine County, Texas, collected by C. E. Burt, 17 Jun 1934.

Other Type Material: Paratypes: BCB 485, 753–756, 1327, 1328, 1568–1571; CAS 11292; FP 28, 30; MBM (two specimens); PV (59 specimens); TCWC 1198–1204; UMMZ 75940 (5 specimens), 75941 (8 specimens), 93135 (5 specimens). (See Remarks.)

Etymology: The name *paludicolus* comes from the Latin *paludis*, “marsh,” and *colus*, “dwelling in,” apparently in reference to the habitat of this taxon.

Remarks: USNM 99777 was erroneously listed as a paratype of *Manculus quadridigitatus paludicolus* Mittleman, 1947 in Cochran (1961). This specimen was not mentioned in the original description. The holotype was listed as “an adult male (one of a series of nine specimens) in the collection of Percy Viosca, Jr. to be deposited in the U. S. National Museum.” One specimen out of UMMZ 75941 was exchanged to the University of Illinois Museum of Natural History, where it is presently cataloged as UIMNH 43487. One specimen out of UMMZ 93135 was exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-27794. The paratypes BCB 485, 753–756, 1327, 1328, 1568–1571; CAS 11292; FP 28, 30; MBM (two specimens); and PV (59 specimens) could not be located and must be considered missing.

***Manculus quadridigitatus uvidus* Mittleman, 1947**

[= *Eurycea paludicola* (Mittleman, 1947); *fide*, Wray et al., 2017: 36]

Mittleman, 1947, *Herpetologica*, 3: 221.

Holotype: USNM 123980, Gayle, Caddo Parish, Louisiana, collected by L. Frierson and J. Strecker, date of collection unknown, cataloged 20 Feb 1947.

Type Locality: “Gayle, Caddo Parish, Louisiana.”

Other Type Material: Paratypes: BU 0007-0010, 0012, 573–576, 1359, 1361–1362, 2263–2269, 2271–2273, 2276, 2333–2341, 4151, 4153–4154, 4156–4157, 4162–4163, 4168–4173, 4176–4178, 4270; CAS 12900; PA 4521. (See Remarks.)

Etymology: The name *uvidus* comes from the Latin *uvidus*, “damp,” apparently in reference to the habitat of this taxon.

Remarks: The holotype was listed as “an adult male in the Baylor University collection (BU 2338) . . . to be deposited in the U. S. National Museum.” The paratypes BU 0007, 573–575, 2263–2269, 2273, 2276, 2333–2337, 2339–2341, 4151, 4153, 4154, 4156, 4157, 4162, 4163, 4169, 4170, 4173, and 7176–4178 are presently in the Mayborn Museum Complex, Baylor University, where they are cataloged with the same numbers with the BU-MMC abbreviation. The other Baylor University paratypes are apparently lost. The paratype PA 4521 was apparently deposited at the Natural History Museum, University of Kansas, where it is presently cataloged as KU 89633.

***Nototriton lignicola* McCranie and Wilson, 1997**

[currently accepted; *fide*, McCranie and Wilson, 2003: 1]

McCranie and Wilson, 1997, *Proc. Biol. Soc. Washington*, 110: 369.

Holotype: USNM 497539, Cerro de Enmedio, along the trail above the Monte Escondido campground, Parque Nacional La Muralla, Olancho, Honduras, elevation 1,780 m, collected by J. R. McCranie, L. D. Wilson, and D. Almendarez, 30 Jul 1996.

Type Locality: “Cerro de Enmedio (15° 06'N, 86° 44'W) along the trail above the Monte Escondido campground, Parque Nacional La Muralla, 1780 m elev., Departamento de Olancho, Honduras.”

Paratypes: USNM 497540–497541, same data as holotype; USNM 497542, same data as holotype, except elevation 1,760 m; USNM 497543, same data as holotype, except elevation 1,770 m; USNM 497544–497548, same data as holotype, except collected by D. Almendarez, 14 Sep 1995.

Etymology: The name *lignicola* is derived from the Latin *lignum*, “wood,” and *colus*, “dwelling in,” in reference to the habitat of this taxon.

***Nototriton mime* Townsend, Medina-Flores, Reyes-Calderón, and Austin, 2013**

[currently accepted; *fide*, Frost, 2021]

Townsend, Medina-Flores, Reyes-Calderón, and Austin, 2013, *Zootaxa*, 3666: 361.

Holotype: USNM 578870, Parque Nacional Montaña de Botaderos, Cerro Ulloa, Olancho, Honduras, 15.383326°N, 86.039936°W, elevation 1,705 m, collected by J. Townsend, M. Medina-Flores, and O. Reyes-Calderón, 16 Apr 2011.

Type Locality: “Cerro Ulloa (15.3833°N, 86.0399°W), Parque Nacional Montaña de Botaderos, 1,705 m, Departamento de Olancho, Honduras.”

Paratypes: USNM 579871, same data as holotype, except 15.3874°N, 86.0467°W, elevation 1,720 m; USNM 579872, same data as holotype, except 15.3843°N, 86.0396°W, elevation 1,710 m.

Other Type Material: Paratype: MVZ 269306.

Etymology: The name *mime* is a patronym honoring Arquínides Gabriel Rosales Martínez, also known as “Mime,” a young Honduran biologist and friend of the authors.

***Nototriton nelsoni* Townsend, 2016**

[currently accepted; *fide*, Frost, 2021]

Townsend, 2016, *Zootaxa*, 4196: 520.

Holotype: USNM 578300, Refugio de Vida Silvestre Texiguat, Cerro El Chino, Atlántida, Honduras, 15.525394°N, 87.278672°W, elevation 1,420 m, collected by B. K. Atkinson, C. A. Cerrato-Mendoza, J. H. Townsend, and L. D. Wilson, 19 Jun 2010.

Type Locality: “Cerro El Chino (15.525394°N, 87.278672°W), 1,420 m, above La Liberación, Refugio de Vida Silvestre Texiguat, Departamento de Atlántida, Honduras.”

Paratypes: USNM 339709–339710, La Fortuna, 2.5 km (airline) NNE of, Cordillera Nombre de Dios, Yoro, Honduras,

15.44°N, 87.31°W, elevation 1,690 m, collected by J. R. McCranie, L. D. Wilson, and K. Williams, 14 Aug 1991; USNM 339711, La Fortuna, 2.5 km (airline) NNE of, Cordillera Nombre de Dios, Yoro, Honduras, 15.44°N, 87.31°W, elevation 1,800 m, collected by J. R. McCranie, L. D. Wilson, and K. Williams, 16 Aug 1991; USNM 509333, La Fortuna, 2.5 km (airline) NNE of, Cordillera Nombre de Dios, Yoro, Honduras, 15.44°N, 87.31°W, elevation 1,600 m, collected by J. R. McCranie, L. D. Wilson, and K. Williams, 26 Jul 1995.

Etymology: The name *nelsoni* is a patronym honoring Cyril “Cirilo” Hardy Nelson-Sutherland, professor emeritus and cofounder of the Department of Biology at the Universidad Nacional Autónoma de Honduras.

Remarks: USNM 509333 is a cleared and stained specimen presently stored in glycerin.

***Nototriton oreadorum* Townsend, 2016**

[currently accepted; *fide*, Frost, 2021]

Townsend, 2016, *Zootaxa*, 4196: 523.

Holotype: USNM 497552, Parque Nacional Pico Bonito, south slope of Cerro Bufalo, Atlántida, Honduras, 15°38'7"N, 86°48'14"W, collected by J. R. McCranie and S. Gotte, 30 May 1996.

Type Locality: “The south slope of Cerro Búfalo (15.66°N, 86.79°W), 1,540 m elevation, Parque Nacional Pico Bonito, Departamento de Atlántida, Honduras.”

Paratype: USNM 339712, Parque Nacional Pico Bonito, Quebrada de Oro (tributary of Río Viejo), 15°38'N, 86°48'W, elevation 1,210 m, collected by J. R. McCranie, 13 Feb 1995.

Etymology: The name *oreadorum* means “belonging to the mountain nymphs,” referring to the Oreads of Greek mythology, female nature deities associated with mountains and valleys, in reference to the steep and challenging terrain of the type locality.

***Nototriton picucha* Townsend, Medina-Flores, Murillo, and Austin, 2011**

[currently accepted; *fide*, Frost, 2021]

Townsend, Medina-Flores, Murillo, and Austin, 2011, *Systematics Biodiversity*, 9: 283.

Holotype: USNM 578299, Parque Nacional Sierra de Agalta, camp NW of La Picucha, Olancho, Honduras, 14°58'24"N, 85°55'40"W, elevation 1,860 m, collected by M. Medina-Flores, J. Murillo, I. Zuniga, and J. Soto, 16 Jul 2010.

Type Locality: “Northwestern slope of Cerro La Picucha (14.9733°N, 85.9279°W), 1890 m, Parque Nacional Sierra de Agalta, Departamento de Olancho, Honduras.”

Paratype: USNM 578298, same data as holotype, except elevation 1,905 m.

Etymology: The name *picucha* is derived from the type locality.

***Nyctanolis pernix* Elias and Wake, 1983**

[currently accepted; *fide*, Frost, 2021]

Elias and Wake, 1983, in Rhodin and Miyata, *Adv. Herpetol. Evol. Biol.*: 2.

Paratype: USNM 206925, Lagunas de Montebello, cave near stream that empties the main lake, Chiapas, Mexico, collected by S. C. Belfit, 8 Jul 1972.

Type Locality: “Finca Chiblac, 10 km (air) NE Barillas, Huehuetenango, Guatemala, (91° 16'W, 15° 53'N), 1370 m (4500 ft) elevation.”

Other Type Material: Holotype: MVZ 134641. Paratypes: MCZ 100154; MVZ 131583–131585, 134639, 134640, 134642–134644, 149370, 149372, 149373, 173062.

Etymology: The name *pernix* is from the Latin *pernix*, “nimble” or “swift,” apparently because of the swift movements of this form.

***Oedipina geophyra* McCranie, Wilson, and Williams, 1993**

[currently accepted; *fide*, García-París and Wake, 2000]

McCranie, Wilson, and Williams, 1993, *Proc. Biol. Soc. Washington*, 106: 385.

Holotype: USNM 316535, La Fortuna, 2.5 km (airline) NNE of, Cordillera Nombre de Dios, Yoro Department, Honduras, 15°26'N, 87°18'W, elevation 1,690 m, collected by J. R. McCranie, L. D. Wilson, and K. L. Williams, 14 Aug 1991.

Type Locality: “2.5 airline km NNE La Fortuna (15° 26'N, 87° 18'W), 1690 m elev., Cordillera Nombre de Dios, Departamento de Yoro, Honduras.”

Paratypes: USNM 316536, 316537, same data as holotype; USNM 316538, same data as holotype, except elevation 1,810 m and date of collection 16 Aug 1991.

Etymology: The name *geophyra* is derived from the Greek *gephyra*, “bridge,” in reference to the morphology of this species that bridges the gap between the two species groups recognized by Brame (1968).

***Oedipina ignea* Stuart, 1952**

[currently accepted; *fide*, García-París and Wake, 2000: 60]

Stuart, 1952, *Proc. Biol. Soc. Washington*, 65: 1.

Holotype: USNM 127959, Río Los Brisas, S of Yepocapa, Department of (Dept.) Chimaltenango, Guatemala, elevation ~1,450 m, collected by H. T. Dalmat, 2 Aug 1947.

Type Locality: “Along the Río Las Brisas, just south of Yepocapa, Department of Chimaltenango, Guatemala. Elevation about 1450 m.”

Etymology: The name *ignea* is derived from the Latin *igneus*, “fiery,” and is named for the location of the type locality on the slopes of the Volcán Fuego.

***Oedipina kasios* McCranie, Vieites, and Wake, 2008**

[currently accepted; *fide*, Frost, 2021]

McCranie, Vieites, and Wake, 2008, *Zootaxa*, 2008: 11.

Paratypes: USNM 343455–343456, Parque Nacional La Muralla, confluence of Quebrada El Pinol and Quebrada Las Cantinas, Dept. Olancho, Honduras, 15°09'N, 86°43'W, elevation 950 m, collected by J. R. McCranie and L. D. Wilson, 8 Aug 1994; USNM 343457, Parque Nacional La Muralla, Quebrada de la Escaleras, Dept. Olancho, Honduras, 15°12'W, 86°41'W, elevation 950 m, collected by

M. R. Espinal, 7 Mar 1993; USNM 530580, Parque Nacional La Muralla, Cerro de Enmedio, Dept. Olancho, Honduras, 15°06'N, 86°41'W, elevation 1,780 m.

Type Locality: "Near Quebrada Pinol, 15°07'N, 86°44'W, Parque Nacional La Muralla, 1190 m., Dept. Olancho, Honduras."

Other Type Material: Holotype: MVZ 232825. Paratype: MVZ 232826.

Etymology: The name *kasios* is derived from the Greek *kasios*, "sister," in reference to the sister species relationship to *Oedipina quadra* in the phylogenetic analysis in the original description.

Oedipina (Oedopinola) maritima García-París and Wake, 2000 [currently accepted; *fide*, Frost, 2021]

García-París and Wake, 2000, *Copeia*, 2000: 50.

Holotype: USNM 529981, Isla Escudo de Veraguas (SE part of), Bocas del Toro Province, Panama, collected by R. I. Crombie, 28 Mar 1991.

Type Locality: "Escudo Camp, West Point, Isla Escudo de Veraguas, Prov. Bocas del Toro, Panamá, approximate 9° 6.1'N, 81° 4.5'W."

Paratypes: USNM 529982–529984, same data as holotype; USNM 529985, Isla Escudo de Veraguas, southwest corner of island, Bocas del Toro Province, Panama, collected by R. I. Crombie, 20 Mar 1991.

Other Type Material: Paratypes: USNM-FS 195536 (field number, not cataloged; to be deposited in a collection in Panama); KU 116681; MVZ 219997. (See Remarks.)

Etymology: The name *maritima* is derived from the Latin *maritimus*, "of the sea," in reference to the island type locality of this species.

Remarks: USNM-FS 195536 remains uncataloged at the National Museum of Natural History, awaiting final deposition in Panama.

Oedipina (Oedopinola) petiola McCranie and Townsend, 2011 [currently accepted; *fide*, Frost, 2021]

McCranie and Townsend, 2011, *Zootaxa*, 2990: 62.

Holotype: USNM 343462, Parque Nacional Pico Bonito, south slope of Cerro Bufalo, Atlántida, Honduras, 15°39'N, 86°48'W, collected by J. R. McCranie, 18 Feb 1995.

Type Locality: "Cerro Búfalo, 15° 39' N, 86°48' W, Parque Nacional Pico Bonito, Cordillera Nombre de Dios, 1580 m elev., Atlántida, Honduras."

Etymology: The name *petiola* is from the Latin *petiolus*, meaning "diminutive foot," and refers to the narrow feet in the holotype.

Oedipina quadra McCranie, Vieites, and Wake, 2008

[currently accepted; *fide*, Frost, 2021]

McCranie, Vieites, and Wake, 2008, *Zootaxa*, 2008: 6.

Paratypes: USNM 316539, Parque Nacional Pico Bonito, 7.4 km SE of La Ceiba, Dept. Atlantida, Honduras, 15°43'N, 86°45'W, elevation 260 m, collected by J. R. McCranie and L. D. Wilson, 24 Jun 1989; USNM 343452, confluence of

Río Wampú and Río Yanguay, Dept. Olancho, Honduras, 15°03'N, 85°08'W, elevation 110 m, collected by J. R. McCranie, 27 Aug 1992; USNM 343453, confluence of Río Wampú and Río Sausa, Dept. Olancho, Honduras, 15°04'N, 85°06'W, elevation 100 m, Dept. Olancho, Honduras, collected by J. R. McCranie, 30 Aug 1992; USNM 343454, confluence of Quebrada Siksatará and Río Wampú, Dept. Olancho, Honduras, 15°04'N, 85°02'W, elevation 95 m, collected by J. R. McCranie, 2 Sep 1992; USNM 530579, Parque Nacional Pico Bonito, S of Armenia Bonita, near Centro de Visitantes (CURLA Forestry Station), Dept. Atlántida, Honduras, 15°42'N, 86°51'W, elevation 120–500 m, collected by J. R. McCranie and S. Gotte, 8 Jun 1996; USNM 534115, Quebrada Machín, Dept. Colón, Honduras, 15°19'N, 85°17'W, elevation 540 m, collected by J. R. McCranie, L. D. Wilson, S. Gotte, and J. Townsend, 29 Jul 1999; USNM 534116, 534117, Quebrada Machín, Dept. Colón, Honduras, 15°19'N, 85°17'W, elevation 540 m, collected by J. R. McCranie, L. D. Wilson, S. Gotte, and J. Townsend, 4 Aug 1999; USNM 534118, Quebrada Machín, Dept. Colón, Honduras, 15°19'N, 85°17'W, elevation 540 m, collected by J. R. McCranie, L. D. Wilson, S. Gotte, and J. Townsend, 6 Aug 1999; USNM 534119, Quebrada Machín, Dept. Colón, Honduras, 15°19'N, 85°17'W, elevation 540 m, collected by J. R. McCranie, L. D. Wilson, S. Gotte, and J. Townsend, 8 Aug 1999; USNM 560948, Cabeceras de Río Rus Rus, Dept. Gracias A Dios, Honduras, 14°53'N, 84°40'W, elevation 190 m, collected by J. R. McCranie, 20 Nov 2003; USNM 560949, between Urus Tingni Kiamp and Warunta Tingni Kiamp, Dept. Gracias A Dios, Honduras, 14°55'N, 84°41'W, elevation 190 m, collected by J. R. McCranie, 22 Nov 2003; USNM 563378, Warunta Tingni Kiamp, Dept. Gracias A Dios, Honduras, 14°55'20"N, 84°41'28"W, elevation 150 m, collected by J. R. McCranie and T. Manzanares R., 15 May 2004; USNM 563379, Urus Tingni Kiamp, Dept. Gracias A Dios, Honduras, 14°54'38"N, 84°40'49"W, elevation 160 m, collected by J. R. McCranie and T. Manzanares R., 29 May 2004; USNM 563380, Urus Tingni Kiamp, Dept. Gracias A Dios, Honduras, 14°54'38"N, 84°40'49"W, elevation 160 m, collected by J. R. McCranie and T. Manzanares R., 18 May 2004.

Type Locality: "Urus Tingni Kiamp, 14°55'N, 84°41'W, tributary of upper portion of Río Warunta, 160 m above sea level, Dept. Gracias A Dios, Honduras."

Other Type Material: Holotype: MVZ 257761. Paratypes: CM 68241; LACM 4702–4704; MVZ 232824, 257755–257760; LSUMZ 21327, 33608; SMF 77486.

Etymology: The name *quadra* is derived from the Latin *quadrus*, "square," in reference to the nearly rectangular cross section of the tail characteristic of this species.

Oedipina (Oedopinola) savagei García-París and Wake, 2000 [currently accepted; *fide*, Frost, 2021]

García-París and Wake, 2000, *Copeia*, 2000: 52.

Paratype: USNM 219122, Finca las Cruces, OTS Field Station, 6 km (by road) S of San Vito de Java, 8°48'N, 82°58'W, elevation 1,250 m, Puntarenas, Costa Rica, collected by R. W. McDiarmid, 22 May 1971.

Type Locality: “Finca Las Cruces, 6 km S San Vito de Java, Prov. Puntarenas, Costa Rica, 8° 47'35" N, 82° 57'30" W, approximately 1200 m elev.”

Other Type Material: Holotype: LACM 109558. Paratypes: LACM 109556, 109557, 145447–145450; MVZ 229360; UCR LDG 961327. (See Remarks.)

Etymology: The name *savagei* is a patronym for Jay M. Savage, American herpetologist.

Remarks: The acronym UCR LDG refers to a field number of L. D. Gomez that was to be deposited (and eventually was cataloged) at the University of Costa Rica; UCR LDG 961327 was returned to the University of Costa Rica, where it is now cataloged as UCR 14587.

Oedipina (Oedopinola) tomasi McCranie, 2006

[currently accepted; *fide*, Frost, 2021]

McCranie, 2006, *J. Herpetol.*, 40: 291.

Holotype: USNM 562862, near Sierra de Omoa, Sendero de Cantiles, Parque Nacional El Cusuco, 15°30'N, 88°14'W, elevation 1,800 m, Cortés, Honduras, collected by J. R. McCranie, F. E. Castañeda, and T. Manzanares, 18 Jun 2005.

Type Locality: “Near Sendero de Cantiles, Parque Nacional El Cusuco, 15° 30'N, 88° 14'W, 1800 m elevation, Departamento de Cortés, Honduras.”

Paratype: USNM 562863, same data as holotype, except collected 22 Jun 2005.

Etymology: The name *tomasi* is a patronym honoring Tomas Manzanares Ruiz, who was instrumental in the collection of this taxon.

Oedipus altamazonicus Cope, 1874

[= *Bolitoglossa altamazonica* (Cope, 1874); *fide*, Taylor, 1944c: 219]

Cope, 1874, *Proc. Acad. Nat. Sci. Philadelphia*, 26: 120.

Syntypes: Uncataloged, “represented by three specimens.” (See Remarks.)

Type Locality: “Nauta.” Type locality based on the neotype designation: “Allpahuayo Mishana National Reserve, San Juan Bautista district, Maynas province, Loreto department, Peru, 03.965° S, 73.421° W, 132 m a.s.l.”

Other Type Material: Neotype: CRBIIAP AR001117. Neotype designation by Cusi, Gagliardi-Urrutia, Brcko, Wake, and von May, 2020, *Zootaxa*, 4834: 390.

Etymology: The name *altamazonicus* is derived from the Latin *altus*, “high,” and the Amazon River, in reference to the type locality of the Upper Amazon.

Remarks: This species was not mentioned in the USNM type list by Cochran (1961). According to Cope (1868), the Orton Expedition to Ecuador and the Upper Amazon was undertaken “under the auspices of the Smithsonian Institution,” and the specimens should have been deposited at the U.S.

National Museum. The syntypes were apparently never received at the U.S. National Museum and therefore never received a catalog number. It is possible that the syntypes may have been deposited at the Academy of Natural Sciences, Philadelphia, but if so, they no longer exist. The types were reported as “apparently no longer in existence” by Dunn (1926a). Because the original types are lost, the neotype was designated by Cusi et al. (2020).

Oedipus bromeliacia Schmidt, 1936

[= *Dendrotriton bromeliacus* (Schmidt, 1936); *fide*, Wake and Elias, 1983, 345: 11.

Schmidt, 1936, *Field Mus. Nat. Hist. Publ., Zool. Ser.*, 20: 161.

Paratypes: USNM 103339, 103340, Volcan Tajumulco, San Marcos, Guatemala, 8,500 feet, collected by K. P. Schmidt, 19 Feb 1934.

Type Locality: “Volcan Tajumulco, at 8,000 feet altitude, on the trail above El Porvenir, San Marcos, Guatemala.”

Other Type Material: Holotype: FMNH 21062. Paratypes: FMNH 20291, 20294, 20324–20326, 20382, 20657, 20693, 20695–20697, 20700 (total of 57 specimens). (See Remarks.)

Etymology: The name *bromeliacia* is from the bromeliad habitat of this species.

Remarks: USNM 103339 and 103340 were received in exchange from the Field Museum of Natural History and cataloged 15 Oct 1937. They were listed as FMNH 20294 in the original description.

Oedipus flavimembris Schmidt, 1936

[= *Bolitoglossa flavimembris* (Schmidt, 1936); *fide*, Wake and Brame, 1963: 386]

Schmidt, 1936, *Field Mus. Nat. Hist. Publ., Zool. Ser.*, 20: 158.

Paratype: USNM 103331, Volcan Tajumulco, San Marcos, Guatemala, 7,200 feet, collected by K. P. Schmidt, 22 Feb 1934.

Type Locality: “Volcan Tajumulco, at 7200 feet, on the trail above El Porvenir, San Marcos, Guatemala.”

Other Type Material: Holotype: FMNH 20381. Paratypes: Ten specimens, FMNH 20296, 20321–20323, 20393. (See Remarks.)

Etymology: The name *flavimembris* is from the Latin *flavus*, “yellow,” and *membrum*, “part,” in reference to the bright yellow limbs mentioned in the original description.

Remarks: USNM 103331 was received in exchange from the Field Museum of Natural History and cataloged 15 Oct 1937. It was listed as FMNH 20323 in the original description. FMNH 20393, listed as a paratype in the original description, was apparently a typographical error for FMNH 20333. FMNH 20333 is a lot of five specimens presently listed in the Field Museum database as paratypes of *Oedipus flavimembris*. In addition, FMNH 20297 is listed in the Field Museum database as a paratype even though it was not listed in the original description. With the addition of that specimen and the five specimens in FMNH 20333, all 10 paratypes mentioned in the original description are accounted for. One specimen out of FMNH 20333

was exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-22174. FMNH 20297 was exchanged to the University of Michigan Museum of Zoology, where it is presently cataloged as UMMZ 80935. One specimen out of FMNH 20333 was recataloged as FMNH 100128.

***Oedipus flaviventris* Schmidt, 1936**

[= *Bolitoglossa flaviventris* (Schmidt, 1936); *fide*, Taylor and Smith, 1945: 547; confirmed by Parra-Olea et al., 2004: 335] Schmidt, 1936, *Field Mus. Nat. Hist. Publ., Zool. Ser.*, 20: 148.

Holotype: USNM 46922, Chicharras, Chiapas, Mexico, collected by E. W. Nelson and E. A. Goldman, 6 Feb 1896.

Type Locality: "Chicharras, Chiapas," Mexico.

Paratypes: USNM 30305, Tehuantepec, Oaxaca, Mexico, collected by F. Sumichrast, date of collection unknown, cataloged 12 May 1902; USNM 46923, same data as holotype.

Other Type Material: Paratype: FMNH 21078.

Etiymology: The name *flaviventris* is from the Latin *flavus*, "yellow," and *ventris*, "belly," in reference to the yellow ventral areas mentioned in the original description.

***Oedipus franklini* Schmidt, 1936**

[= *Bolitoglossa franklini* (Schmidt, 1936); *fide*, Wake and Brame, 1963: 386; confirmed by Parra-Olea et al., 2004: 336]

Schmidt, 1936, *Field Mus. Nat. Hist. Publ., Zool. Ser.*, 20: 159.

Paratypes: USNM 103332, 103333, Volcan Tajumulco, San Marcos, Guatemala, elevation 7,500 feet, collected by K. P. Schmidt, 27 Feb 1934.

Type Locality: "Volcan Tajumulco, at 5600 feet altitude, on the trail above El Porvenir, San Marcos, Guatemala."

Other Type Material: Holotype: FMNH 21061. Paratypes: FMNH 20318–20320, 20388–20392, 20650, 20655, 20656, 20691, 20692 (total of 17 specimens); eight from the Volcan Atitlan, above Olas de Moca; a specimen collected by F. X. Williams on the Volcan Pacaya for the California Academy of Sciences. (See Remarks.)

Etiymology: The name *franklini* is a patronym for Franklin J. W. Schmidt, the author's brother.

Remarks: USNM 103332 and 103333 were received in exchange from the Field Museum of Natural History and cataloged 15 Oct 1937. They were listed as FMNH 20655 and 20656, respectively, in the original description. The specimen from the California Academy of Sciences is cataloged as CAS 71919. Despite 17 specimens from the Volcan Tajumulco being mentioned in the original description, only 12 specimens can be accounted for by the FMNH catalog numbers, although some of the catalog numbers may represent more than one specimen. In addition, FMNH 20392, listed as a paratype, is actually a hylid frog, *Plectrohyla matudai*. The eight specimens from the Volcan Atitlan were lot cataloged as FMNH 20407. Later, two specimens out of FMNH 20407 were recataloged as FMNH 100224 and 126347. In addition, two specimens out of FMNH 20407

were exchanged to the Museum of Comparative Zoology, where they are presently cataloged as MCZ A-22180 and A-22181. FMNH 20320 was exchanged to the University of Illinois Museum of Natural History, where it is presently cataloged as UIMNH 39933. Two specimens out of FMNH 20390 were exchanged to the University of Michigan Museum of Zoology, where they are presently cataloged as UMMZ 80932.

***Oedipus gadovii* Dunn, 1926**

[= *Pseudoeurycea gadovii* (Dunn, 1926); *fide*, Taylor, 1944c: 209] Dunn, 1926a, *Salamanders Fam. Plethodontidae*: 437.

Paratypes: USNM 19263–19265, Mount Orizaba, Veracruz, Mexico, collected by W. S. Blatchley, 2 Aug 1891.

Type Locality: "Xometla, at 8,500 feet altitude on Mt. Orizaba, [= Veracruz,] Mexico."

Other Type Material: Holotype: BMNH 1903.9.30.312. Paratypes: BMNH 1903.9.30.309–1903.9.30.311, 1903.9.30.331. (See Remarks.)

Etiymology: The name *gadovii* is a patronym honoring H. Gadow, collector of the holotype.

Remarks: The holotype has been renumbered BMNH 1946.9.6.41.

***Oedipus goebeli* Schmidt, 1936**

[= *Pseudoeurycea goebeli* (Schmidt, 1936); *fide*, Taylor, 1944c: 209] Schmidt, 1936, *Field Mus. Nat. Hist. Publ., Zool. Ser.*, 20: 163.

Paratypes: USNM 103334, 103335, Volcan Tajumulco, San Marcos, Guatemala, elevation 10,000–10,400 feet, collected by K. P. Schmidt, 13–14 Feb 1934.

Type Locality: "Volcan Tajumulco, at 8,000 feet altitude, on the trail above El Porvenir, San Marcos, Guatemala."

Other Type Material: Holotype: FMNH 21064. Paratypes: FMNH 20295, 20298 (four specimens), 20299 (11 specimens), 20301 (15 specimens), 20406, 20694; CAS: one specimen from Volcan Agua. (See Remarks.)

Etiymology: The name *goebeli* is a patronym honoring H. Goebel, the person who invited the author to visit the coffee plantation El Porvenir at the foot of Volcan Tajumulco.

Remarks: USNM 103334 and 103335 were received in exchange from the Field Museum of Natural History and cataloged 15 Oct 1937. They were listed as FMNH 20299 and 20301 in the original description, respectively.

***Oedipus helmrichi* Schmidt, 1936**

[= *Bolitoglossa helmrichi* (Schmidt, 1936); *fide*, Taylor, 1944c: 218; Wake and Brame, 1963: 386; confirmed by Parra-Olea et al., 2004: 336]

Schmidt, 1936, *Field Mus. Nat. Hist. Publ., Zool. Ser.*, 20: 152.

Paratype: USNM 103338, above Finca Samac, Alta Verapaz, Guatemala, collected by D. Clark, 27 Mar 1934.

Type Locality: "Mountains above Finca Samac, west of Coban, Alta Verapaz, Guatemala, at 5000 feet altitude."

Other Type Material: Holotype: FMNH 21063. Paratypes: FMNH 20727 (15 specimens). (See Remarks.)

Etymology: The name *helmrichi* is a patronym for Gustav Helmrich of the Finca Samac.

Remarks: USNM 103338 was received in exchange from the Field Museum of Natural History and cataloged 15 Oct 1937. It was listed as FMNH 20727 in the original description.

Oedipus morio Cope, 1869

[= *Bolitoglossa morio* (Cope, 1869); *fide*, Wake and Brame, 1963: 386]

Cope, 1869, *Proc. Acad. Nat. Sci. Philadelphia*, 21: 103.

Holotype: USNM 6888, Mountains of Guatemala, collected by Dr. Van Patten, date of collection unknown, cataloged 1881.

Type Locality: "Mountains of Guatemala." Type locality based on the neotype designation: "3.7 km S Santa María Visitación, Sololá, Guatemala at 2000–2200 (14.723073° N, 91.330252° W)."

Other Type Material: Neotype: UTA-A 34090. Neotype designation by Campbell, Smith, Streicher, Acevedo, and Brodie, 2010, *Misc. Publ. Mus. Zool. Univ. Michigan*, 200: 2.

Etymology: The name *morio* is from the Latin *morio*, "fool" or "simpleton." Cope provided no explanation for his choice of this name.

Remarks: This species was not mentioned in the USNM type list by Cochran (1961). The holotype cannot be found in the USNM collection. There is an old written remark in the ledger entry that says "Destroyed." This apparently happened prior to 1926 because it was reported as "apparently no longer in existence" by Dunn (1926a). Because the holotype is no longer in existence, the neotype was designated by Campbell et al. (2010).

Oedipus multidentata Taylor, 1939

[= *Chiropterotriton multidentatus* (Taylor, 1939); *fide*, Taylor, 1944c: 216; confirmed by Rabb, 1958: 5]

Taylor, 1939 [1938], *Univ. Kansas Sci. Bull.*, 25: 289.

Paratypes: USNM 134284–134286, El Chico, Hidalgo, Mexico, collected by E. H. Taylor, 2 Aug 1938.

Type Locality: "Alvarez (km 53 on Potosi and Rio Verde R.R.), San Luis Potosí, Mexico, elevation 8,000 feet."

Other Type Material: Holotype: MCZ 14812. Paratypes: MCZ 14810–14811; UMMZ 63946, 63948, 63953; EHT-HMS 15658–15848. (See Remarks.)

Etymology: The name *multidentatus* is from the Latin *multus*, "much" or "more," and *dentatus*, "toothed," in reference to the large number of maxillary teeth in adult males mentioned in the original description.

Remarks: USNM 134284–134286 were received in exchange from the University of Illinois Museum of Natural History (formerly UIMNH 26953–26955) and cataloged on 10 Mar 1954. They were listed as EHT-HMS 15752, 15748, and 15745, respectively, in the original description. Some of the paratypes EHT-HMS 15658–15848 are presently cataloged as FMNH 105347–105349, 106534, 106535, 117638–117645, 117647–117664, 117666–117690, 117693–117703, 117705–117709,

117711–117720, 117722–117738, 117740–117755, 189907–189913, 190603, 190604, and 196226. Additional paratypes from EHT-HMS 15658–15848 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 23336–23339, 26929–26980, 26986, 32646, and 32648. Later, UIMNH 26953–26955 were exchanged to the U.S. National Museum (see above). UIMNH 26986 was exchanged to the University of Colorado Museum of Natural History, where it is presently cataloged as UCM 22131. UIMNH 26952 was exchanged to the Field Museum of Natural History, where it is presently cataloged as FMNH 75773. UIMNH 26979 and 26980 were exchanged to the Carnegie Museum of Natural History, where they are presently cataloged as CM 39995 and 39996. UIMNH 23339 was exchanged to the Senckenberg Forschungsinstitut und Naturmuseum, where it is presently cataloged as SMF 53177. However, this does not account for all of the paratypes from EHT-HMS 15658–15848; 12 specimens could not be located and must be considered missing.

Oedipus nasalis Dunn, 1924

[= *Cryptotriton nasalis* (Dunn, 1924); *fide*, García-París and Wake, 2000: 58]

Dunn, 1924, *Field Mus. Nat. Hist. Publ., Zool. Ser.*, 12: 97.

Paratypes: USNM 103336, 103337, San Pedro, Cortés, Honduras, collected by K. P. Schmidt and L. L. Walters, 1 Apr 1923.

Type Locality: "Mountains west of San Pedro, Honduras, at 2000 feet on trail"; corrected to "along the Quebrada del Infierno on the eastern slopes of the Cerro de la Virtud, 1370 m elevation, 15° 32'N, 88° 06'W" by McCranie (2006).

Other Type Material: Holotype: FMNH 4568. Paratypes: FMNH 4563–4567, 4569–4591, 91462 (formerly FMNH 4577), 91463 (formerly FMNH 4563), 126339 (formerly FMNH 4586). (See Remarks.)

Etymology: The name *nasalis* is from the Latin *nasus*, "nose," in reference to the large nostrils mentioned in the original description.

Remarks: Only three paratypes (FMNH 4579, 4584, and 4590) are specifically mentioned by number in the original description. However, it is clear from the original description that there were additional specimens. A search of the FMNH database found a total of 28 paratypes in the original type series. FMNH 4569 and 4570 were exchanged to the U.S. National Museum and cataloged as USNM 103336 and 103337 on 15 Oct 1937.

Oedipus odonnelli Stuart, 1943

[= *Bolitoglossa odonnelli* (Stuart, 1943); *fide*, Wake and Elias, 1983: 1–19]

Stuart, 1943, *Misc. Publ. Mus. Zool. Univ. Michigan*, 56: 10.

Paratype: USNM 118781, Finca Volcán, Alta Verapaz, Guatemala, collected by L. C. Stuart, 20 Mar 1938.

Type Locality: "Cafetal just east of the hacienda at Finca Volcán, Alta Verapaz, Guatemala. Altitude, 1200 meters."

Other Type Material: Holotype: UMMZ 89096. Paratypes: UMMZ 89097–89105.

Etymology: The name *odonnelli* is a patronym honoring Reginald O'Donnell of Finca Volcán.

Remarks: USNM 118781 was received in exchange from the University of Michigan Museum of Zoology and cataloged on 3 Jun 1944. It was listed as UMMZ 89105 in the original description. UMMZ 89098 was exchanged to the Field Museum of Natural History, where it is now cataloged as FMNH 109847. UMMZ 89104 was exchanged to the Museum of Comparative Zoology, where it is now cataloged as MCZ A-25540.

Oedipus robertsi Taylor, 1939

[= *Pseudoeurycea robertsi* (Taylor, 1939); *fide*, Taylor, 1944c: 209] Taylor, 1939 [1938], *Univ. Kansas Sci. Bull.*, 25: 287.

Paratype: USNM 134290, Nevada de Toluca, México, México, collected by E. H. Taylor, 31 Aug 1938.

Type Locality: "Nevada de Toluca, elevation between 10,000 and 11,000 feet," Mexico.

Other Type Material: Holotype: EHT-HMS 12503. Paratypes: EHT-HMS 12496–12498, 12504, 12505, 15600–15615.

Etymology: The name *robertsi* is a patronym honoring H. Radclyffe Roberts, collector of the holotype.

Remarks: USNM 134290 (formerly UIMNH 27210) was received in exchange from the University of Illinois Museum of Natural History and cataloged on 10 Mar 1954. It was listed as EHT-HMS 15603 in the original description. The holotype, EHT-HMS 12503, is presently in the Field Museum of Natural History, where it is cataloged as FMNH 100002. Some of the paratypes EHT-HMS 12496–12498, 12504, 12505, and 15600–15615 are presently cataloged as FMNH 100773–100778, 178235, 178292, 190601, and 190602. The paratype EHT-HMS 15607 was deposited at the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-25610. Additional paratypes from EHT-HMS 12496–12498, 12504, 12505, and 15600–15615 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27210–27214. Later, UIMNH 27210 was exchanged to the U.S. National Museum (see above). The paratypes EHT-HMS 12497, 15600, 15604, 15605, 15608, and 15612 could not be located and must be considered missing.

Oedipus rufescens Cope, 1869

[= *Bolitoglossa rufescens* (Cope, 1869); *fide*, Taylor, 1941e: 145] Cope, 1869, *Proc. Acad. Nat. Sci. Philadelphia*, 21: 104.

Holotype: USNM 6886, Orizaba, Veracruz, Mexico, collected by F. Sumichrast, date of collection unknown, cataloged in 1881.

Type Locality: "Orizaba" (= Orizaba), Veracruz, Mexico.

Etymology: The name *rufescens* is derived from the Latin *rufus*, "reddish," in reference to the color of the head mentioned in the original description.

Remarks: This species was not mentioned in the USNM type list by Cochran (1961). The holotype was missing and

presumed lost prior to 1926 because Dunn (1926a) stated that the type was "apparently not now in existence."

Oedipus smithi Taylor, 1939

[= *Pseudoeurycea smithi* (Taylor, 1939); *fide*, Taylor, 1944c: 209] Taylor, 1939 [1938], *Univ. Kansas Sci. Bull.*, 25: 269.

Paratype: USNM 134291, Cerro San Felipe, 15 miles NW of Oaxaca, Oaxaca, Mexico, collected by E. H. Taylor, 20 Aug 1938.

Type Locality: "Cerro de San Luis, 15 mi. N.W. Oaxaca, Oaxaca," Mexico.

Other Type Material: Holotype: EHT-HMS 3966. Paratypes: EHT-HMS 3965, 3967–3969, 15616–15641. EHT-HMS 3970 was not listed as a paratype but was clearly part of the type series because it was listed in the table of measurements in the original description. It was also clearly mentioned by number in the discussion of variation.

Etymology: The name *smithi* is a patronym honoring Hobart M. Smith, American herpetologist and collector of the holotype.

Remarks: USNM 134291 (formerly UIMNH 27219) was received in exchange from the University of Illinois Museum of Natural History and cataloged on 10 Mar 1954. It was listed as EHT-HMS 15631 in the original description. The holotype, EHT-HMS 3966, is presently in the Field Museum of Natural History, where it is cataloged as FMNH 100011. EHT-HMS 3970 (mentioned above) is presently cataloged as FMNH 100647. The paratypes EHT-HMS 3967–3969 are presently cataloged as FMNH 100863–100865, and EHT-HMS 3965 is presently cataloged as UIMNH 27226. Some of the paratypes EHT-HMS 15616–15641 are presently cataloged as FMNH 100842–100855, 126482, 179362, and 179363. The paratypes EHT-HMS 15623 and 15632 were deposited at the Museum of Comparative Zoology, where they are presently cataloged as MCZ A-25611 and A-25612, respectively. Additional paratypes from EHT-HMS 15616–15641 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 27216–27225. Later, UIMNH 27219 was exchanged to the U.S. National Museum (see above). UIMNH 27221 was exchanged to Brigham Young University, where it is presently cataloged as BYU 13251. UIMNH 27222 was exchanged to the University of Michigan Museum of Zoology, where it is presently cataloged as UMMZ 114071. UIMNH 27223 was exchanged to Werner C. A. Bokermann (final deposition unknown). The paratype EHT-HMS 15630 could not be located and must be considered missing.

Oedipus striatulus Noble, 1918

[= *Bolitoglossa striatula* (Noble, 1918); *fide*, Taylor, 1941e: 147, 1944c: 219; confirmed by Parra-Olea et al., 2004: 335]

Noble, 1918, *Bull. Am. Mus. Nat. Hist.*, 38: 344.

Paratype: USNM 37771, Turrialba, Cartago, Costa Rica, collected by J. Tristan, 6 Feb 1906.

Type Locality: "Cukra, Eastern Nicaragua."

Other Type Material: Holotype: AMNH 6999. Paratypes: “Besides the type there have been three other specimens which are referable to this species.” (See Remarks.)

Etymology: The name *striatulus* is from the Latin *stria*, “furrow” or “line,” in reference to the numerous brown lines mentioned in the original description.

Remarks: AMNH 6999 is presently cataloged as AMNH A-6999. USNM 37771 was not listed by number in the original description; it was only referred to as “collected on Mt. Turrialba, Costa Rica, in 1906 . . . now in the National Museum.” Of the three paratypes mentioned in the original description, the first “was collected in the Chontales Mountains”; this specimen is now cataloged as AMNH A-6998. “Another was taken on Mt. Mombacho”; this specimen is now cataloged as AMNH A-5426. The third paratype is the USNM specimen listed above.

***Oedipus townsendi* Dunn, 1922**

[= *Parvimolge townsendi* (Dunn, 1922); *fide*, Taylor, 1944c: 223] Dunn, 1922a, *Proc. Biol. Soc. Washington*, 35: 5.

Paratype: USNM 30352, Tehuantepec, Oaxaca, Mexico, collected by C. Sartorius, date of collection unknown, cataloged (as “Returned from Cope’s estate”) 12 May 1902. (See Remarks.)

Type Locality: “Cerro de los Estropajos near Jalapa, Veracruz, Mexico.”

Other Type Material: Holotype: MCZ 8017. Paratypes: MCZ 8018–8021.

Etymology: The name *townsendi* is a patronym honoring Prescott Townsend, who collected the type series with E. R. Dunn.

Remarks: USNM 30352 was considered to be a possible syntype of *Thorius pennatulus* Cope, 1869 by Dunn (1926a). Although Cochran (1961) listed USNM 30352 as a paratype of *Oedipus townsendi* Dunn, 1922, it is highly questionable whether Dunn (1922a) considered this specimen to be a paratype. The specimen was discussed in the “Remarks” section of the original description but not in the “Description” section. MCZ 8020 was exchanged to the Field Museum of Natural History, where it is presently cataloged as FMNH 73365. MCZ 8021 was exchanged to E. H. Taylor in 1941; subsequently, this specimen was deposited at the Field Museum of Natural History, where it is presently cataloged as FMNH 100409.

***Phaeognathus hubrichti* Highton, 1961**

[currently accepted; *fide*, Brandon, 1966b: 1]

Highton, 1961, *Copeia*, 1961: 67.

Holotype: USNM 142486, 3 miles NW of McKenzie, on U.S. Route 31, Butler County, Alabama, collected by L. Hubricht, 18 Jun 1960.

Type Locality: “Three miles northwest of McKenzie on U.S. Route 31, Butler County, Alabama.”

Etymology: The name *hubrichti* is a patronym honoring Leslie Hubricht, collector of the holotype.

***Plethodon amplus* Highton and Peabody, 2000**

[currently accepted; *fide*, Weisrock and Larson, 2006: 44–45]

Highton and Peabody, 2000, in Bruce et al., *Biol. Plethodontid Salamanders*: 60.

Holotype: USNM 446296, Little Pisgah Mountain, SSW slope, 1.8 miles (by dirt road) NE of U.S. Route 74A at Hickory Nut Gap, Henderson County, North Carolina, 35°29′42″N, 82°20′08″W, elevation 3,640 feet, collected by R. Highton, S. Highton, and C. Molineaux, 29 Jul 1973.

Type Locality: “South slope of Little Pisgah Mountain (35° 29′42″ N 82° 20′08″ W, locality 31), Henderson County, North Carolina, at an elevation of 1109 m.”

Paratypes: USNM 446282, 446484, 446287, 446294, 446295, 446299, 446300, 446304–446306, 446308, 446312, 446317, 446318, 446321, same data as holotype.

Etymology: The name *amplus* is from the Latin *amplus*, “large,” and refers to the large body of this species.

***Plethodon aureolus* Highton, 1984**

[currently accepted; *fide*, Highton, 1989: 75]

Highton, 1984 [1983], *Brimleyana*, 9: 2.

Holotype: USNM 238341, Cherokee National Forest, Farr Gap, Monroe County, Tennessee, 35°27′45″N, 84°01′37″W, elevation 2,860 feet, collected by R. Highton and J. K. Streicher, 30 Jun 1979.

Type Locality: “Farr Gap, Unicoi Mountains, Monroe County, Tennessee.”

Paratypes: USNM 238342–238351, same data as holotype.

Etymology: The name *aureolus* is from the Latin *aureolus*, “golden” or “gilt,” in reference to the brightly colored brassy dorsal spots of this species.

***Plethodon chattahoochee* Highton, 1989**

[currently accepted; *fide*, Highton et al., 2017: 34]

Highton, 1989, *Illinois Biol. Monogr.*, 57: 55.

Holotype: USNM 168527, Chattahoochee National Forest, Brasstown Bald, on dirt road east of summit, 0.2 mile (by road) NE of its junction with road to fire tower, Towns County, Georgia, 34°52′21″N, 83°48′31″W, elevation 1,353 m, collected by R. Highton and T. Savage, 22 Jul 1961.

Type Locality: “Locality 9 [= 34°52′21″N, 83°48′31″W] . . . , 0.3 km east of the top of Brasstown Bald, at an elevation of 1,353 m, Towns County, Georgia.”

Paratype(s): USNM 168518–168526, 168528–168535, same data as holotype.

Etymology: The name *chattahoochee* is for the Chattahoochee National Forest, which approximately coincides with the distribution of this species.

***Plethodon cheoah* Highton and Peabody, 2000**

[currently accepted; *fide*, Weisrock and Larson, 2006: 44]

Highton and Peabody, 2000, in Bruce et al., *Biol. Plethodontid Salamanders*: 62.

Holotype: USNM 459012, Nantahala National Forest, Bellcollar Gap, 0.4 mile (air) SW of top of Cheoah Bald, Graham and

Swain Counties, North Carolina, 35°19'20"N, 83°41'11"W, elevation: 4,740 feet, collected by R. Highton and J. K. Streicher, 1 Jul 1979.

Type Locality: "Bellcollar Gap (35° 19'20"N 83° 41'11" W), 0.6 km southwest of the top of Cheoah Bald, at an elevation of 1445 m, Graham-Swain County line, North Carolina."

Paratypes: USNM 458972, 458973, 458977–458987, 458989–458991, 458993, 458994, 459006, same data as holotype.

Etymology: The name is for Cheoah Bald, the type locality of this species.

***Plethodon cinereus angusticlavius* Grobman, 1944**

[= *Plethodon angusticlavius* Grobman, 1944; *fide*, Highton, 1997: 354]

Grobman, 1944, *Ann. New York Acad. Sci.*, 45: 302.

Paratype: USNM 57089, Stone County, Missouri, no further locality data, collected by J. Hurter, 20 Jun 1910.

Type Locality: "Mud Cave, near Fairy Cave, Stone County, Missouri."

Other Type Material: Holotype: AMNH 40366. Paratypes: AMNH 40367; CM 21960; UR 7120–7122, 7124–7129, 7132–7135. (See Remarks.)

Etymology: The name *angusticlavius* is from the Latin *angustus*, "narrow," and *clavius*, "stripe," in reference to the narrow dorsal stripe of this species,

Remarks: AMNH 40366 and AMNH 40367 are presently cataloged as AMNH A-40366 and AMNH A-40367. The UR paratypes are presently cataloged as FMNH 91486–91498.

***Plethodon cinereus dorsalis* Cope, 1889**

[= *Plethodon dorsalis* Cope, 1889; *fide*, Stejneger and Barbour, 1917: 15; confirmed by Highton, 1962: 277]

Cope, 1889, *Bull. U.S. Natl. Mus.*, 34: 138.

Lectotype: USNM 3776, Louisville, Jefferson, Kentucky, collector unknown, date of collection unknown, cataloged 2 Aug 1858. Lectotype designation by Highton (1962: 277).

Type Locality: "Louisville, Kentucky."

Paralectotypes: USNM 512291–512293, same data as lectotype. (See Remarks.)

Etymology: The name *dorsalis* is derived from the Latin *dorsalis*, "of the back," and is in reference to the broad stripe mentioned in the original description.

Remarks: There were originally four syntypes cataloged as USNM 3776. Highton (1962) designated one specimen as the lectotype and indicated the specimen as USNM 3776A (by scratching an "A" on the catalog tag). The remaining three specimens originally cataloged as USNM 3776 were recataloged as USNM 512291–512293 on 25 Feb 1997.

***Plethodon clemsonae* Brimley, 1927**

[= *Plethodon metcalfei* Brimley, 1912; *fide*, Highton and Peabody, 2000: 59]

Brimley, 1927, *Copeia*, 164: 73.

Holotype: USNM 73849, Jocassee, Oconee County, South Carolina, elevation 1,200–1,500 feet, collected by J. A. Berly, 8 Apr 1927.

Type Locality: "Jocassee, S. C., . . . at an elevation of 1200 to 1500 feet."

Other Type Material: Paratypes: CSB 7762 and 7763; Clemson College No. 69. (See Remarks.)

Etymology: The name *clemsonae* is a matronym for Clemson College.

Remarks: The holotype, USNM 73849, was cited as C. S. Brimley No. 7761. The original description stated, "The type specimen will be deposited in the U. S. National Museum, Paratype 7762 will be retained in my collection, and the other two paratypes will be returned to Mr. Sherman, State Entomologist of South Carolina, at Clemson College." CSB 7763 and Clemson No. 69 were later sent to the University of Michigan Museum of Zoology, where they are presently cataloged as UMMZ 142916.

***Plethodon crassulus* Cope, 1886**

[= *Aneides lugubris* (Hallowell, 1849); *fide*, Dunn, 1926a: 211] Cope, 1886, *Proc. Am. Philos. Soc.*, 23: 521.

Holotype: USNM 9447, California, no further locality data, collected by J. G. Cooper, date of collection unknown, cataloged 19 Nov 1877.

Type Locality: "California."

Etymology: The name *crassulus* is apparently derived from the Latin *crassus*, "thick" or "stout," in reference to the robust body form mentioned in the original description.

***Plethodon croceater* Cope, 1868**

[= *Ensatina eschscholtzii croceater* (Cope, 1868); *fide*, Stebbins, 1949: 457]

Cope, 1868a [1867], *Proc. Acad. Nat. Sci. Philadelphia*, 19: 210.

Holotype: USNM 4701, Fort Tejon, Kern County, California, collected by J. Xantus, date of collection and cataloging unknown.

Type Locality: "Fort Tejon, Cal."

Etymology: The name *croceater* is from the Latin *croceus*, "saffron-like," and *ater*, "black," apparently in reference to the black and orange coloration mentioned in the original description.

Remarks: USNM 4701 cannot be located at the National Museum of Natural History and apparently was lost prior to 1916 (Van Denburgh, 1916: 220).

***Plethodon dixi* Pope and Fowler, 1949**

[= *Plethodon wehrlei* Fowler and Dunn, 1917; *fide*, Highton, 1962: 320]

Pope and Fowler, 1949, *Nat. Hist. Misc.*, 47: 1.

Paratypes: USNM 127239–127249, Dixie Caverns, 5 miles S of Salem, Roanoke County, Virginia, collected by J. A. Fowler, 21 Jun 1948; USNM 564570, 564571, Dixie Caverns, 8.5 miles WSW of Salem, Roanoke County, Virginia,

collected by C. M. Bogert, C. H. Pope, and S. Pope, 19 Jul 1948.

Type Locality: "Dixie Caverns, Roanoke County, Virginia."

Other Type Material: Holotype: CNHM 56510. Paratypes: CNHM 56511–56609; CM 26263 (29 specimens); American Museum of Natural History (22 specimens); J. A. Fowler Collection 1206, 1207 (eight specimens). (See Remarks.)

Etymology: The name *dixi* is from the Dixie Caverns, the type locality of the species.

Remarks: The holotype is presently cataloged as FMNH 56510, and the CNHM paratypes are presently cataloged as FMNH 56511–56609. At present, there are 27 specimens in CM 26263. The 22 specimens in the American Museum of Natural History were cataloged as AMNH A-54127–54133 (and 15 untagged specimens). AMNH A-54133 and one untagged specimen were exchanged to Dr. A. P. Blair, Tulsa University. The A. P. Blair collection was later donated to the National Museum of Natural History, where the two paratypes are presently cataloged as USNM 564570 and 564571. The additional 14 untagged specimens at the American Museum of Natural History are presently cataloged as AMNH A-144157–144170. The whereabouts of the J. A. Fowler paratypes are unknown.

Plethodon dunni Bishop, 1934

[currently accepted; *fide*, Storm and Brodie, 1970: 1]

Bishop, 1934, *Proc. Biol. Soc. Washington*, 47: 169.

Holotype: USNM 95196, near Portland, Clackamas County, Oregon, collected by S. G. Jewett Jr., 13 Jan 1934.

Type Locality: "Just outside the city limits of Portland, Oregon in Clackamas County."

Other Type Material: Paratypes: Five additional specimens, one other from the type locality and four from Eagle Creek, Clackamas County, Oregon. (See Remarks.)

Etymology: The name *dunni* is a patronym honoring Emmett Reid Dunn, American herpetologist.

Remarks: The holotype was not listed by number in the original description but was mentioned as "Type in the U. S. National Museum." One specimen is in the Carnegie Museum of Natural History (CM 8679) with the remark "This specimen was one of the type series but not designated a paratype." The deposition of the remaining four paratypes is unknown.

Plethodon electromorphus Highton, 1999

[currently accepted; *fide*, Regester, 2000: 1]

Highton, 1999, *Herpetologica*, 55: 66.

Holotype: USNM 507747, Cedar Creek State Park, Gilmer County, West Virginia, 38°52'34"N, 80°51'03"W, elevation 900 feet, collected D. E. Green, 5 Oct 1996.

Type Locality: "Locality 35, 274 m elevation, Cedar Creek State Park, Gilmer County, West Virginia."

Paratypes: USNM 507748–507763, same data as holotype; USNM 484593–484602, same data as holotype, except collected by R. Highton and H. G. Dowling, 11 Oct 1980.

Etymology: The name *electromorphus* is derived from the Greek *elektron*, "amber," and *morphe*, "form" or "shape," in reference to the electrophoretic differences that distinguish this species from *Plethodon richmondi*.

Plethodon fourchensis Duncan and Highton, 1979

[currently accepted; *fide*, Highton, 1986: 1]

Duncan and Highton, 1979, *Copeia*, 1979: 109.

Holotype: USNM 204835, Ouachita National Forest, on Forest Route 278, 3.3 miles (by road) E of its junction with U.S. Route 71 at Foran Gap, 0.9 mile (air) WSW of Wolf Pinnacle, Fourche Mountain, Polk County, Arkansas, collected by R. Highton, R. R. Beatson, S. B. Hedges, and D. M. Rosenberg, 9 Oct 1976.

Type Locality: "1.5 km west, 0.3 km south of the top of Wolf Pinnacle Mountain, Polk County, Arkansas."

Paratypes: USNM 204836–204855, same data as holotype.

Etymology: The name *fourchensis* is derived from Fourche Mountain, the type locality.

Plethodon glutinosus chlorobryonis Mittleman, 1951

[= *Plethodon chlorobryonis* Mittleman, 1951; *fide*, Highton, 1989: 58]

Mittleman, 1951, *Herpetologica*, 7: 108.

Holotype: USNM 129933, 3 miles N of New Bern, along U.S. Route 17, Craven County, North Carolina, collected by C. B. Goodstein and M. B. Mittleman, 10 Nov 1950.

Type Locality: "In the dry bottomlands along a small creek 13 miles north of New Bern, Craven County, North Carolina, along U. S. Highway 17."

Paratypes: USNM 83469, Lake Waccamaw, Columbus County, North Carolina, collected by J. E. Benedict Jr., date of collection unknown, cataloged 28 Apr 1931; USNM 84206, 84207, near Williams Mill Pond, Gates County, North Carolina, collected by M. K. Brady, 11 Aug 1931; USNM 91725, 91726, Lake Waccamaw, Columbus County, North Carolina, collected by I. E. Gray, 3 Jul 1933; USNM 124354, 8 miles E of Winfall, on Route 37, Perquimans County, North Carolina, collected by R. L. Hoffman and H. I. Kleinpeter, 5 Apr 1947; USNM 129934, 129935, same data as holotype; USNM 129936, 4 miles N of Windsor, Bertie County, North Carolina, collected by C. B. Goodstein and M. B. Mittleman, 10 Nov 1950.

Other Type Material: Paratype: MCZ A-30602. (See Remarks.)

Etymology: The name *chlorobryonis* is from the Greek *chloris*, "green," and *bryon*, "moss," in reference to the greenish, lateral patches mentioned in the original description.

Remarks: The holotype, allotype, and three paratypes were not listed by catalog number in the original description. They were listed in Mittleman's personal collection as "to be deposited in the United States National Museum." The author stated that three specimens collected with the holotype (the allotype and two paratypes, one preserved and one living individual) were to be deposited in the U.S. National Museum;

however, only the allotype and one additional paratopotype were deposited at the U.S. National Museum. Apparently, the living individual was not sent here. USNM 124354 was exchanged to the Museum of Comparative Zoology on 7 Aug 1958 and is presently cataloged as MCZ A-30602.

***Plethodon gordonii* Brodie, 1970**

[= *Plethodon dunni* Bishop, 1934; *fide*, Feder et al., 1978: 69] Brodie, 1970, *Herpetologica*, 26: 497.

Holotype: USNM 166687, Dinner Creek, T13S, R7W, Sec. 1, NW quarter, Benton County, Oregon, collected by E. D. Brodie Jr. and R. A. Nussbaum, 9 Apr 1969.

Type Locality: "Dinner Creek (T13S, R7W, Sec. 1, NW quarter), Benton County, Oregon."

Paratypes: USNM 166688–166691, Siuslaw National Forest, on Klickitat Road, 12 miles from Oregon Highway 34, T13S, R8W, Sec. 1, Lincoln County, Oregon, collected by S. Whiting, 4 May 1969; USNM 166692–166693, Alder Creek, where it crosses Mary's Peak Road, T13S, R7W, SEC 3, Benton County, Oregon, collected by E. D. Brodie Jr., 13 May 1969; USNM 166694, Siuslaw National Forest, on Klickitat Road, 12 miles from Oregon Highway 34, T13S, R7W, Sec. 16, NW quarter, Benton County, Oregon, collected by E. D. Brodie Jr. and R. A. Nussbaum, 18 May 1969; USNM 166695–166698, Hyde Creek, T13S, R8W, Sec. 6, Benton County, Oregon, collected by R. G. Altig, fall 1965; USNM 166699–166701, Hyde Creek, T13S, R8W, Sec. 6, Benton County, Oregon, collected by E. D. Brodie Jr., 18 Nov 1966; USNM 166702, Hyde Creek, T13S, R8W, Sec. 6, Benton County, Oregon, collected by E. D. Brodie III, 11 Feb 1967; USNM 166703–166707, WSW of Corvallis, 1 mile up Road 121, off Rock Creek Road (1239), off Oregon Highway 34, T12S, R6W, Sec. 19, SW quarter, collected by E. D. Brodie Jr. and J. A. Wiens, 9 Mar 1967.

Other Type Material: Paratypes: EDB 527, 582–584, 682–684, 747, 759, 788, 1081, 1326–1347, 1355–1357, 1930, 1931, 2014, 2306–2310, 2981, 2982, 3094–3100, 3104–3116; LACM 30641, 30642; OSU 195, 199, 207, 208, 210, 212–217, 1658, 1659, 3282, 5218, 5361, 5959–5963, 10452–10462, 10455–10457, 10461, 10462; MCZ A-89458. (See Remarks.)

Etymology: The name *gordonii* is a patronym for Kenneth L. Gordon, professor emeritus of zoology, Oregon State University.

Remarks: USNM 166688 was exchanged to the Museum of Comparative Zoology on 19 Apr 1976 and is presently cataloged as MCZ A-89458. Most of the EDB paratypes are now deposited at the University of Michigan Museum of Zoology (see Kluge, 1983).

***Plethodon hoffmani* Highton, 1972**

[currently accepted; *fide*, Highton and Larson, 1979: 587]

Highton, 1972 [1971], *Res. Div. Monogr. Virginia Polytech. Inst. State Univ.*, 4: 151.

Holotype: USNM 135203, Clifton Forge, Alleghany County, Virginia, collected by R. L. Hoffman, Apr 1954.

Type Locality: "Clifton Forge, Alleghany County, Virginia."

Paratypes: USNM 135204, 135205, same data as holotype; USNM 127578, 127579, north of Clifton Forge, Alleghany County, Virginia, collected by R. L. Hoffman, 28 Dec 1946; USNM 127589, Lowmoor Mines, Alleghany County, Virginia, collected by R. L. Hoffman, 1 Jun 1947; USNM 133044, 2 miles north of Clifton Forge, Alleghany County, Virginia, collected by R. L. Hoffman, 28 Apr 1950; USNM 190220–190223, George Washington National Forest, on VA Route 606, 0.6 mile (by road) northwest of the junction of Rose Avenue and Revere Street in Clifton Forge, Alleghany County, Virginia, 37°49'44"N, 79°50'08"W, elevation 1,200 feet, collected by R. L. Hoffman and R. Highton, 20 Oct 1956. (See Remarks.)

Other Type Material: Paratype: CM 34992. (See Remarks.)

Etymology: The name *hoffmani* is a patronym for Richard L. Hoffman, professor emeritus of biology, Radford University, and friend and collecting companion of R. Highton.

Remarks: USNM 133044 was exchanged to the Museum of Comparative Zoology on 19 Apr 1976, where it is presently cataloged as MCZ A-89459. USNM 190220–190223 were listed as topotypes in the original description, but the locality data are slightly different from the holotype.

***Plethodon hubrichti* Thurow, 1957**

[currently accepted; *fide*, Highton and Larson, 1979: 587]

Thurow, 1957, *Herpetologica*, 13: 59.

Holotype: USNM 139087, Blue Ridge Parkway, 0.9 mile S of Milepost 80 and a sign reading "View of Black Rock Hill," Bedford County, Virginia, 37°29'N, 79°33'W, elevation ~3,100 feet, collected by G. R. Thurow, 9 Dec 1956.

Type Locality: "By the Blue Ridge Parkway at about 3100 feet, 0.9 miles south of cement milepost 80 and a sign reading 'view of Black Rock Hill' in Bedford County near the Bedford-Botecourt line and roughly 10 miles ESE of Buchanan, Virginia."

Paratypes: USNM 139088, 139089, same data as holotype. (See Remarks.)

Other Type Material: Paratypes: GRT 1222–1229; CNMH 60512–60518.

Etymology: The name *hubrichti* is a patronym honoring Leslie Hubricht, American malacologist and collector of the first known specimens of this species.

Remarks: The holotype was cited by field number (GRT 1221) in the original description. The paratypes GRT 1223 and 1226 are presently cataloged as USNM 139088 and 139089, respectively. The remainder of the paratypes GRT 1222–1229 could not be located and must be considered missing. The paratypes CNMH 60512–60518 are presently cataloged as FMNH 60512–60518. In addition, the Field Museum of Natural History has an additional specimen, FMNH 93317, which they list as a paratype. This specimen was listed in the original description as "apparently *P. hubrichti*" but was not specifically listed as a paratype.

***Plethodon huldae* Grobman, 1949**

[= *Plethodon cinereus* (Green, 1818); *fide*, Muchmore, 1955: 172; Rabb, 1955: 262; confirmed by Highton, 1962: 286] Grobman, 1949, *Proc. Biol. Soc. Washington*, 62: 136.

Holotype: USNM 127955, Shenandoah National Park, foot trail to Hawksbill Mountain, ~100 yards from Skyline Drive, Madison County, Virginia, collected by A. B. Grobman and H. Grobman, 5 Sep 1947.

Type Locality: "Along the foot trail to Hawksbill Mountain about 100 yards from the Skyline Drive at an elevation of approximately 3500 feet in Madison County, Virginia."

Paratypes: USNM 127956–127958, same locality as holotype, collected by H. I. Kleinpeter and S. A. Peabody, Aug 1947.

Other Type Material: Paratypes: AMNH A-53996, A-53997; ANSP 26054; CAS 14682; CM 28897, 28899; CNHM 56501–56509; DBUF 2208, 2209; MCZ 26588; SCB (three specimens); UMMZ 98748–98751. (See Remarks.)

Etymology: The name *huldae* is a matronym for Hulda Grobman, wife of the author.

Remarks: The original specimen cataloged as MCZ 26588 was lost in shipment and was replaced in 1951 with a topotype. Therefore, MCZ 26588 is no longer a paratype. CNHM 56501–56509 are presently cataloged as FMNH 56501–56509. DBUF 2208 and 2209 are presently cataloged as UF 2208 and 2209. The three SCB paratypes were apparently later deposited at the Field Museum of Natural History, where they were cataloged as FMNH 92674–92676. FMNH 92674 was later exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-28282, and FMNH 92676 was also exchanged to the University of Illinois Museum of Natural History, where it is presently cataloged as UIMNH 39941. In addition, the Museum of Comparative Zoology lists MCZ A-26803 and A-26804 as paratypes. However, although they were collected at the type locality, they were not collected until 26 Feb 1951, well after the original description was published. Therefore, these two specimens are not paratypes, only topotypes.

***Plethodon idahoensis* Slater and Slipp, 1940**

[currently accepted; *fide*, Highton and Larson, 1979: 587; Howard et al., 1993: 238]

Slater and Slipp, 1940, *Occas. Pap. Dept. Biol. Puget Sound*, 8: 38.

Holotype: USNM 110504, NE corner of Coeur d'Alene Lake, Kootenai County, Idaho, collected by J. R. Slater, 13 Sep 1939.

Type Locality: "Northeast corner of Coeur d'Alene Lake, Kootenai County, Idaho; elevation about 2160 feet."

Paratype: USNM 110505, same data as holotype, except collected by J. W. Slipp.

Other Type Material: Paratypes: College of Puget Sound No. 2711; JWS 39I13c3, 39I13c4, 39I13c5. (See Remarks.)

Etymology: The name *idahoensis* is derived from the state of Idaho, where the type locality is located.

Remarks: The holotype was published as College of Puget Sound No. 2710 in the original description but was clearly indicated "to be deposited in the United States National Museum." In addition, a second specimen, JWS 39I13c3, was also to be deposited with the holotype in the U.S. National Museum. It is the specimen presently cataloged as USNM 110505. The additional three paratypes, College of Puget Sound No. 2711, JWS 39I13c4, and JWS 39I13c5, are in the J. R. Slater Museum of Natural History, where they are presently cataloged as PSM 2711–2713, respectively.

***Plethodon intermedius* Baird, 1868**

[= *Plethodon vehiculum* (Cooper, 1860); *fide*, Bishop, 1934: 171; Highton, 1962: 265]

Baird, 1868c, in Cope, 1868a [1867], *Proc. Acad. Nat. Sci. Philadelphia*, 19: 209.

Holotype: USNM 4732, Fort Tejon, Kern County, California, collected by J. Xantus, date of collection and cataloging unknown.

Type Locality: "Fort Tejon, Cal."

Paratype: USNM 6635, Vancouver Island, coal mines, British Columbia, collected by A. Hewson, date of collection and cataloging unknown.

Etymology: The name *intermedius* is from the Latin *intermedius*, "between" or "middle," possibly because the author considered it intermediate between *Plethodon glutinosus* and *P. erythronotus*.

Remarks: Cochran (1961) referred to USNM 4732a as a "cotype" (syntype in this context). However, it is clear from the original description that Baird listed USNM 4732 as the type. USNM 6635 is not presently in the collection and must be considered lost. Remarks in the original ledger at top of the page above USNM 7001 read "6601–7000 assigned to Mr. Cope in Phila, March 1867." Apparently, the specimen with this catalog number was not returned upon Cope's death.

***Plethodon jacksoni* Newman, 1954**

[= *Plethodon wehrlei* Fowler and Dunn, 1917; *fide*, Highton, 1962: 318]

Newman, 1954, *Herpetologica*, 10: 9.

Holotype: USNM 134498, Trillium Vale, ~1 mile E of Blacksburg, Montgomery County, Virginia, elevation 2,100 feet, collected by W. B. Newman, 11 Feb 1950.

Type Locality: "Trillium Vale, elevation 2,100 feet, approximately one mile east of Blacksburg, Montgomery County, Virginia."

Paratypes: USNM 143187, same data as holotype, except collected 11 Feb 1950; USNM 143188–143190, same data as holotype, except collected 25 Jan 1950; USNM 143191–143195, same data as holotype, except collected 15 Feb 1950; USNM 143196, same data as holotype, except collected 19 Feb 1951; USNM 143197–143200, same data as holotype, except collected 19 Apr 1951; USNM 143201–143203,

same data as holotype, except collected 15 Apr 1951; USNM 143204–143211, Old Mill Cave, near Bennett's Mills, Montgomery County, Virginia, elevation 1,600 feet, collected by W. B. Newman, 27 May 1951; USNM 143212, 143213, Virginia Polytechnic Institute Ecology Area, Montgomery County, Virginia, elevation 1,900 feet, collected by W. B. Newman, 7 Mar 1951; USNM 143214, same data, except collected 12 Feb 1951.

Etymology: The name is a patronym honoring Herbert W. Jackson, former associate professor of biology at Virginia Polytechnic Institute.

Remarks: The holotype, USNM 134498, was cited as WBN 6 in the original description. All of the paratypes were also cited by WBN number: USNM 143187–143190 as WBN 1–4, USNM 143192 as WBN 96, USNM 143192 and 143193 as WBN 107 and 108, USNM 143194 and 143195 as WBN 124 and 125, USNM 143196 as WBN 1250, USNM 143197–143200 as WBN 1295–1298, USNM 143201–143203 as WBN 1350–1352, USNM 143204–143207 as WBN 453–456, USNM 143208–143211 as WBN 673–676, and USNM 143214 as WBN 1519. USNM 143212 and 143213 were cited in error as WBN 1294 and 1295; they are actually WBN 1274 and 1275.

***Plethodon longicrus* Adler and Dennis, 1962**

[= *Plethodon yonahlossee* Dunn, 1917; *fide*, Guttman et al., 1978: 445]

Adler and Dennis, 1962, *Spec. Publ. Ohio Herpetol. Soc.*, 4: 1.

Holotype: USNM 145658, northeast slope of Bluerock Mountain, below the Bat Caves, 0.8 mile ESE of Bat Cave (town), Rutherford County, North Carolina, collected by K. K. Adler, D. G. Dennis, and S. G. Tilley, 28 Aug 1961.

Type Locality: “The northeast slope of Bluerock Mountain, below the Bat Caves, Rutherford County, North Carolina, approximately 0.8 miles ESE of Bat Cave (city), at an elevation of about 1645 feet above sea level.”

Paratypes: USNM 145659, 145661, 145663, same data as holotype; USNM 145660, 145664, 145665, same locality as holotype, collected by K. K. Adler, D. G. Dennis, and C. J. Hirschfeld, 7 and 8 Sep 1961; USNM 145662, same locality as holotype, collected by K. K. Adler and C. J. Hirschfeld, 4 Nov 1961.

Other Type Material: Paratypes: AMNH 67676, 67677; ANSP 26733, 26734; CM 38009, 38010; CNHM 131271, 131272; MCZ 34962, 34963; MVZ 72661, 72662; UIMNH 50346, 50347; UMMZ 123052–123054. (See Remarks.)

Etymology: The name *longicrus* is from the Latin *longus*, “long,” and *crus*, “leg,” in reference to the long legs mentioned in the original description.

Remarks: AMNH 67676 and 67677 are presently cataloged as AMNH A-67676 and A-67677. CNHM 131271 and 131272 are presently cataloged as FMNH 131271 and 131272.

***Plethodon meridianus* Highton and Peabody, 2000**

[currently accepted; *fide*, Highton et al., 2017: 34]

Highton and Peabody, 2000, in Bruce et al., *Biol. Plethodontid Salamanders*: 61.

Holotype: USNM 454653, South Mountains State Park, south of Bumgartner Mountain, Burke and Cleveland Counties, North Carolina, 35°35'08"N, 81°41'22"W, elevation 2,700 feet, collected by R. Highton, J. K. Streicher, and J. Ott, 1 Jun 1979.

Type Locality: “South Mountains (35° 35'08" N 81° 41'22" W, locality 34), Burke–Cleveland county line, North Carolina, at an elevation of 823 m.”

Paratypes: USNM 454658–454682, same data as holotype.

Etymology: The name *meridianus* is from the Latin *meridies*, “south,” and *anus*, “belonging to,” in reference to the fact that this species is endemic to the South Mountains.

***Plethodon metcalfi* Brimley, 1912**

[currently accepted; *fide*, Highton and Peabody, 2000: 59]

Brimley, 1912, *Proc. Biol. Soc. Washington*, 25: 138.

Holotype: USNM 49682, Sunburst, Haywood County, North Carolina, collected by C. S. Brimley and F. Sherman Jr., May 1912.

Type Locality: “Near Sunburst, Haywood Co., N. C., . . . at elevations of about 3500 to 4000 feet.”

Paratypes: USNM 49683, 164412, same data as holotype.

Other Type Material: Original description states, “Described from thirty-nine specimens, twenty-two of them taken near Sunburst, Haywood Co., N. C. in late May, 1912 by Mr. Sherman and myself; the other seventeen collected by Mr. Z. P. Metcalf, on Grandfather Mt., in September, 1908.” (See Remarks.)

Etymology: The name *metcalfi* is a patronym honoring Z. P. Metcalf, collector of a portion of the type series.

Remarks: The holotype, USNM 49682, was not listed by USNM number in the original description, which stated, “The type specimen, Brimley No. 6766, collected at Sunburst as above stated, will be deposited in the U. S. National Museum.” Paratypes were not listed by number in the original description. USNM 49683 (Brimley No. 6765) was received with the holotype from C. S. Brimley. In addition, there are two specimens (USNM 57020, 57021) received from J. Hurter that were collected in Haywood County by Sherman and Brimley in May 1912 and might be paratypes. An additional paratype, USNM 164412, was not listed in Cochran (1961) because the specimen was not received from the North Carolina State Museum of Natural History until 1967. This specimen was deposited by C. S. Brimley in the North Carolina State Museum of Natural History where it was cataloged as NCSM 5408 (original number Brimley No. 6769).

***Plethodon mississippi* Highton, 1989**

[currently accepted; *fide*, Highton et al., 2017: 34]

Highton, 1989, *Illinois Biol. Monogr.*, 57: 65.

Holotype: USNM 257388, Tishomingo State Park, Tishomingo County, Mississippi, 34°36'38"N, 88°11'56"W, elevation 177 m, collected by R. Highton and D. E. Carr, 18 Jan 1986.

Type Locality: "Locality 79 . . . Tishomingo State Park, at an elevation of 177 m, Tishomingo County, Mississippi."

Paratypes: USNM 257389–257395, same data as holotype; USNM 257396–257425, same locality as holotype, collected by R. Highton, W. Garber, and P. Kahla, 15 Mar 1973.

Etymology: This species is named for the state of Mississippi, where the type locality is located.

***Plethodon montanus* Highton and Peabody, 2000**

[currently accepted; *fide*, Weisrock and Larson, 2006: 25–51]

Highton and Peabody, 2000, in Bruce et al., *Biol. Plethodontid Salamanders*: 58.

Holotype: USNM 438400, Deep Gap, on Elk Garden Ridge, west of Mount Rogers, Mount Rogers National Recreation Area, Jefferson National Forest, Grayson and Smyth Counties, Virginia, 36°39'28"N, 81°33'25"W, elevation 4,920 feet, collected by R. Highton and J. E. Oovich, 3 Jun 1980.

Type Locality: "Deep Gap (36° 39'28" N 81° 33'25 W), 1 km west of the top of Mt. Rogers, Grayson – Smyth county line, Virginia, at an elevation of 500 m."

Paratypes: USNM 438390–438399, 438401–438403, same data as holotype.

Etymology: The name *montanus* is from the Latin *montanus*, "of the mountains," in relation to the high-altitude, mountainous habitat of this species.

***Plethodon neomexicanus* Stebbins and Riemer, 1950**

[currently accepted; *fide*, Highton, 1962: 272]

Stebbins and Riemer, 1950, *Copeia*, 1950: 73.

Paratype: USNM 129378, 12 miles W and 4 miles S of Los Alamos, Sandoval County, New Mexico, collected by R. C. Stebbins, 14 Aug 1949. (See Remarks.)

Type Locality: "12 miles west and 4 miles south of Los Alamos, 8,750 feet altitude +/-, Sandoval County, New Mexico."

Other Type Material: Holotype: MVZ 49033. Paratypes: MVZ 49018–49032, 49034, 49035.

Etymology: The name *neomexicanus* is from the state of New Mexico, where the type locality is located.

Remarks: USNM 129378 was received in exchange from the Museum of Vertebrate Zoology and cataloged on 8 Feb 1950. It was listed as MVZ 49035 in the original description. MVZ 49027 was exchanged to the University of Michigan Museum of Zoology, where it now cataloged as UMMZ 109902.

***Plethodon ocmulgee* Highton, 1989**

[currently accepted; *fide*, Highton et al., 2017: 34]

Highton, 1989, *Illinois Biol. Monogr.*, 57: 60.

Holotype: USNM 257426, Little Ocmulgee State Park, Wheeler County, Georgia, 32°05'38"N, 82°53'35"W, elevation 49 m, collected by R. Highton and S. B. Hedges, 8 Nov 1976.

Type Locality: "Locality 32 . . . Little Ocmulgee State Park, at an elevation of 49 m, Wheeler County, Georgia."

Paratypes: USNM 257427–257464, same data as holotype.

Etymology: This species is named for the Ocmulgee River, as much of the species range is in the Ocmulgee River drainage.

***Plethodon ouachitae* Dunn and Heinze, 1933**

[currently accepted; *fide*, Bishop, 1943: 269; confirmed by Highton, 1962: 324]

Dunn and Heinze, 1933, *Copeia*, 1933: 121.

Holotype: USNM 92484, Ouachita National Forest, Rich Mountain, Polk County, Arkansas, collected by A. A. Heinze and D. A. Boyer, 30 May 1933.

Type Locality: "Ouachita National Forest, on Rich Mountain, Polk Co., Arkansas."

Other Type Material: Paratypes: Eight additional specimens. (See Remarks.)

Etymology: The name *ouachitae* is for the Ouachita National Forest, location of the type locality.

Remarks: In the original description, the authors stated that there were five specimens collected by L. Hubricht on Rich Mountain, east of Page, Le Flore County, Oklahoma, and that there were four specimens from Rich Mountain, Ouachita National Forest, Polk County, Arkansas. However, detailed measurements were given for only eight specimens: the holotype, three additional specimens from Arkansas, and four specimens from Oklahoma. It is not clear whether the ninth specimen, an additional one from Oklahoma, should be considered a paratype or not. The final deposition of the paratypes is not given in the original description. Only two paratypes could be located. One specimen was presented to the Carnegie Museum of Natural History, where it is presently cataloged as CM 7141. A second specimen is in the Field Museum of Natural History, where it is presently cataloged as FMNH 92806. The remainder of the paratypes could not be located and must be considered missing.

***Plethodon petraeus* Wynn, Highton, and Jacobs, 1988**

[currently accepted; *fide*, Jensen and Camp, 2004: 1]

Wynn, Highton, and Jacobs, 1988, *Herpetologica*, 44: 135.

Holotype: USNM 267205, Crockford–Pigeon Mountain Wildlife Management Area, on road into Dickson Gulf, 1.2 miles (by road) W of its junction with Chamberlain Road, on eastern slope of Pigeon Mountain, ~6 miles (air) SW of Lafayette, Walker County, Georgia, elevation 310 m, 34°39'50"N, 85°22'10"W, collected by J. F. Jacobs and A. H. Wynn, 24–25 May 1986.

Type Locality: "34° 39'50" N and 85°22'10 W, at an elevation of 310 m, at the mouth of Dickson Gulf on the eastern slope of Pigeon Mountain, Walker County, Georgia."

Paratypes: USNM 267106–267123, same data as holotype; USNM 267124–267128, same data as holotype, except collected by A. H. Wynn, S. Douglas, and J. R. MacGregor, 1–2 Nov 1985; USNM 267129–267135, ~0.7 mile (air) NW of Harrisburg, near cave at source of northernmost branch of Spring Creek, south of Harrisburg Gulf, on eastern slope of Pigeon Mountain, Walker County, Georgia, elevation 226 m, 34°36'00"N, 85°23'50"W, collected by J. F. Jacobs and A. H. Wynn, 16 Oct 1985; USNM 267136–267161, same data as above, except collected by R. Highton, J. R. MacGregor, D. Stephens, and A. H. Wynn, 1 Nov 1985; USNM 267162–267197, same data as above, except collected by J. F. Jacobs and A. H. Wynn, 26 May 1986; USNM 267198, 267199, same data as above, except collected by A. H. Wynn and L. A. Hollenberg, 16 Oct 1986; USNM 267200–267231, same data as above, except collected by R. Highton, P. Manzo, and S. B. Mayhugh, 19 Mar 1987.

Etymology: The name *petraeus* is from the Greek *petraeos*, “among rocks” or “rock dwelling,” in reference to the habitat of this species.

Remarks: USNM 267198 and 267199 are cleared and stained specimens presently stored in glycerin.

Plethodon punctatus Highton, 1972

[currently accepted; *fide*, Highton and Larson, 1979: 588]

Highton, 1972 [1971], *Res. Div. Monogr. Virginia Polytech. Inst. State Univ.*, 4: 176.

Holotype: USNM 190224, George Washington National Forest, NW slope of Cow Knob, 0.1–0.2 mile NNW of top of Cow Knob, along Hog Ridge, Pendleton County, West Virginia, collected by R. T. Danstedt, D. F. Fraser, and R. Highton, 22 Sep 1970.

Type Locality: “Between 0.1 and 0.2 mile north-northwest of the top of Cow Knob, Pendleton County, West Virginia state line.”

Paratypes: USNM 190225, same data as holotype; USNM 190226–190234, George Washington National Forest, 0.2 mile (by jeep trail) ESE of top of Cow Knob, Rockingham and Pendleton Counties, Virginia–West Virginia, collected by R. Highton, R. G. Jaeger, and R. D. Worthington, 29 Apr 1966.

Etymology: The name *punctatus* is from the Latin *punctum*, “spot,” in reference to the large number and size of the dorsal yellowish-white spots of this species.

Plethodon richmondi Netting and Mittleman, 1938

[currently accepted; *fide*, Highton, 1962: 305]

Netting and Mittleman, 1938, *Ann. Carnegie Mus.*, 27: 288.

Paratypes: USNM 107283, 107284, Lodi Township, Section 30, Athens County, Ohio, collected by H. T. Gier, 29 Mar 1938; USNM 108549, Huntington, Ritter Park, Cabell County, West Virginia, collected by N. D. Richmond and N. B. Green, 15 Oct 1938.

Type Locality: “Ritter Park, Huntington, Cabell County, West Virginia, at an elevation of 600–700 feet.”

Other Type Material: Holotype: CM 14189. Paratypes: CM 5278, 5279, 5285a–c,f, 5294–5296, 5303–5308, 5599, 5985a,b, 5986, 6079, 6097, 7515, 8775, 9773, 11256, 14072, 14101–14104, 14136, 14182–14188, 14190–14215, 14258 (43 specimens), 14264 (11 specimens), 14265–14268, 14271–14281; CSNH 1270 (21 specimens); O. U. Zool. A1–6, A278–284, A289–294, A341, A342, A344, A345, A347, A348, A350, A356–358, A631, A632.

Etymology: The name *richmondi* is a patronym for Neil D. Richmond, American herpetologist and collector of the holotype.

Remarks: USNM 107283 and 107284 were received in exchange from the Ohio University Department of Zoology and cataloged on 1 Mar 1939. They were listed as O. U. Zool. A278–279 in the original description. These two paratypes have been reidentified as *Plethodon electromorphus* on the basis of the distributions in Highton (1999). USNM 108549 was received in exchange from the Carnegie Museum of Natural History and cataloged on 1 Nov 1939. It was listed as CM 14188 in the original description. CM 5295 was exchanged to the Chicago Academy of Sciences, where it is presently cataloged as CA 7817. CM 5296 was exchanged to L. M. Klauber and was later deposited at the San Diego Natural History Museum, where it is presently cataloged as SDNHM 32680. CM 14182 was exchanged to S. C. Bishop and was later deposited at the Field Museum of Natural History, where it is presently cataloged as FMNH 92809. CM 14183 was exchanged to E. R. Dunn and was later deposited at the Academy of Natural Sciences, Philadelphia, where it is presently cataloged as ANSP 23055. CM 14184 was exchanged to the Field Museum of Natural History, where it is presently cataloged as FMNH 33900. CM 14185 was exchanged to the University of Michigan Museum of Zoology, where it is presently cataloged as UMMZ 86162. CM 14186 was exchanged to Stanford University and was later deposited at the California Academy of Sciences, where it is presently cataloged as CAS-SU (Amp) 4459. CM 14187 was exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-24089. As mentioned above, CM 14188 was exchanged to the U.S. National Museum. Two specimens out of CM 14258 were exchanged to the University of Illinois Museum of Natural History, where they are presently cataloged as UIMNH 57321 and 57322. CM 14272–14281 were exchanged to Neil D. Richmond and N. Bayard Green; these specimens could not be located and must be considered missing. CSNH 1270 (21 specimens) and all the paratypes deposited at the Department of Zoology, Ohio University (except for O. U. Zool. A278, 279, which were exchanged to the U.S. National Museum), could not be located and must be considered missing.

Plethodon richmondi popei Highton and Grobman, 1956

[= *Plethodon richmondi* Netting and Mittleman, 1938; *fide*, Highton, 1962: 305]

Highton and Grobman, 1956, *Herpetologica*, 12: 187.

Paratypes: USNM 135178, Nigger Mountain (= Mount Jefferson), SE of Jefferson, Ashe County, North Carolina, collected by L. Hubricht, 17 Oct 1953; USNM 135179, Blue Ridge Parkway, Milepost 236.2, Alleghany and Wilkes Counties, North Carolina, collected by L. Hubricht, 10 Oct 1953; USNM 135180, 2 miles SW of Sparta, Alleghany County, North Carolina, collected by L. Hubricht, 17 Oct 1953; USNM 135181–135198, Burke's Garden, Tazewell County, Virginia, collected by R. L. Hoffman, 20 Mar 1954; USNM 135199–135202, 6 miles W of Wytheville, Wythe County, Virginia, collected by R. L. Hoffman, 30 Mar 1954; USNM 135207–135213, Brushy Mountain, 5 miles E of Marion, Smyth County, Virginia, collected by R. L. Hoffman, 2 May 1954; USNM 137291, 137292, Comers Rock, Grayson-Wythe county line, Virginia, collected by W. Auffenberg and A. Grobman, 30 Aug 1951.

Type Locality: "Comers Rock, Grayson-Wythe County line, Virginia."

Other Type Material: Holotype: UF 8226. Paratypes: AMNH 58375, 58376; ANSP 26136, 26137; CAS 16663, 16664; CM 34063, 34064; CNHM 74868, 74869; CSNH 2514 (4); UF 8005, 8321, 8322, 8328 (10), 8334 (14); MCZ 28416, 28417; MVZ 63723, 63724; UMMZ 113702, 113703. (See Remarks.)

Etymology: The name *popei* is a patronym honoring Clifford H. Pope, American herpetologist.

Remarks: AMNH 58375 and 58376 are presently cataloged as AMNH A-58375 and A-58376. The CAS paratypes are now cataloged as CA 16663 and 16664, the CNHM paratypes are now FMNH 74868 and 74869, and the CSNH paratypes are now cataloged as CMC 2514.

***Plethodon richmondi shenandoah* Highton and Worthington, 1967**
[= *Plethodon shenandoah* Highton and Worthington, 1967; *fide*, Highton and Larson, 1979: 587]

Highton and Worthington, 1967, *Copeia*, 1967: 617.

Holotype: USNM 157379, Shenandoah National Park, Appalachian Trail, 0.02 mile NE of its junction with Naked Top Mountain Trail, 0.4 mile (air) W of top of Hawksbill Mountain, Page County, Virginia, 38°33'20"N, 78°24'10"W, elevation 3,650 feet, collected by R. Highton, R. D. Worthington, and R. G. Jaeger, 20 Apr 1966.

Type Locality: "Appalachian Trail 0.02 mile northeast of its junction with Naked Top Mountain Trail, 0.4 air mile west of the top of Hawksbill Mountain, Shenandoah National Park, Page County, Virginia, 3650 ft elevation."

Paratypes: USNM 157380–157388, same data as holotype; USNM 157389–157424, same data as holotype, except collected 26 Apr 1965; USNM 157425–157464, same data as holotype, except collected 9 May 1965; USNM 157465–157470, Shenandoah National Park, Appalachian Trail, 0.57 mile W of its junction with Timber Hollow Fire Trail, 0.1 mile (air) N of top of Hawksbill Mountain, Page County, Virginia, 38°33'25"N, 78°23'35"W, collected by R. Highton,

R. D. Worthington, and R. G. Jaeger, 26 Apr 1966; USNM 157471–157487, Shenandoah National Park, Appalachian Trail, 0.36 mile W of its junction with Timber Hollow Fire Trail, 0.2 mile (air) N of top of Hawksbill Mountain Page County, Virginia, 38°33'23"N, 78°23'54"W, collected by R. Highton, R. D. Worthington, and R. G. Jaeger, 26 Apr 1966; USNM 157488–157498, Shenandoah National Park, Appalachian Trail, 0.30 mile W of its junction with Timber Hollow Fire Trail, 0.2 mile (air) ENE of top of Hawksbill Mountain Page County, Virginia, 38°33'23"N, 78°23'28"W, collected by R. Highton, R. D. Worthington, and R. G. Jaeger, 26 Apr 1966.

Other Type Material: Paratypes: AMNH A-74362, A-74363; CM 40532, 40533; CMNH 152585, 152586; MCZ 51749, 51750; MVZ 79379, 79380; UF 21491, 21492; UMMZ 126017, 126018. (See Remarks.)

Etymology: The name *shenandoah* is from the Shenandoah National Park, location of all three isolated populations of this species.

Remarks: CMNH 152585 and 152586 are now FMNH 152585 and 152586.

***Plethodon savannah* Highton, 1989**

[currently accepted; *fide*, Highton et al., 2017: 35]

Highton, 1989, *Illinois Biol. Monogr.*, 57: 73.

Holotype: USNM 257465, Hephzibah, ENE of, just NW of the intersection of U.S. Route 25 (Peach Orchard Road) and Rheney Road, Richmond County, Georgia, 33°19'48"N, 82°03'49"W, elevation 101 m, collected by R. Highton and H. Hotz, 17 Mar 1985.

Type Locality: "Locality 128 . . . at an elevation of 101 m, Richmond County, Georgia."

Paratypes: USNM 257466–257480, same data as holotype; USNM 257481, same locality as holotype, collected by R. Highton, 20 Mar 1983; USNM 257482–257484, same locality as holotype, collected by P. Manzo and G. J. Naylor, 28 Jun 1985.

Etymology: This species is named after the Savannah River, apparently the eastern limit of its range.

***Plethodon sequoyah* Highton, 1989**

[currently accepted; *fide*, Highton et al., 2017: 35]

Highton, 1989, *Illinois Biol. Monogr.*, 57: 68.

Holotype: USNM 257485, Beavers Bend State Park, McCurtain County, Oklahoma, 34°07'29"N, 94°40'15"W, elevation 140 m, collected by R. Highton and S. B. Hedges, 11 Oct 1976.

Type Locality: "Locality 91 . . . Beavers Bend State Park, at an elevation of 140 m, McCurtain County, Oklahoma."

Paratypes: USNM 257486–257521, same locality as holotype, collected by R. Highton, S. Highton, and J. Streicher, 25 May 1978.

Etymology: This name *sequoyah* is a patronym for the Cherokee Native American Sequoyah.

***Plethodon sherando* Highton, 2004**[currently accepted; *fide*, Frost, 2021]Highton, 2004, *Jeffersoniana*, 14: 10.

Holotype: USNM 556159, George Washington National Forest, northwest slope of Bald Mountain, on Bald Mountain Lookout Road, 0.7 mile (by road) NE of its junction with Blue Ridge Parkway, 37°55'09"N, 79°04'00"W, elevation 3,460 feet, collected by R. Highton and G. A. Marvin, 17 May 2003.

Type Locality: "Northwest slope of Bald Mountain (37° 55'09" N, 79° 04'00 W) at an elevation of 1055 m, August County, Virginia."

Paratypes: USNM 419385–419389, same locality as holotype, collected by R. Highton, 23 May 1965; USNM 419390, 419391, same locality as holotype, collected by R. Highton, 22 Oct 1966; USNM 419392–419406, 419408–419411, same locality as holotype, collected by R. Highton, 19 Oct 1968; USNM 556160–556162, same data as holotype.

Etiymology: The name *sherando* is for Sherando Lake, which in turn was named for an Iroquois chief who lived in the Shenandoah Valley of Virginia.

***Plethodon shermani* Stejneger, 1906**[currently accepted; *fide*, Highton and Peabody, 2000: 62]Stejneger, 1906, *Proc. U.S. Natl. Mus.*, 30: 559.

Holotype: USNM 36214, Wayah Bald Mountain, east of Wayah Gap, between Franklin and Aquone, Macon County, North Carolina, collected by F. Sherman Jr., 24 Aug 1904.

Type Locality: "Nantahala Mountain, between Andrews and Aquone"; corrected to between Franklin and Aquone, on Wayah Bald Mountain, east of Wayah Gap, Macon County, North Carolina, by Brimley (1912: 138). (See Remarks.)

Etiymology: The name *shermani* is a patronym for F. Sherman Jr., collector of the holotype.

Remarks: The type locality was originally published as "Nantahala Mountain, between Andrews and Aquone"; Brimley (1912) presented evidence, based on a collecting trip with F. Sherman Jr., that Sherman was in error when he gave Stejneger that locality and the actual locality was on the road between Franklin and Aquone, on Wayah Bald Mountain, east of Wayah Gap.

***Plethodon stormi* Highton and Brame, 1965**[currently accepted; *fide*, Brodie, 1971: 1]Highton and Brame, 1965, *Pilot Register Zool.*, 20: 1–2.

Holotype: USNM 149964, 1.25 miles south of Copper, Jackson County, Oregon, collected by J. Riggs, 11 May 1963.

Type Locality: "1¼ mile south of Copper, Jackson County, Oregon."

Paratypes: USNM 149965, 149966, same locality as holotype, collected by R. Highton, A. H. Brame Jr., R. W. McDiarmid, and J. Paxton; USNM 152773–152778, 0.3 mile S of McKee Bridge, Jackson County, Oregon, collected by R. M. Storm, 22 Mar 1964.

Other Type Material: Paratypes: AMNH A-73538; CM 39919; CMNH 152202; LACM 1983; MCZ 44573; MVZ 78571; OSU 7316–7319; UMMZ 125660.

Etiymology: The name *stormi* is a patronym honoring Robert M. Storm, Oregon State University.

***Plethodon vandykei larselli* Burns, 1954**[= *Plethodon larselli* Burns, 1954; *fide*, Burns, 1962: 177; Highton, 1962: 260]Burns, 1954, *Herpetologica*, 10: 83.

Holotype: USNM 134129, north slope of Larch Mountain, 3 miles from summit, on Multnomah Falls Trail, Multnomah County, Oregon, collected by D. M. Burns, 24 May 1953.

Type Locality: "North slope of Larch Mountain, three miles from summit, on the Multnomah Falls Trail, Multnomah County, Oregon."

Paratype: USNM 134130, same data as holotype, except collected in early Jun 1951.

Etiymology: The name *larselli* is a patronym honoring Olof Larsell, former professor of anatomy, University of Oregon Medical School.

Remarks: In the original description, the author mentioned that there were 11 additional specimens, all collected at Archer Falls, Skamania County, Washington, by D. M. Burns and A. Keeney on 28 Nov 1953. Variation in coloration in these specimens was discussed and compared to the two type specimens. However, these specimens were not included in the type series because the author felt they represented intergrades between this taxon and the nominal subspecies *Plethodon vandykei vandykei*.

***Plethodon ventralis* Highton, 1997**[currently accepted; *fide*, Highton et al., 2017: 35]Highton, 1997, *Herpetologica*, 53: 351.

Holotype: USNM 176841, Great Smoky Mountains National Park, on trail from Schoolhouse Gap to Whiteoak Sink, around sinkhole 0.47 mile (by trail) S of Schoolhouse Gap, Blount County, Tennessee, 35°38'20"N 83°44'52"W, elevation 1,800 feet, collected by R. Highton, T. Savage, and J. P. Angle, 19 Nov 1963.

Type Locality: "Near the entrance to a cave on the trail from Schoolhouse Gap to White Oak Sinks (35° 38'20" N 83° 44'52" W), Great Smoky Mountains National Park, 549 m elevation, Blount County, Tennessee."

Paratypes: USNM 169777–169780, 169782–169786, same locality as holotype, collected by R. Highton et al., 18 Apr 1962; USNM 176498, same locality as holotype, collected by R. Highton and J. P. Angle, 29 Sep 1963; USNM 176823–176840, 176843–176873, same data as holotype; USNM 465999–466005, same locality as holotype, collected by R. Highton and D. C. Morizot, 2 Oct 1971; USNM 466010–466035, same locality as holotype, collected by R. Highton et al., 9 Mar 1974; USNM 474824–474843, same locality as holotype, collected by R. Highton et al., 7 Jul 1969; USNM

474893, same locality as holotype, collected by R. Highton et al., 14 May 1975; USNM 474895–474904, same locality as holotype, collected by R. Highton and D. Sherry, 7 Oct 1978.

Etymology: The name *ventralis* refers to the color pattern of the venter of the species.

***Plethodon virginia* Highton, 1999**

[currently accepted; *fide*, Highton et al., 2017: 35]

Highton, 1999, *Herpetologica*, 55: 66.

Holotype: USNM 507764, George Washington National Forest, along the jeep road SE of the top of Cow Knob, Rockingham and Pendleton Counties, Virginia–West Virginia, 38°41'25"N, 79°05'17"W, elevation 3,600–4,000 feet, collected by R. Highton and D. E. Green, 22 Sep 1996.

Type Locality: “Along the jeep trail from 0.2–0.9 km southeast and south-southeast of the top of Cow Knob (38°41'25"N, 79°05'17"W) at an elevation of 1100–1200 m, along the Pendleton County, West Virginia–Rockingham County, Virginia state line.”

Paratype(s): USNM 352209, 352210, George Washington National Forest, 0.2 mile (by jeep trail) ESE of top of Cow Knob, elevation 3,940 feet, collected by R. Highton, 3 Sep 1970; USNM 352221–352227, George Washington National Forest, 0.2 mile (by jeep trail) ESE of top of Cow Knob, elevation 3,940 feet, collected by R. Highton, 23 May 1970; USNM 352293–352297, George Washington National Forest, Cow Knob, along road S of lookout tower, collected by R. Highton and P. Manzo, 26 May 1987; USNM 359217–359221, George Washington National Forest, 0.2 mile (by jeep trail) ESE of top of Cow Knob, elevation 3,940 feet, collected by R. Highton, R. G. Jaeger, and R. D. Worthington, 29 Apr 1966; USNM 507765–507773, same data as holotype.

Etymology: The name *virginia* is from the geographic range of the species, which includes parts of the states of Virginia and West Virginia.

***Plethodon websteri* Highton, 1979**

[currently accepted; *fide*, Highton et al., 2017: 35]

Highton, 1979, *Brimleyana*, 1: 32.

Holotype: USNM 204814, SE of Howelton, WNW of Attalla, on U.S. Route 278, ~0.5 mile (by road) SE of its junction with AL Route 179, Etowah County, Alabama, collected by R. Highton, S. Bunting, M. Kielek, and A. Larson, 7 Jan 1976.

Type Locality: “0.6 km east, 0.9 km south of Howelton, Etowah County, Alabama.”

Paratypes: USNM 204815–204834, same locality as holotype, collected by R. Highton and L. Smith, 15 Oct 1977.

Etymology: The name *websteri* is a patronym honoring the late T. Preston Webster, who first called Highton’s attention to this species.

Remarks: The holotype and paratypes were cited using the erroneous abbreviation “NMNH” in the original description.

***Plethodon welleri* Walker, 1931**

[currently accepted; *fide*, Bishop, 1943: 285; Highton, 1962: 274] Walker, 1931, *Proc. Junior Soc. Nat. Hist. Cincinnati*, 2: 48.

Holotype: USNM 84135, Grandfather Mountain, near Linville, Avery County, North Carolina, elevation above 5,000 feet, collected by W. H. Weller and R. Dury, 27 Aug 1930.

Type Locality: “Grandfather Mountain, above 5,000 feet, near Linville, North Carolina.”

Paratypes: USNM 84136, 84137, same data as holotype.

Other Type Material: Paratypes: CSNH 776.2–776.29, 1087–1092. (See Remarks.)

Etymology: The name *welleri* is a patronym honoring the memory of Worth Hamilton Weller, collector of the types of this species.

Remarks: The holotype USNM 84135 was listed as CSNH 776.1 in the original description. The two USNM paratypes were also listed by their CSNH number but are presently disassociated from their original number and are cataloged only as part of CSNH 776. Other paratypes out of CSNH 776 were apparently also exchanged to other museums. There is one paratype at the Carnegie Museum of Natural History cataloged as CM 10994, two paratypes at the Museum of Comparative Zoology cataloged as MCZ A-17365 and A-17366, two paratypes at the University of Michigan Museum of Zoology cataloged as UMMZ 71785, and two paratypes at the Field Museum of Natural History cataloged as FMNH 15988 and 15989. In addition, one specimen (CSNH 776.10) must have been exchanged to Sherman C. Bishop and then later deposited with his collection at the Field Museum of Natural History, where it is presently cataloged as FMNH 93004. These specimens, along with the two USNM paratypes, account for 10 of the 28 paratypes from CSNH 776.2–776.29, and three of the original specimens are still at the Cincinnati Museum Center under catalog number CMC 776. The whereabouts of the remaining 15 paratypes are unknown, and they must be considered missing.

***Plethodon welleri ventromaculatum* Thurow, 1956**

[= *Plethodon welleri* Walker, 1931; *fide*, Highton, 1962: 274]

Thurow, 1956, *Am. Midl. Nat.*, 55: 344.

Paratypes: USNM 124632, 124633, Mount Rogers, Mount Rogers National Recreation Area, Jefferson National Forest, Grayson County, Virginia, elevation 5,600–5,900 feet, collected by R. L. Hoffman and H. I. Kleinpeter, 1 Jul 1947; USNM 132323, 132324, 5.3 miles N of Carderview, woodland on TN Route 67, Johnson County, Tennessee, elevation ~2,500 feet, collected by R. L. Hoffman, 31 May 1952; USNM 133073, 133074, Grayson County, Virginia, collected by L. G. Carr, 15 Aug 1946.

Type Locality: “Mt. Rogers at 5500’ altitude, Grayson County, Virginia.”

Other Type Material: Holotype: AMNH 54448. Paratypes: AMNH 54448 (10 specimens); CMNH 60102–60105, 60522–60525. (See Remarks.)

Etymology: The name *ventromaculatum* is from the Latin *venter*, “belly,” and *maculates*, “spot,” in reference to the melanophore gaps found along the ventrolateral areas of most of the specimens.

Remarks: The holotype AMNH 54448 is presently cataloged as AMNH A-54448. The 10 paratypes collected with the holotype were erroneously listed as AMNH 5448 in the original description. Nine of 10 of these paratypes are now recataloged as AMNH A-60267–60275. The tenth paratype out of AMNH A-54448 was exchanged to the University of Illinois Museum of Natural History, where it is presently cataloged as UIMNH 40630. The CMNH paratypes are presently cataloged as FMNH 60102–60105 and 60522–60525. USNM 133074 was exchanged to Museum of Comparative Zoology on 7 Aug 1958 and is presently cataloged as MCZ A-30604.

***Plethodon yonahlossee* Dunn, 1917**

[currently accepted; *fide*, Highton, 1962: 322]

Dunn, 1917, *Bull. Am. Mus. Nat. Hist.*, 37: 598.

Paratypes: USNM 36397, 36398, between Linville and Blowing Rock, North Carolina, collected by F. Sherman Jr., Sep 1902, USNM 62017, ~1.5 miles from Linville, near Yonahlossee Road, Avery County, North Carolina, collected by E. R. Dunn, 16 Aug 1916.

Type Locality: “Near the Yonahlossee Road about 1½ miles from Linville, N.C., altitude 4200 feet.”

Other Type Material: Holotype: AMNH 4634. Paratypes: AMNH 4633, 4635–4644, 4666, 4667, 4711–4714, 4853–4856.

Etymology: This species is named for the type locality of Yonahlossee Road.

Remarks: USNM 62017 was received in exchange from the American Museum of Natural History and cataloged on 23 May 1919. It was listed as AMNH 4636 in the original description. AMNH 4711 and AMNH 4856 were exchanged to the Museum of Comparative Zoology, where they are presently cataloged as MCZ A-4892 and A-4893, respectively. AMNH 4638 was exchanged to the Naturhistorisches Museum Wien, where it is now cataloged as NMW 22863.

***Plethopsis wrighti* Bishop, 1937**

[= *Batrachoseps wrighti* (Bishop, 1937); *fide*, Stebbins and Lowe, 1949: 128]

Bishop, 1937, *Herpetologica*, 1: 93.

Holotype: USNM 102445, Mount Hood Highway, 8.7 miles SE of Sandy, Clackamas County, Oregon, collected by S. C. Bishop, M. R. Wright, and S. G. Jewett Jr., 15 Jun 1936.

Type Locality: “In woods bordering Mt. Hood highway, 8.7 miles southeast of Sandy, Clackamas County, Oregon.”

Paratype: USNM 102446, same data as holotype.

Other Type Material: It is unclear exactly how many specimens Bishop had in hand. In the Introduction, he stated that the new species “is represented by a series of twenty-one

specimens secured during a recent collection trip.” Then, in the description, he clearly identifies the holotype and an allotype and then stated, “Fifteen specimens of both sexes; also 4 adults and 2 juveniles.” In the table in the original description, he presented measurements and other features of 20 specimens, including the type. (See Remarks.)

Etymology: The name *wrighti* is a patronym for A. H. Wright of Ithaca, New York, and a matronym for Margaret R. Wright of Rochester, New York. Given the two people to be honored, the name should have more properly been *Plethopsis wrightorum*.

Remarks: Only the USNM specimens are identified by catalog number in the original description. A search of other museums located an additional 10 paratypes. One specimen, probably deposited at the Chicago Natural History Museum around the time of the original description, is presently cataloged as FMNH 36882. An additional seven specimens were apparently retained in the personal collection of the author and were later deposited at the Field Museum of Natural History, where they are presently cataloged as FMNH 86559–86565. Two additional paratypes were deposited at the Museum of Comparative Zoology, where they are presently cataloged as MCZ A-22355 and A-22356. Additional paratypes out of the original 21 specimens could not be located and must be considered missing.

***Pseudoeurycea brunnata* Bumzahem and Smith, 1955**

[currently accepted; *fide*, Frost, 2021]

Bumzahem and Smith, 1955, *Herpetologica*, 11: 73.

Paratype: USNM 137207, region of Soconusco, Chiapas, Mexico, collected by E. Matuda, 1944–1949.

Type Locality: “Región de Soconusco, Chiapas, Mexico.”

Other Type Material: Holotype: UIMNH 33708. Paratypes: UIMNH 33703–33707, 33709–33720. (See Remarks.)

Etymology: The name *brunnata* is derived from the Latin *brunneus*, “brown,” and the suffix *-atus*, “having the nature of,” in reference to the brown coloration mentioned in the original description.

Remarks: USNM 137207 was received in exchange from the University of Illinois Museum of Natural History and cataloged on 27 Oct 1955. It was listed as UIMNH 33720 in the original description.

***Pseudoeurycea firscheini* Shannon and Werler, 1955**

[currently accepted; *fide*, Lara-Góngara, 2003: 22]

Shannon and Werler, 1955, *Herpetologica*, 11: 82.

Paratype: USNM 139718, mountain crest above Acultzingo, Veracruz, Mexico, collected by J. Werler, 7 Jan 1951.

Type Locality: “2 miles W of Acultzingo, Veracruz, . . . at an elevation of 7,000 feet.”

Other Type Material: Holotype: FAS 4714. Paratypes: FAS 4175; UIMNH 21807, 25103. (See Remarks.)

Etymology: The name *firscheini* is a patronym for I. Lester Firschein, “whose earlier explorations on Volcan San Martin

have done much toward stimulating interest in this region of Mexico” (Shannon and Werler, 1955: 82).

Remarks: USNM 139718 was received in exchange from the University of Illinois Museum of Natural History and cataloged on 8 Oct 1957. It was listed as UIMNH 25103 in the original description. The holotype, published as FAS 4714, is now cataloged as UIMNH 67055 (Phillips, 2009). The paratype FAS 4175 was later deposited at the University of Illinois Museum of Natural History, where it is presently cataloged as UIMNH 67213.

***Pseudoeurycea tlahuicilob* Adler, 1996**

[currently accepted; *fide*, Lara-Góngara, 2003: 49]

Adler, 1996, *Occas. Pap. Mus. Nat. Hist. Univ. Kansas*, 177: 10.

Paratype(s): USNM 342489, Cruz Ocote, 36.8 km (by road) W of (along Milpillás–Atoyac road), eastern approaches to Cerro Teotepec, Guerrero, Mexico, 17°28'N, 100°08'W, elevation 8,775–8,900 feet, collected by H. L. Freeman, L. A. Cross Jr., and M. Gerardi, Jun 1971; USNM 342490, Cruz Ocote, 50.3 km (by road) W of (along Milpillás–Atoyac road), eastern approaches to Cerro Teotepec, Guerrero, Mexico, 17°28'N, 100°08'W, elevation 9,725 feet, collected by H. L. Freeman and L. A. Cross Jr., 25–26 Jun 1971.

Type Locality: “Eastern approaches to Cerro Teotepec (17° 28'N, 100° 08'W), along the Milpillás–Atoyac Road, 50.3 km (by road) W Cruz Ocote, Guerrero, Mexico, at an elevation of 9725 feet (= 2966 m).”

Other Type Material: Holotype: KU 221955. Paratypes: AMNH A-142152, A-142153; KU 221956; MVZ 222469–222471; UMMZ 21101, 21102; UTA A-45578.

Etymology: The name *tlahuicilob* is from the Nahuatl word for painter or artist and was given in honor of the artistic and photographic skills of D. M. Dennis, friend, colleague, and field companion of the author.

***Pseudoeurycea werleri* Darling and Smith, 1954**

[currently accepted; *fide*, Wake and Lynch, 1976: 61]

Darling and Smith, 1954, *Trans. Kansas Acad. Sci.*, 77: 180.

Paratype: USNM 137208, Volcan San Martín, Veracruz, Mexico, collected by D. M. Darling, 22–28 Feb 1953.

Type Locality: “Volcán San Martín, Veracruz,” Mexico, between 3,000 and 4,500 feet in elevation.

Other Type Material: Holotype: UIMNH 33897. Paratypes: UIMNH 33895, 33896, 33898; F. A. Shannon Coll. Nos. 4166–4173. (See Remarks.)

Etymology: The name *werleri* is a patronym for John E. Werler, collector of some of the paratypes.

Remarks: USNM 137208 was received in exchange from the University of Illinois Museum of Natural History and cataloged on 27 Oct 1955. It was listed as UIMNH 33896 in the original description. UIMNH 33898 was exchanged to the Museum of Comparative Zoology on 19 Sep 1951, where it is presently cataloged as MCZ A-29623. The present whereabouts of the F. A. Shannon paratypes are unknown.

***Pseudotriton duryi* Weller, 1930**

[= *Gyrinophilus porphyriticus duryi* (Weller, 1930); *fide*, Stejneger and Barbour, 1933: 15; confirmed by Brandon, 1966a: 42] Weller, 1930a, *Proc. Junior Soc. Nat. Hist. Cincinnati*, 1: 29.

Lectotype: USNM 84300 (formerly CSNM 499d), designated lectotype by Walker and Weller, 1932: 81.

Type Locality: “Cascade Caves, about ten miles from Grayson,” Carter County, Kentucky.

Other Type Material: Paralectotypes: CSNH 499a–c, e–g. (See Remarks.)

Etymology: The name *duryi* is a patronym for Ralph Dury, director of the Cincinnati Society of Natural History.

Remarks: Both Weller (1930a) and Walker and Weller (1932) listed the type series as CSNM 499. Apparently, this was in error for CSNH 449 as the paralectotypes are presently at the Cincinnati Museum Center cataloged as CMC 449. The original catalog entry for the types was CSNH 449, and the catalog entry for CSNH 499 is blank (John Fenner, Cincinnati Museum Center, personal communication, 15 Feb 2009). It is not clear how many of the six paralectotypes remain at the Cincinnati Museum Center because there are an additional five specimens listed as paratypes by other museums. These specimens include one at the Carnegie Museum of Natural History cataloged as CM 10937, one specimen at the Museum of Comparative Zoology cataloged as MCZ A-17540, and three specimens at the Ohio State University Museum of Biological Diversity cataloged as OSUM 2303.

***Pseudotriton montanus* Baird, 1850**

[currently accepted; *fide*, Highton et al., 2017: 36]

Baird, 1850 [1849], *J. Acad. Nat. Sci. Philadelphia*, ser. 2, 1: 293.

Syntypes: USNM 3839 (three specimens), South Mountain, near Carlisle, Adams and Franklin Counties, Pennsylvania, collected by S. F. Baird, date of collection unknown, cataloged 2 Aug 1858.

Type Locality: “South Mountain, near Carlisle, Pennsylvania.” Type locality discussed and restricted to “Caledonia State Park, Franklin County,” Pennsylvania, by McCoy (1992: 93).

Etymology: The name *montanus* is from the Latin *montanus*, pertaining to mountains, in reference to the type locality of South Mountain.

Remarks: The syntypes were not listed by number in the original description. However, the original description mentioned only two specimens, one 6 inches long and the other 3 inches. There are three specimens present under USNM 3839, one just under 6 inches in length and two others that are approximately 3 inches in length. Because of this discrepancy in the number of specimens, the largest specimen is hereby selected as the lectotype of *Pseudotriton montanus* Baird, 1850. The two smaller specimens have been recataloged as USNM 576281 and 576282 and are paralectotypes.

***Pseudotriton montanus floridanus* Netting and Goin, 1942**

[currently accepted; *fide*, Neill, 1948: 136; Highton et al., 2017: 36]

Netting and Goin, 1942, *Ann. Carnegie Mus.*, 29: 175.

Paratypes: USNM 22819, Chuluota, Seminole County, Florida, collected by R. A. Mills, date of collection unknown, cataloged 27 Jul 1896; USNM 118789, Gainesville, Alachua County, Florida, collected by J. S. Rogers, 10 Apr 1936.

Type Locality: "A seepage area along 'C' Creek, on the University of Florida campus, in Gainesville, Alachua County, Florida."

Other Type Material: Holotype: CM 16850. Paratypes: CM 16851–16853, 20129; DBUF 598, 599, 641, 692; FMNH 35419; UMMZ 56646, 68855, 86419 (2). (See Remarks.)

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

Remarks: USNM 118789 was received in exchange from the University of Michigan in 1944 and cataloged on 3 Jun 1944. It was listed as UMMZ 86419 in the original description. The DBUF paratypes are presently cataloged as UF 598, 599, 641, and 692.

Pseudotriton ruber vioscai Bishop, 1928

[currently accepted; *fide*, Highton et al., 2017: 36]

Bishop, 1928a, *Occas. Pap. Boston Soc. Nat. Hist.*, 5: 247.

Holotype: USNM 75057, 10 miles W of Bogalusa, Washington County, Louisiana, collected by P. Viosca Jr., 10 Apr 1926.

Type Locality: "A spring run 10 miles west of Bogalusa, La."

Paratype: USNM 75080, same data as holotype, except collected 13 Feb 1928.

Other Type Material: Paratypes: CM 16835; FMNH 93341. (See Remarks.)

Etymology: The name *vioscai* is a patronym honoring Percy Viosca Jr., collector of the type series.

Remarks: Paratypes were not listed by museum number in the original description. Bishop (1928b) recorded that "specimens have been taken at the type locality . . . April 10, 1926, 4 adults, 1 larva; February 13, 1928, 2 adults, 1 larva." In addition, measurements were given for four adult specimens. It is not clear whether the measurements were taken on the paratypes listed by catalog number above, but that is most likely the case. What happened to the four additional specimens mentioned as having been collected at the type locality is unknown.

Salamandra agilis Sager, 1839

[= *Plethodon cinereus* (Green, 1818); *fide*, Cope, 1889: 133; Highton, 1962: 285]

Sager, 1839, *Am. J. Sci. Arts*, 36: 322.

Syntypes: USNM 3770 (15 specimens), Detroit, Wayne County, Michigan, collected by A. Sager, date unknown, cataloged 2 Aug 1858.

Type Locality: Not stated.

Etymology: The name *agilis* is from the Latin for agile.

Remarks: Sager (1839) did not indicate how many specimens he had of his new form, but he presented measurements of only one specimen.

Salamandra cirrigera Green, 1831

[= *Eurycea cirrigera* (Green, 1831); *fide*, Jacobs, 1987: 434]

Green, 1831, *J. Acad. Nat. Sci. Philadelphia*, 6: 253.

Syntypes: "Two pair . . . near New Orleans," collected by William Stewart; types "not known to exist" according to Dunn (1926a: 307). Possible syntypes: USNM 4734 (two specimens), S. States (= southern states?), collected by F. Bache. (See Remarks.)

Type Locality: "Near New Orleans."

Etymology: The name *cirrigera* is from the Latin *cirrus*, "tendrill," and the suffix *-gera*, "bearer," in reference to the nasal cirri mentioned in the original description.

Remarks: This species was not mentioned in the USNM type list by Cochran (1961). The deposition of the original four specimens was not stated in the original description, although it is reasonable to assume that they were in the Academy of Natural Sciences, Philadelphia. Cope (1889) listed USNM 4734 (two specimens) from "Southern States (La.?): Dr. F. Blache" as Green's types, and the original ledger entry has an entry in L. Stejneger's handwriting stating "Type of Green's *cirrigera*." However, it is unlikely that these two specimens, given the discrepancies between their data and the original description, were the types of *Salamandra cirrigera* Green, 1831. It is a moot point since USNM 4734 has been missing since Cope (1889) examined them, and there were no *Eurycea cirrigera* returned by Cope's estate after his death. Pyron and Beamer (2020) discussed the history and provenance of Jacob Green's collection but reached no conclusion about the types of *Salamandra cirrigera* Green, 1831.

Salamandra cylindracea Harlan, 1825

[= *Plethodon cylindraceus* (Harlan, 1825); *fide*, Highton, 1989: 70] Harlan, 1825, *J. Acad. Nat. Sci. Philadelphia*, 5: 156.

Neotype: USNM 257522, ENE of Chester, on SC Route 9, Chester County, South Carolina, 34°32'10"N, 81°05'36"W, elevation 137 m, collected by R. Highton and D. C. Morizot, 31 Mar 1971. Neotype designation by Highton, 1989, *Illinois Biol. Monogr.*, 57: 71.

Type Locality: "South Carolina"; restricted by Schmidt (1953: 34) to "vicinity of Charleston." Type locality based on the neotype designation: "locality 112 at an elevation of 137 m, Chester County, South Carolina."

Other Type Material: Two syntypes. (See Remarks.)

Etymology: The name *cylindracea* is derived from the Latin *cylindriatus*, "cylindrical," in reference to the cylindrical tail of this species mentioned in the original description.

Remarks: According to the original description, there were two syntypes ("Male" and "Female") that were presented to Harlan by Dr. Blanding. It is not clear from the original description where these specimens were deposited, although Harlan (1827) referred to specimens in the "Cab. A. N. S." (ANSP). In any case, these specimens are not currently known to exist (Malnate, 1971).

***Salamandra porphyritica* Green, 1827**

[= *Gyrinophilus porphyriticus porphyriticus* (Green, 1827); *fide*, Brandon, 1966a: 31]

Green, J. 1827, *Contrib. Macrurian Lyc. Arts Sci.*, 1: 3, plate 2.

Possible Syntype: USNM 3840, Canonsburg: Washington, Pennsylvania, collected by J. Green, date unknown, cataloged 2 Aug 1858.

Type Locality: “French creek, near Meadville, Crawford county, Pa.” Type locality based on the neotype designation: “a small spring-fed stream (flowing directly into French Creek) at Liberty and Linden streets, Meadville, Crawford Co., Pa.”

Other Type Material: Neotype: MCZ 35778. Neotype designation by Brandon, 1966, *Illinois Biol. Monogr.*, 35: 32.

Etymology: The name *porphyriticus* is from the Greek *porphyros*, meaning the color of porphyry, a purple stone.

Remarks: Green (1827) did not indicate how many specimens he had but did indicate that “these animals are numerous in French creek, near Meadville, Crawford county, Pa.” He also mentioned the variation in coloration in different specimens. He did indicate that he had at least one other specimen, “a young animal of this species nearly four inches long,” which he then proceeded to describe in some detail, so it is clear that he based his description on more than one specimen. Brandon (1966a) was unable to locate any of the types and therefore designated MCZ 35778 as the neotype. Pyron and Beamer (2020) discussed the history and provenance of Jacob Green’s collection and suggested that USNM 3840 might be one of the missing types. They suggested that comparison of the figure of the presumed holotype, plate 1 in Green (1927), to USNM 3840 might be able to determine if that specimen is the one figured. Unfortunately, USNM 3840 is in poor condition, and comparison with the figured specimen is inconclusive. If USNM 3840 can be positively identified as one of the original types, Brandon’s (1966a) designation of a neotype would be invalid.

***Salamandra variolata* Gilliams, 1818**

[= *Plethodon variolatus* (Gilliams, 1818); *fide*, Highton, 1989: 59–60]

Gilliams, 1818, *J. Acad. Nat. Sci. Philadelphia*, 1: 460.

Neotype: USNM 267104, Beechtree Recreation Area, Berkeley County, South Carolina, collected by D. E. Carr, 27 Mar 1986. Neotype designation by Highton, 1989, *Illinois Biol. Monogr.*, 57: 60.

Type Locality: “Inhabits the southern states”; restricted by Schmidt (1953: 34) to “vicinity of Charleston, South Carolina.” Type locality based on the neotype designation: “locality 27 . . . at an elevation of 6 m, Beechtree Recreation Area, Berkeley County, South Carolina.”

Etymology: The name *variolata* is derived from the Latin *variola*, “spotted,” in reference to the irregular, white spots mentioned in the original description.

Remarks: According to the original description, the types were in the “Cabinet of the Academy” (ANSP) and are not currently known to exist (Malnate, 1971), although ANSP specimens were noted by Harlan (1827). It is not clear from the original description how many specimens Gilliams had since he gave the measurements of only one specimen but then stated, “I am indebted for these specimens to the Florida Party.”

***Spelerpes bilineatus borealis* Baird, 1889**

[= *Eurycea bislineata* (Green, 1818); *fide*, Dunn, 1926a: 297]

Baird, 1889a, in Cope, 1889, *Bull. U.S. Natl. Mus.*, 34: 165.

Syntypes: USNM 4735 (11 specimens), Lake Oquassa (= Rangeley Lake), Franklin County, Maine, collected by C. Girard, 1852.

Type Locality: “Vicinity of Lake Oquassa.”

Etymology: The name *borealis* is from the Latin *borealis*, “northern,” in reference to the northern locality where the specimens were collected.

Remarks: There are at present 11 specimens (nine adults and two larvae) lot cataloged as USNM 4735. Cochran (1961) listed 12 specimens as USNM 4735a (see the Introduction concerning lettered catalog numbers), whereas Cope (1889: 168) listed only nine specimens.

***Spelerpes cephalicus* Cope, 1865**

[= *Aquiloerycea cephalica* (Cope, 1865); *fide*, Rovito et al., 2015: 185]

Cope, 1865, *Proc. Acad. Nat. Sci. Philadelphia*, 17: 196.

Holotype: USNM **uncataloged**, “sent by Dr. Sartorius to the Smithsonian Institution.” (See Remarks.)

Type Locality: “Mexican Table Land.” Type locality based on the neotype designation: “Cruz Blanca, Veracruz.”

Other Type Material: Neotype: EHT-HMS 4372. Neotype designation by Smith and Taylor, 1948, *Bull. U.S. Natl. Mus.*, 194: 30.

Etymology: The name *cephalicus* is apparently derived from the Greek *kephale*, “head.”

Remarks: This species was not mentioned in the USNM type list by Cochran (1961). The holotype was apparently never received at the U.S. National Museum and therefore never received a catalog number. EHT-HMS 4372, designated the neotype by Smith and Taylor (1948), was later deposited at the Field Museum of Natural History, where it is presently cataloged as FMNH 100018. However, there are two specimens (USNM 30350, 30351) originally cataloged as *Spelerpes cephalicus* that were returned from Cope’s estate. It is possible that one of these specimens may be the lost holotype, thereby invalidating Smith and Taylor’s (1948) selection of a neotype.

***Spelerpes chiropterus* Cope, 1863**

[= *Chiropterotriton chiropterus* (Cope, 1863); *fide*, Wake and Lynch, 1976: 59]

Cope, 1863, *Proc. Acad. Nat. Sci. Philadelphia*, 15: 54.

Holotype: USNM uncataloged, "sent by Dr. Sartorius to the Smithsonian Institution." (See Remarks.)

Type Locality: "Merador, near, Vera Cruz, Mexico." Type locality based on the neotype designation: "1.4 mi southwest by road southwest edge of Huatusco de Chicuellar, Veracruz, Mexico, 19.141388 N, 96.98083 W (EPE = max. error distance 1.202 mi)."

Other Type Material: Neotype: MVZ 85590. Neotype designation by Parra-Olea, García-Castillo, Rovito, Maisano, Hanken, and Wake, 2020, *PeerJ*, 8(e8800): 46.

Etymology: The name *chiropterus* is derived from the Greek *cheiros*, "hand," and *pteros*, "wing," in reference to the "prominent wing-like rudiment . . . of the inner digit of both pairs of extremities" mentioned in the original description.

Remarks: This species was not mentioned in the USNM type list by Cochran (1961). The holotype was apparently never received at the U.S. National Museum and therefore never received a catalog number. It is possible that USNM 30347, a specimen "returned by Cope's estate," is actually the holotype of this species. This specimen was originally cataloged as *Spelerpes chiropterus* with a locality of "Tehuantepec, Mex.," collected by F. Sumichrast. However, L. Stejneger later wrote in pencil the locality of "? Mirador area, Vera Cruz" and the collector "Sartorius ?" Although the specimen is now broken in two pieces at the base of the tail and the tip of the tail is broken off and missing, measurements taken of the specimen are approximately those reported in the original description. If this specimen turns out to be the lost holotype, it will invalidate the selection of a neotype by Parra-Olea et al. (2020).

Spelerpes collaris Stejneger, 1907

[= *Oedipina collaris* (Stejneger, 1907); *fide*, Taylor, 1944c: 226] Stejneger, 1907, *Proc. U.S. Natl. Mus.*, 32: 465.

Holotype: USNM 37350, Topaz mine, 90 miles NW of Bluefields, Zelaya Department, Nicaragua, collector unknown, received from W. F. Thornton, date of collection unknown, cataloged 13 Feb 1907.

Type Locality: "Topaz mine, '90 miles NW. of Bluefields, and 50 miles back in direct line from the coast;' elevation 400 feet."

Etymology: The name *collaris* is from the Latin *collare*, "neck band," in reference to the pale color of the gular fold mentioned in the original description.

Spelerpes gibbicaudus Blatchley, 1893

[= *Pseudoeurycea leprosa* (Cope, 1869); *fide*, Taylor, 1939 [1938]: 274]

Blatchley, 1893, *Proc. U.S. Natl. Mus.*, 16: 38.

Holotype: USNM 19255, Orizaba, Veracruz, Mexico, collected by F. Sumichrast, date unknown; recataloged from USNM 6340 on 17 Sep 1892.

Type Locality: "Orizaba, Mexico."

Etymology: The name *gibbicaudus* is from the Latin *gibbus*, "humped," and *cauda*, "tail," in reference to the thick, stout tail of the type.

Remarks: USNM 19255 was removed from USNM 6340 (syntypes of *Spelerpes leprosus* Cope) and reidentified by Blatchley as an undescribed species that he subsequently described. Taylor (1939 [1938]) subsequently selected USNM 19255 as the lectotype of *Spelerpes leprosus* Cope, 1869 (see discussion below).

Spelerpes leprosus Cope, 1869

[= *Pseudoeurycea leprosa* (Cope, 1869); *fide*, Taylor, 1944c: 209] Cope, 1869, *Proc. Acad. Nat. Sci. Philadelphia*, 21: 105.

Lectotype: USNM 19255, Orizaba, Veracruz, Mexico, collected by F. Sumichrast, date unknown; recataloged from USNM 6340 on 17 Sep 1892. Lectotype designation by Taylor (1939 [1938]: 276).

Type Locality: "Orizaba, Mexico."

Paralectotypes: USNM 6340 (two specimens), Orizaba, Veracruz, Mexico, collected by F. Sumichrast, date unknown; USNM 103591, 103592, recataloged from USNM 6340 on 30 Dec 1937.

Etymology: The name *leprosus* is from the Latin *leprosus*, "scaly" or "scabby," apparently in reference to the splotchy or speckled coloration mentioned in the original description.

Remarks: Cope (1869) based the description on six syntypes (USNM 6340), although he gave measurements of only one specimen with the statement "No. 6340, Type" above the list of measurements. The original ledger entry for USNM 6340, made in 1864, records only five specimens. The smallest specimen mentioned in the original description was apparently lost. One specimen was removed and recataloged as USNM 19255 on 17 Sep 1892 and was made the holotype of *Spelerpes gibbicaudus* Blatchley, 1893. Taylor (1939) examined all five syntypes and determined USNM 19255 was the specimen that Cope had measured. Although he considered Cope's listing of measurements of a single specimen sufficient indication of a holotype, he firmly fixed the primary type status of USNM 19255 by selecting it as a lectotype (Taylor, 1939 [1938]: 276), thus placing *Spelerpes gibbicaudus* Blatchley, 1893 clearly in the synonymy of *Spelerpes leprosus* Cope, 1869. Of the four remaining specimens (paralectotypes), he reidentified one specimen (USNM 103591) as *Oedipus cephalicus* (Cope) and indicated that a second (USNM 103592) could not be positively identified. He also indicated that the two remaining specimens in USNM 6340 were the same species and may belong to an undescribed form.

Spelerpes lineolus Cope, 1865

[= *Pseudoeurycea lineola* (Cope, 1865); *fide*, Darda, 1994: 180] Cope, 1865, *Proc. Acad. Nat. Sci. Philadelphia*, 17: 197.

Holotype: USNM uncataloged, "sent by Dr. Sartorius to the Smithsonian Institution." (See Remarks.)

Type Locality: “Mexican Table Land.”

Etymology: The name *lineolus* is derived from the Latin *linea*, “line,” and the suffix *-olus*, “small,” in reference to the delicate supraoccipital crest mentioned in the original description.

Remarks: This species was not mentioned in the USNM type list by Cochran (1961). The holotype was apparently never received at the U.S. National Museum and therefore never received a catalog number. According to Dunn (1926) and Malnate (1971), ANSP 735 is the holotype. It is likely that the holotype was in Cope’s possession at the Academy of Natural Sciences, Philadelphia, and that the specimen was retained at the academy after Cope’s death.

***Spelerpes multiplicatus* Cope, 1869**

[= *Eurycea multiplicata* (Cope, 1869); *fide*, Stejneger and Barbour, 1917: 20]

Cope, 1869, *Proc. Acad. Nat. Sci. Philadelphia*, 21: 106.

Syntypes: USNM 4038 (five specimens), Arkansas, no further locality data, collected by L. A. Edwards, date of collection unknown, cataloged 2 Aug 1858.

Type Locality: “Red River, Arkansas”; corrected to “Red River in eastern Oklahoma” by Stejneger and Barbour (1917: 20); restricted to “near Fort Towson, Choctaw County, Oklahoma,” by Dundee (1950: 27–28), who discussed the type locality and collector.

Etymology: The name *multiplicatus* is from the Latin *multus*, “much,” and *plicatus*, “fold,” in reference to the numerous costal grooves mentioned in the original description.

***Spelerpes orculus* Cope, 1865**

[= *Chiropterotriton orculus* (Cope, 1865); *fide*, Darda, 1994: 180] Cope, 1865, *Proc. Acad. Nat. Sci. Philadelphia*, 17: 196.

Holotype: Uncataloged, “sent by Dr. Sartorius to the Smithsonian Institution.” (See Remarks.)

Type Locality: “Mexican Table Land.” Type locality based on the neotype designation: “ridge between Popocatepetl and Iztaccihuatl, along Mexican Hwy. 196, 16.2 km by road east jct Mexican Hwy. 115, Mexico, Mexico, 3,300 masl, 19.0973 N, 98.6829 W.”

Other Type Material: Neotype: MVZ 138783. Neotype designation by Parra-Olea, García-Castillo, Rovito, Maisano, Hanken, and Wake, 2020, *PeerJ*, 8(e8800): 50.

Etymology: The name *orcus* is apparently derived from the Latin *Orcus*, the abode of the dead. Cope provided no explanation for his choice of this name.

Remarks: This species was not mentioned in the USNM type list by Cochran (1961). The holotype was apparently never received at the U.S. National Museum and therefore never received a catalog number. The neotype was designated by Parra-Olea et al. (2020).

***Spelerpes orizabensis* Blatchley, 1893**

[= *Pseudoeurycea leprosa* (Cope, 1869); *fide*, Cochran, 1961: 26] Blatchley, 1893, *Proc. U.S. Natl. Mus.*, 16: 38.

Syntypes: USNM 19266–19267, Mount Orizaba, Veracruz, Mexico, collected by W. S. Blatchley, 2 Aug 1891.

Type Locality: “On the southwestern slope of the mountain at a height of 11,000 feet on the slope of Mount Orizaba.”

Etymology: The name *orizabensis* refers to Mount Orizaba, location of the type locality.

Remarks: The original description refers to three specimens collected, but there are only two cataloged. The whereabouts of the third specimen are unknown.

***Spelerpes picadoi* Stejneger, 1911**

[= *Nototriton picadoi* (Stejneger, 1911); *fide*, Wake and Elias, 1983: 11]

Stejneger, 1911, *Proc. U.S. Natl. Mus.*, 41: 285.

Holotype: USNM 48280, La Estrella, SE of Cartago, Cartago Province, Costa Rica, collected by C. Picado, Sep 1911.

Type Locality: “La Estrella, southeast of Cartago, Costa Rica.”

Etymology: The name *picadoi* is a patronym for the collector, C. Picado.

***Spelerpes ruber schencki* Brimley, 1912**

[= *Pseudotriton ruber schencki* (Brimley, 1912); *fide*, Dunn, 1918: 467]

Brimley, 1912, *Proc. Biol. Soc. Washington*, 25: 139.

Holotype: USNM 49679, Sunburst, Haywood County, North Carolina, elevation 3,200 feet, collected by C. S. Brimley, May 1912.

Type Locality: “Sunburst, at an elevation of 3200 feet Haywood Co.”

Paratype: USNM 49680, same data as holotype.

Other Type Material: Paratypes were not listed by number in the original description, but the original description stated, “Described from 9 specimens, 8 from Sunburst, 1 from Highlands.” (See Remarks.)

Etymology: The name *schencki* is a patronym for C. A. Schenck, director of the Biltmore Forest School.

Remarks: The holotype, USNM 49679, was not listed by USNM number in the original description, which stated, “Type, Brimley No. 6789, taken at Sunburst at an elevation of 3200 feet will be deposited in the U. S. National Museum.” USNM 49680 (Brimley No. 6785) was received with the holotype from C. S. Brimley. It is not clear how many paratypes there actually were because after stating that the species was described from nine specimens, Brimley indicated that “this form has been taken at Sunburst, Haywood Co. (8 specimens); Highlands, Macon Co. (3 sp.); Blantyre, Transylvania Co. (4 sp.).” Queries of other museums located two specimens at the Mayborn Museum Complex, Baylor University, that are listed in their database as syntypes. However, since Brimley clearly identified a type specimen, these two specimens can only be paratypes. The specimens are presently cataloged as BU-MMC 358–359. A third specimen was located at the Cornell University Museum of Vertebrates that was collected at Sunburst, Haywood County,

North Carolina, by C. S. Brimley in 1912. It may be one of the eight specimens taken at Sunburst mentioned in the original description and therefore a paratype. It is presently cataloged as CU 2058.

***Spelerpes ruber sticticeps* Baird, 1889**

[= *Pseudotriton montanus* Baird, 1850; *fide*, Dunn, 1926a: 287] Baird, 1899b, in Cope, 1889, *Bull. U.S. Natl. Mus.*, 34: 178.

Syntypes: USNM 11475 (two specimens), no locality data, collector and date of collection unknown, cataloged 8 Oct 1881.

Type Locality: "South Carolina"; corrected to "Georgia" by Cope (1889); restricted to Rabun County, Georgia, by Schmidt (1953: 48). This restriction was disputed by Neill (1957), who restricted the type locality to "Augusta, Richmond County, Georgia."

Etymology: The name *sticticeps* is from the Greek *stictos*, "spotted," and the Latin *-ceps*, "head," in reference to the whitish spots on the head mentioned in the original description.

Remarks: USNM 11475 are the syntypes according to Dunn (1926a: 291).

***Thorius dubitus* Taylor, 1941**

[currently accepted; *fide*, Hanken and Wake, 1998: 330]

Taylor, 1941c, *Univ. Kansas Sci. Bull.*, 27: 108.

Paratypes: USNM 110984–110991, 110993–111007, 111009, 111010, above Acultzingo, Veracruz, Mexico, collected by H. M. Smith, 19 Aug 1939; USNM 110011, 5 miles W of Acultzingo, Puebla, Mexico, collected by H. M. Smith, 20 Aug 1939; USNM 134293, ~2 miles S of Acultzingo, Veracruz, Mexico, collected by E. H. Taylor, 1939.

Type Locality: "Summit of mountain about two miles south of Acultzingo, Veracruz (near Puebla line)," Mexico.

Other Type Material: Holotype: EHT-HMS 17751. Paratypes: EHT-HMS 17731–17750, 17752–17786, 22064–22084. (See Remarks.)

Etymology: The name *dubitus* is from the Latin *dubito*, "uncertain," apparently in relation to the confused taxonomic history of the genus *Thorius* from the vicinity of type locality.

Remarks: USNM 110011 was erroneously listed as a topotype in the original description. USNM 110999 was erroneously listed as *Thorius troglodytes* in Taylor (1941c: plate 3, figure 4). The specimen pictured is *Thorius troglodytes*, but USNM 110999 is *Thorius dubitus*. USNM 134293 was received in exchange from the University of Illinois Museum of Natural History and cataloged on 10 Mar 1954. It was listed as EHT-HMS 22076 in the original description. USNM 111004 is not present in the collection. The metal tags for USNM 111004 and field number S 9049 are in the archived file folder with H. M. Smith's field notes. Attached is a paper tag reading "Thorius dubitus – no specimen received Feb '40 – DMC." The holotype, EHT-HMS 17751, is presently in the Field Museum of Natural History, where it is cataloged as FMNH 100039. Some of the paratypes EHT-HMS 17731–17750, 17752–17786, and 22064–22084 are presently cataloged as FMNH 100581–100606,

122014, 123440, 123443, 123446, and 123449. Additional paratypes from EHT-HMS 17731–17750, 17752–17786, and 22064–22084 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 26808–26830 and 32629. Later, UIMNH 26829 was exchanged to the U.S. National Museum (see above). UIMNH 26827 was exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-29624. UIMNH 26828 was exchanged to the Field Museum of Natural History, where it is presently cataloged as FMNH 75776. UIMNH 26822 was exchanged to the Senckenberg Forschungsinstitut und Naturmuseum, where it is presently cataloged as SMF 53189. UIMNH 26830 was exchanged to the University of Colorado, where it is presently cataloged as UCM 13650. The paratypes EHT-HMS 17736, 17740, 17752, 17754, 17775–17777, 17780, 22065–22069, 22072, and 22074 could not be located and must be considered missing.

***Thorius magnipes* Hanken and Wake, 1998**

[currently accepted; *fide*, Frost, 2021]

Hanken and Wake, 1998, *Copeia*, 1998: 326.

Paratype: USNM 224769, 1.9 miles (by dirt road) S of Puerto del Aire (Cumbres de Acultzingo), Veracruz, Mexico, collected by R. W. McDiarmid, 2 Sep 1975.

Type Locality: "4 km south of Puerto del Aire, Veracruz, México, elevation 2475 m."

Other Type Material: Holotype: MVZ 114514. Paratypes: LACM 118719–118721; MVZ 85948, 85949, 114515–114518, 129657, 129658, 150541, 150542, 150545–150555, 150559, 150560, 150563, 150572, 150575, 185392–185396, 186960–186962, 205071; MZFC 8602.

Etymology: The name *magnipes* is from the Latin *magnus*, "great," and *pes*, "foot," in reference to the very large feet and limbs of this species.

***Thorius maxillabrochus* Gehlbach, 1959**

[= *Thorius schmidtii* Gehlbach, 1959; *fide*, Hanken and Wake, 1998: 333]

Gehlbach, 1959, *Copeia*, 1959: 205.

Holotype: USNM 140293, 4 miles W of Zoquitlan, Puebla, Mexico, elevation ~8,400 feet, collected by R. H. Long Jr. and F. C. Sibley, 12 Aug 1954.

Type Locality: "ca. 8,400 feet, four miles west of Zoquitlán, Puebla, Mexico."

Paratype: USNM 140294, same data as holotype.

Etymology: The name *maxillabrochus* is from the Latin *maxilla*, "jawbone," and *brochus*, "projecting," in reference to the prominent maxillary teeth.

***Thorius munificus* Hanken and Wake, 1998**

[currently accepted; *fide*, Frost, 2021]

Hanken and Wake, 1998, *Copeia*, 1998: 321.

Paratypes: USNM 497640, 497641, 4 km (by road) west of Las Vigas, along Mexico Highway 140, NE flank of Cofre de

Perote, elevation ~2,400 m, collected by S. S. Sweet, 17 Dec 1972.

Type Locality: “Mexican Hwy. 140, 4.5 km by road west of Las Vigas, Veracruz, México, elevation 2420 m.”

Other Type Material: Holotype: MVZ 183274. Paratypes: MVZ 183241, 183244, 183247, 183248, 183255–183273, 183277, 186980–186998; MZFC 8596, 8597.

Etymology: The name *munificus* is from the Latin *munificus*, “bountiful” or “generous.”

***Thorius narisovalis* Taylor, 1940**

[currently accepted; *fide*, Frost, 2021]

Taylor, 1940a [1939], *Univ. Kansas Sci. Bull.*, 26: 416.

Paratypes: USNM 134294, 134295, Cerro San Felipe, Oaxaca, Mexico, collected by E. H. Taylor, 18 Aug 1938.

Type Locality: “Elevation of about 2,600–3,000 meters on Cerro San Felipe, 15 km. north[east] of Oaxaca, Oaxaca.”

Other Type Material: Holotype: EHT-HMS 17859. Paratypes: EHT-HMS 17794–17858, 17860–17870. (See Remarks.)

Etymology: The name *narisovalis* is from the Latin *naris*, “nostril,” and *ovalis*, “egg shaped,” in reference to the oval nostril referred to in the original description.

Remarks: USNM 134294 and 134295 were received in exchange from the University of Illinois Museum of Natural History and cataloged on 10 Mar 1954. They were listed as EHT-HMS 17867 and 17864 in the original description, respectively. The holotype, EHT-HMS 17859, is presently in the Field Museum of Natural History, where it is cataloged as FMNH 100089. Some of the paratypes EHT-HMS 17794–17858 and 17860–17870 are presently cataloged as FMNH 100450–100490. Additional paratypes from EHT-HMS 17794–17858 and 17860–17870 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 26831–26854. Later, UIMNH 26853 and 26854 were exchanged to the U.S. National Museum (see above). UIMNH 26850 was exchanged to the Carnegie Museum of Natural History, where it is presently cataloged as CM 39997. UIMNH 26851 was exchanged to the Senckenberg Forschungsinstitut und Naturmuseum, Frankfurt, Germany, where it is presently cataloged as SMF 53191. UIMNH 26852 was exchanged to the Field Museum of Natural History, where it is presently cataloged as FMNH 75777. The paratypes EHT-HMS 17802 and 17817 were deposited in the American Museum of Natural History, where they are presently cataloged as AMNH A-53779 and A-53780. The paratype EHT-HMS 17839 was deposited in the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-24544. The paratypes EHT-HMS 17795, 17807, 17815, and 17837 could not be located and must be considered missing.

***Thorius pennatulus* Cope, 1869**

[currently accepted; *fide*, International Commission on Zoological Nomenclature, 1990: 168]

Cope, 1869, *Proc. Acad. Nat. Sci. Philadelphia*, 21: 111.

Holotype: USNM 6341 (largest out of six specimens, adult female), Orizaba, Veracruz, Mexico, collected by F. Sumichrast, date unknown, cataloged in 1864.

Type Locality: “Orizaba, Mexico”; probably near the city of Orizaba, Veracruz, Mexico, according to Taylor (1940a [1939]: 414). Type locality based on the neotype designation: “Cuautlapan, Veracruz, Mexico.”

Paratypes: USNM 6341 (five remaining specimens); USNM 6744, same data as holotype. (See Remarks.)

Other Type Material: Neotype: UNSM 111017, Cuautlapan, Veracruz, Mexico, collected by H. M. Smith, Jul 1940. Neotype designation by Taylor, 1941c, *Univ. Kansas Sci. Bull.*, 27: 107.

Etymology: The name *pennatulus* is from the Latin *pennatus*, “feathered,” and *-ulus*, a diminutive suffix, apparently in reference to the V-shaped spots marking the dorsal band of this species, which are mentioned in the original description.

Remarks: USNM 6341 and 6744 have been missing for years and apparently were never returned by Cope. Dunn (1926a) speculated that USNM 25101, 30348, 30349, and 30352 and ANSP 1269 (three specimens) were the missing Cope types of *Thorius pennatulus* recataloged after Cope’s death. Dunn (1922a) referred USNM 30352 to *Oedipus townsendi* in his description of that species. Taylor (1941c) examined the remaining three specimens (USNM 25101, 30348, and 30349) and found them to be in unrecognizable condition. Because he could not identify any of these specimens as part of the type series of *Thorius pennatulus*, he selected USNM 111017 as the neotype. On 16 Feb 1944, all three specimens examined by Taylor were discarded by Doris Cochran because of their poor condition. Malnate (1971) considered ANSP 1269 (three specimens) to be surviving syntypes, invalidating Taylor’s selection of a neotype. However, since Cope (1969) clearly identified one specimen (the largest female) as the type, ANSP 1269 would not be syntypes. The only question is whether one of the specimens might be the largest female selected by Cope as the type. Measurement of ANSP 1269, 22943, and 22944 (recataloged from ANSP 1269) showed that they were smaller than the measurements recorded by Cope (1869) for the type (Ned Gilmore, Academy of Natural Sciences, Philadelphia, personal communication, 3 Jul 2008). These specimens, if they do represent part of the type series, are paratypes. Therefore, Taylor’s selection of USNM 111017 as the neotype is still valid.

***Thorius pulmonaris* Taylor, 1940**

[currently accepted; *fide*, Hanken, 1983: 1063]

Taylor, 1940a [1939], *Univ. Kansas Sci. Bull.*, 26: 411.

Paratype: USNM 139719, Cerro San Felipe, Oaxaca, Mexico, collected by E. H. Taylor, 22 Aug 1938.

Type Locality: “Cerro San Felipe, about 12 km. north[east] of Oaxaca, Oaxaca, Mexico.”

Other Type Material: Holotype: EHT-HMS 16684. Paratypes: EHT-HMS 16676–16711, 16713–16733. (See Remarks.)

Etymology: The name *pulmonaris* is from the Latin *pulmo*, “lung,” and *naris*, “nostril,” in reference to the large nostrils

and nasal passages mentioned in the original description and the author's supposition that they may be used for direct oxygen exchange.

Remarks: USNM 139719 was received in exchange from the University of Illinois Museum of Natural History and cataloged on 7 Oct 1957. It was listed as EHT-HMS 16719 in the original description. The holotype, EHT-HMS 16684, is presently in the University of Illinois Museum of Natural History, where it is cataloged as UIMNH 30992. Some of the paratypes EHT-HMS 16676–16711 and 16713–16733 were deposited at the Field Museum of Natural History, where they are presently cataloged as FMNH 108606–108631, 108633–108636, 126860, and 126867. Additional paratypes from EHT-HMS 16676–16711 and 16713–16733 were deposited at the University of Illinois Museum of Natural History, where they were cataloged as UIMNH 30981–31001. Later, UIMNH 30983 was exchanged to the U.S. National Museum (see above). UIMNH 30981 was exchanged to Brigham Young University but apparently cannot be found at the present time. UIMNH 30982 was exchanged to the University of Michigan Museum of Zoology, where it is presently cataloged as UMMZ 117247. UIMNH 30984 was exchanged to the Senckenberg Forschungsinstitut und Naturmuseum, Frankfurt, Germany, where it is presently cataloged as SMF 53190. UIMNH 30987 and 30988 were exchanged to the American Museum of Natural History, where they are presently cataloged as AMNH A-49967 and A-49968. UIMNH 30999 was exchanged to the Carnegie Museum of Natural History, where it is presently cataloged as CM 39998. UIMNH 31000 was exchanged to the California Academy of Sciences, where it is presently cataloged as CAS 87827. The paratype EHT-HMS 16688 was deposited in the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-24545. The paratypes EHT-HMS 16679, 16715, 16726, 16729, and 16733 could not be located and must also be considered lost.

***Thorius schmidtii* Gehlbach, 1959**

[currently accepted; *fide*, Hanken and Wake, 1998: 336]

Gehlbach, 1959, *Copeia*, 1959: 203.

Holotype: USNM 140295, 4 miles W of Zoquitlan, Puebla, Mexico, collected by F. C. Sibley, 14 Aug 1954.

Type Locality: "ca. 8,400 feet, four miles west of Zoquitlán, Puebla, Mexico."

Paratypes: USNM 140296–140300, same data as holotype.

Other Type Material: Paratypes: E. H. Taylor Nos. 36523–36525; Cornell University No. 6299. (See Remarks.)

Etymology: The name *schmidtii* is a patronym honoring K. P. Schmidt, American herpetologist.

Remarks: E. H. Taylor Nos. 36523–36525 are in the Field Museum of Natural History, where they are presently cataloged as FMNH 178282–178284. Cornell University No. 6299 was exchanged to the American Museum of Natural History, where it is presently cataloged as AMNH A-83911.

***Thorius troglodytes* Taylor, 1941**

[currently accepted; *fide*, Hanken and Wake, 1998: 331]

Taylor, 1941c, *Univ. Kansas Sci. Bull.*, 27: 110.

Paratypes: USNM 110961, 8 km E of Ozumbilla, Puebla, Mexico, collected by H. M. Smith, 17 Jan 1939; USNM 110962–110968, Pajaro Verde, Puebla, Mexico, collected by H. M. Smith, 17 Dec 1939; USNM 110969–110972, 110974, 110975, Acultzingo, Veracruz, Mexico, collected by H. M. Smith, 15 Jan 1939; USNM 110976–110983, 5 miles W of Acultzingo, Veracruz, Mexico, collected by H. M. Smith, 18 Jan 1939; USNM 110992, above Acultzingo, Veracruz, Mexico, collected by H. M. Smith, 19 Aug 1939. (See Remarks.)

Type Locality: "Along old road on mountains about two miles south of Acultzingo, Veracruz," Mexico.

Other Type Material: Holotype: EHT-HMS 17791. Paratypes: EHT-HMS 12142, 12143, 17789, 17790, 17791A.

Etymology: The name *troglodytes* is from the Latin *troglodytes*, "hole dweller," in reference to the habitat of this species mentioned in the original description.

Remarks: This species was not mentioned in the USNM type list by Cochran (1961). All the USNM paratypes were erroneously listed as topotypes in the original description. USNM 110964, 110968, 110969, 110978, and 110983 are cleared and stained specimens presently stored in glycerin. USNM 110992 was exchanged to University of Florence on 23 Dec 1960. USNM 110980–110982 were reidentified from *Thorius troglodytes* to *Thorius dubitus* by James Hanken and David Wake, 7 Nov 1995. The holotype, EHT-HMS 17791, is presently in the Field Museum of Natural History, where it is cataloged as FMNH 100112. The paratypes EHT-HMS 12142, 12143, and 17791A are presently cataloged as FMNH 126703–126705. There are two additional specimens that are listed as paratypes in the Field Museum of Natural History database. They are FMNH 100352 (formerly EHT-HMS 17792) and FMNH 124415 (formerly EHT-HMS 17793). However, those EHT-HMS numbers were not listed as paratypes in the original description. The paratype EHT-HMS 17790 was deposited at the University of Illinois Museum of Natural History, where it is presently cataloged as UIMNH 27046. The paratype EHT-HMS 17789 could not be located and must be considered missing.

***Typhlomolge rathbuni* Stejneger, 1896**

[= *Eurycea rathbuni* (Stejneger, 1896); *fide*, Mitchell and Reddell, 1965: 23]

Stejneger, 1896 [1895], *Proc. U.S. Natl. Mus.*, 18: 620.

Holotype: USNM 22686, San Marcos, Hays County, Texas, collector unknown, collected Feb 1896.

Type Locality: "Subterranean waters near San Marcos, Texas"; corrected to "Texas: San Marcos, U.S. Fish Commission Well 42" by Dunn (1926a: 257). Given as "artesian well 188 feet deep, at U.S. Fish Commission Station, San Marcos, Hays Co., Texas," by Stejneger and Barbour (1933: 15).

Paratypes: USNM 22687, 22688, same collection data as holotype, except collected 1896; USNM 22689–22692, same collection data as holotype, except collected 27 Feb 1896; USNM 22693, same collection data as holotype, except collected by H. Von Bayer, 25 Jan 1896. (See Remarks.)

Etymology: The name *rathbuni* is a patronym honoring Richard Rathbun, head of the U.S. Fish Commission.

Remarks: Paratypes were not listed by number in the original description, although the introduction mentions “more than a dozen specimens.” Only eight specimens were cataloged at the U.S. National Museum; the whereabouts of any additional specimens are unknown. USNM 22690 was exchanged to the Instituto Lillo on 23 May 1946. USNM 22691 is presently not in the USNM collection and must be considered lost. A note from Doris M. Cochran indicates that the specimen could not be found with the rest of the paratypes on 18 Oct 1957.

Typhlotriton braggi Smith, 1968

[= *Eurycea spelaea* (Stejneger, 1892); *fide*, Bonett and Chippindale, 2004: 1199]

Smith, 1968, *Wasmann J. Biol.*, 26: 156.

Holotype. USNM 167146, Cushman Cave, 3.5 miles SE of Cushman, Independence County, Arkansas, collected by C. C. Smith and F. Wise, 29 Apr 1959.

Type Locality: “Cushman Cave, 3½ miles SE. of Cushman, Independence County, Arkansas.”

Paratypes: USNM 166108–166118, stream below Cushman Cave, Independence County, Arkansas, collected by C. C. Smith, 27 Apr 1958; USNM 166119–166122, 166154, 563732, 563733, stream below Cushman Cave, Independence County, Arkansas, collected by C. C. Smith, 15 May 1959; USNM 166123–166133, 167158, 563767–563771, Fair Spring, near Cushman, Independence County, Arkansas, collected by C. C. Smith, 11 May 1958; USNM 167147, 563717, same data as holotype; USNM 167148, same data as holotype, except collected 15 Nov 1960; USNM 167149, 563718, Bell Cave, Independence County, Arkansas, collected by C. C. Smith, 8 Apr 1959; USNM 167150, 563719–563723, stream below Allen Cave, Independence County, Arkansas, collected by C. C. Smith, 3 Aug 1958; USNM 167151, 563724–563726, stream below Cushman Cave, Independence County, Arkansas, collected by C. C. Smith, 29 Mar 1958; USNM 167152, 563727, stream below Cushman Cave, Independence County, Arkansas, collected by C. C. Smith, 10 Apr 1959; USNM 167153, 563728–563731, stream below Cushman Cave, Independence County, Arkansas, collected by C. C. Smith, 15 Jul 1958; USNM 167155, 563734–563743, west of Cushman Cave, upper end of stream below first big spring, Independence County, Arkansas, collected by C. C. Smith, 1 Jun 1958; USNM 167156, 563744–563746, Fair Spring, near Cushman, Independence County, Arkansas, collected by C. C. Smith, 2 Jan 1959; USNM 167157, 167162, 563747–563766,

563794–563801, Fair Spring, near Cushman, Independence County, Arkansas, collected by C. C. Smith, 27 Apr 1958; USNM 167159, 563772–563785, Fair Spring, near Cushman, Independence County, Arkansas, collected by C. C. Smith, 1 Nov 1958; USNM 167160, 563786–563789, Fair Spring, near Cushman, Independence County, Arkansas, collected by C. C. Smith, 1960; USNM 167161, 563790–563792, Fair Spring, near Cushman, Independence County, Arkansas, collected by C. C. Smith, 1 May 1958; USNM 167163, 563802–563811, Fair Spring, near Cushman, Independence County, Arkansas, collected by C. C. Smith, 20 Jun 1959; USNM 167164, 563812–563853, Independence County, Arkansas, no further locality data, collector unknown, 1958; USNM 167165, 563854–563858, John Eddings Cave, Newton County, Arkansas, collected by C. C. Smith, Haddock, and Dickison, 30 Mar 1959; USNM 167166, spring near Mountain View, Stone County, Arkansas, collected by C. C. Smith, Haddock, and Dickison, 30 Mar 1959.

Etymology: The name *braggi* is a patronym honoring Arthur N. Bragg, friend and associate of the author.

Remarks: The type series was not listed by number in the original description, but the description stated that they were deposited in the Stovall Museum, University of Oklahoma. Brandon and Black (1970) reported that they found the type series “untagged and uncataloged” in the Stovall Museum of Science and History, University of Oklahoma. They then had the specimens deposited at the U.S. National Museum. The 43 specimens cataloged as USNM 167164 (presently USNM 167164 and 563812–563853) were found with labels indicating four different localities in Independence County, Arkansas (Fair Spring, Glenn Creek spring, Scout Cave, and stream below Cushman Cave), but the locality data could not be positively associated with individual specimens.

Typhlotriton nereus Bishop, 1944

[= *Eurycea spelaea* (Stejneger, 1892); *fide*, Bonett and Chippindale, 2004: 1199]

Bishop, 1944, *Copeia*, 1944: 1.

Paratypes: USNM 19778, 19779, 19781, 19784, 19785, 19787, Rockhouse Cave, Barry County, Missouri, collected by G. E. Harris, date of collection unknown, cataloged 3 Jan 1893; USNM 134296, near Riverton, Cherokee County, Kansas, collected by H. M. Smith, E. H. Taylor, McKnoun, and Lane, 26 Mar 1931.

Type Locality: “York Spring, Imboden, Lawrence Co., Arkansas.”

Other Type Material: Holotype: Collection of Sherman C. Bishop No. 926. Paratypes: AMNH 34152, 34246–34248, 34250, 50040–50044; CU 434 (8); EHT A 1204 (15); KU 16036–16038, 16043–16045, 16199, 16350, 16352–16354, 16357–16360; MCZ 2269, 2270, 4607, 4608, 24061–24064; SCB (5); UAM (2); UMMZ 77052 (2), 77053 (2), 81481. (See Remarks.)

Etymology: The name *nereus* is from the Greek sea nymph Nereus; in modern usage, a nereid is a spring-dwelling nymph, and the name refers to the spring habitat of this taxon.

Remarks: The holotype (Sherman C. Bishop No. 926) is presently in the Field Museum of Natural History, where it is now cataloged as FMNH 93143. The paratype USNM 134296 was listed as EHT A 1204 with the locality being “near Galena” and 26 Mar 1932 as the date of collection in the original description. Four other specimens out of EHT A 1204 were deposited at the Field Museum of Natural History, where they are presently cataloged as FMNH 126737 and 190351–190353. Three additional specimens out of EHT A 1204 were deposited at the University of Illinois Museum of Natural History, where they are presently cataloged as UIMNH 27300–27302. That accounts for 8 of the original 15 specimens listed as EHT A 1204; the whereabouts of the additional seven specimens are unknown. CU 434 (eight specimens) were listed as paratypes; however, the catalog number CU 434 is assigned to a single specimen of *Acris* from Georgia. It is probable that CU 434 was a typographical error for CU 4234, which was a lot of *Typhlotriton spelaus* from Adair County, Oklahoma (the original number of specimens was not recorded when originally cataloged in 1942). At the present time, there is a single specimen under that number (John P. Friel, Cornell University Museum of Vertebrates, personal communication, 8 Nov 2010). There is an additional lot of eight specimens of *Typhlotriton spelaus* from Adair County, Oklahoma (CU 4375), that may also be the paratypes of *Typhlotriton nereus* that were published as CU 434. Although not mentioned in the original description, there were 14 duplicates under MCZ 2269 that were recataloged as MCZ A-125087–125100. MCZ 2270 was apparently listed in error as a paratype of *Typhlotriton nereus*. It is actually a specimen of *Eurycea lucifuga*. MCZ 24064 was also listed in error as a paratype of *Typhlotriton nereus*. It is actually a specimen of *Ensatina eschscholtzii platensis* from California. There is no indication in the original ledger entries for these two specimens that they were ever identified as *Typhlotriton* (Jose Rosado, Museum of Comparative Zoology, personal communication, 29 Nov 2010). One specimen out of UMMZ 77052 was later exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ A-27798. The paratypes from the Sherman C. Bishop private collection and the University of Arkansas Museum could not be located and must be considered missing. There are an additional eight specimens at the Field Museum of Natural History (FMNH 126733–126736 and 126738–126741) that are listed as paratypes in their database. It is not clear whether these specimens might be the missing specimens from EHT A 1204 (although that would make the total number of specimens in EHT A 1204 16 rather than the 15 as published) or whether they might be some of the other missing paratypes.

***Typhlotriton spelaus* Stejneger, 1892**

[= *Eurycea spelaea* (Stejneger, 1892); *fide*, Bonett and Chippindale, 2004: 1199]

Stejneger, 1892, *Proc. U.S. Natl. Mus.*, 15: 116.

Holotype: USNM 17903, Rock House Cave, Barry County, Missouri, collected by F. A. Sampson, 24 Jul 1891.

Type Locality: “Rock House Cave, Missouri.”

Paratypes: USNM 17904, same data as holotype; 17905, same locality as holotype, collected by G. E. Harris, 21 Sep 1891; 17906–17912, collected by G. E. Harris, Oct 1891. (See Remarks.)

Etymology: The name *speleus* is from the Latin *speleum*, “cave,” in reference to the cave habitat of this species.

Remarks: Paratypes were not listed by USNM number in the original description. However, the larva collected by F. A. Sampson and the additional larvae collected by George E. Harris were mentioned in the description. USNM 19776–19791 were erroneously listed as paratypes of *Typhlotriton speleus* Stejneger, 1892 by Cochran (1961). Although these specimens are also larvae collected by G. E. Harris, evidence indicates that these specimens were probably not available when the original description of the species was written. The donation containing these specimens was not accessioned until 20 Aug 1892, and the specimens were not cataloged until 3 Jan 1893. The original description was published 2 Aug 1892 and was probably submitted to the printer well before that. In addition, the original description mentioned that G. E. Harris “has only succeeded so far in obtaining larvae, but we hope to be able to during the present year to secure more adults.”

***Urspelerpes brucei* Camp, Peterman, Milanovich, Lamb, Maerz, and Wake, 2009**

[currently accepted; *fide*, Camp et al., 2012: 2]

Camp, Peterman, Milanovich, Lamb, Maerz, and Wake, 2009, *Journal of Zoology*, 279: 87.

Holotype: USNM 558253, Yonah Dam Road, 5 air miles north of Toccoa, Stephens County, Georgia, collected by W. E. Peterman, J. R. Milanovich, K. Holcomb, D. Sollenberger, A. Grosse, and S. Sterrett, 30 Mar 2007.

Type Locality: “Small, first-order stream located at the foot of the Blue Ridge escarpment in Stephens County, GA, USA (34° 39'N, 83° 18'W).”

Paratypes: USNM 558254, same locality as holotype, collected by C. D. Camp, 21 Apr 2007; USNM 558255, same locality as holotype, collected by J. R. Milanovich, D. Sollenberger, J. C. Maerz, J. Maerz, R. Maerz, and C. D. Camp, 15 Apr 2007; USNM 558256, same locality as holotype, collected by J. Jensen and C. D. Camp, 11 May 2007; USNM 558257–558259, same locality as holotype, collected by C. D. Camp and J. R. Milanovich, 19 Apr 2008.

Other Type Material: Paratypes: MVZ 257762, 258038, 258039.

Etymology: The genus name *Urspelerpes* is derived from the Greek *ur-*, “original,” and the genus name *Spelerpes*, a pri-

mary synonym for the genus *Eurycea*, indicating the basal relationship this new genus and species have to *Eurycea*. The specific epithet *brucei* is a patronym in honor of Richard C. Bruce, professor emeritus of Western Carolina University and retired director of the Highlands Biological Station in North Carolina.

FAMILY PROTEIDAE

Menobanchus latastei Garnier, 1888

[= *Necturus maculosus maculosus* (Rafinesque, 1818); *fide*, Cope in Garnier, 1888: 218]

Garnier, 1888, *Proc. Canad. Inst., Toronto*, ser. 3, 5: 218.

Syntypes: USNM 22331-22332, Maitland River, Ontario, Canada, collected by J. H. Garnier, date of collection unknown, cataloged 25 Apr 1895.

Type Locality: "Maitland river."

Etymology: The name *latastei* is a patronym for F. Lataste. This may refer to the French zoologist Fernand Lataste, but it could not be confirmed.

Remarks: Types were not listed in the original description

Menobanchus punctatus Gibbs, 1850

[= *Necturus punctatus* (Gibbs, 1850); *fide*, Garman, 1884: 36; Cope, 1889: 27]

Gibbs, 1850, *Proc. Am. Assoc. Adv. Sci.*, 1850: 159.

Syntype: USNM 11813, Southern Santee River, South Carolina, collector unknown, collected 1850, received from L. R. Gibbs.

Type Locality: "Discovered by Mr. Augustus. Schoolbred on the South Santee River, a few miles from its mouth."

Other Type Material: Syntypes: Total of 10 specimens mentioned in original description, of which one was subsequently lost according to Gibbs (1853). (See Remarks.)

Etymology: The name *punctatus* is from the Latin *punctum*, "spot," in reference to the many dark spots mentioned in the original description.

Remarks: MCZ 1553 was considered a "cotype" (= syntype) by Dunn (1918) and by Barbour and Loveridge (1929). The whereabouts of any of the remaining syntypes are unknown.

Necturus alabamensis Viosca, 1937

[currently accepted; *fide*, Bart et al., 1997: 200]

Viosca, 1937, *Copeia*, 1937: 121.

Holotype: USNM 102676, Black Warrior River, near Tuscaloosa, Tuscaloosa County, Alabama, collector unknown, 22 Jan 1914.

Type Locality: "Black Warrior River near Tuscaloosa, Alabama."

Other Type Material: The original description mentions "one specimen, poorly preserved and without data . . . found in the Zoology Department, University of Alabama." (See Remarks.)

Etymology: The name *alabamensis* is from the state of Alabama.

Remarks: The additional specimen mentioned in the original description could not be located and must be considered missing.

Necturus beyeri Viosca, 1937

[currently accepted; *fide*, Hecht, 1958: 16]

Viosca, 1937, *Copeia*, 1937: 123.

Holotype: USNM 102674, Upper Calcasieu River, near Oakdale, Allen Parish, Louisiana, collected by P. Viosca, winter of 1928.

Type Locality: "Upper Calcasieu River near Oakdale, Louisiana."

Paratypes: USNM 102675, 159760, same data as holotype. (See Remarks.)

Other Type Material: Paratypes: MCZ 17732 and 17733. The remaining paratypes were retained in the author's personal collection. (See Remarks.)

Etymology: The name *beyeri* is a patronym honoring George E. Beyer, pioneer student of Alabama herpetology.

Remarks: The paratype USNM 102675 was erroneously listed as USNM 102676 in the original description. USNM 102676 is actually the holotype of *Necturus alabamensis* Viosca, 1937. The type series consisted of 20 specimens (6 males and 14 females) from the type locality. Viosca deposited two specimens (holotype and paratype) in the U.S. National Museum and two paratypes at the Museum of Comparative Zoology and retained the rest of the paratypes in his personal collection. Later, he must have distributed some of these paratypes to other museums. The North Carolina State Museum received one (NCSM 63), which was later exchanged to the U.S. National Museum and cataloged as USNM 159760 on 25 May 1966. The University of Michigan Museum of Zoology also received a specimen from the "So. Biol. Supply Co." (company owned by Viosca), and it was assumed, based on the data supplied with the specimen, that this specimen (UMMZ 81910) is also a paratype. The remainder of paratypes could not be located and must be considered missing.

Necturus lödingi Viosca, 1937

[= *Necturus beyeri* Viosca, 1937; *fide*, Gunter and Brode, 1964: 122-123; confirmed by Guyer et al., 2020: 28]

Viosca, 1937, *Copeia*, 1937: 126.

Holotype: USNM 61752, Mertz Station, near Mobile, Mobile County, Alabama, collected by C. Löding, Feb 1918.

Type Locality: "Eslava Creek, near Mobile, Alabama."

Other Type Material: "There are two paratypes, taken by E. J. Wendt in Hall's Mill Creek near Mobile, Alabama, in August and September 1935." (See Remarks.)

Etymology: The name *lödingi* is a patronym honoring H. P. Löding, collector of the holotype.

Remarks: USNM 61752 was erroneously listed as USNM 6172 at the beginning of the original description but was correctly identified as USNM 61752 in the discussion concerning paratypes and other specimens. The whereabouts of the two

paratypes are unknown. The original description mentions five other specimens collected at the type locality, but they can be considered only referred specimens since they were not available for Viosca's examination since they were either destroyed or could not be located. There is no explanation for the discrepancy between the locality recorded for the holotype in the original USNM ledger and the type locality as published.

***Necturus louisianensis* Viosca, 1938**

[= *Necturus maculosus louisianensis* Viosca, 1938; *fide*, Schmidt, 1953: 13]

Viosca, 1938, *Proc. Biol. Soc. Washington*, 51: 143.

Holotype: USNM 104238, Big Creek, a few miles east of Pollock, Grant Parish, Louisiana, collected by P. Viosca and O. Bruce, 22–23 Feb 1938.

Type Locality: "Big Creek a few miles east of Pollock, Louisiana."

Other Type Material: Paratypes: "In addition to the type there are 24 paratypes." (See Remarks.)

Etymology: The name *louisianensis* comes from the state of Louisiana.

Remarks: Paratypes were not listed by museum number in the original description but were listed only by locality, collector, and date. However, if the number of specimens listed is correct, there should actually be 25 paratypes. There are presently 75 specimens cataloged as TU 6149–6152 that are considered paratypes. It is not clear which of these specimens are the original paratypes.

***Necturus maculosus lewisi* Brimley, 1924**

[= *Necturus lewisi* Brimley, 1924; *fide*, Bishop, 1943: 32; Hecht, 1958: 15]

Brimley, 1924, *J. Elisha Mitchell Sci. Soc.*, 40: 167.

Holotype: USNM 73848, Neuse River, near Raleigh, Wake County, North Carolina, collected by F. B. Lewis, 25 Feb 1921.

Type Locality: "Neuse River, near Raleigh."

Other Type Material: Paratypes: The original description says "over forty specimens from the vicinity of Raleigh." (See Remarks.)

Etymology: The name *lewisi* is a patronym honoring Frank B. Lewis, collector of the holotype.

Remarks: The holotype was listed as "No. 6868" in the original description; this number is the C. S. Brimley collection number. Paratypes were not listed by museum number in the original description. Searching online databases revealed the following specimens recorded as paratypes: CM 10594 and MCZ A-17726–17729. The whereabouts of any of the additional paratypes are unknown.

FAMILY RHYACOTRITONIDAE

***Ranodon olympicus* Gaige, 1917**

[= *Rhyacotriton olympicus* (Gaige, 1917); *fide*, Dunn, 1920: 56]

Gaige, 1917, *Occas. Pap. Mus. Zool. Univ. Michigan*, 40: 2.

Paratypes: USNM 55277, Lake Cushman, Mason County, Washington, collected by P. Putnam, 7 May 1916; USNM 55331, same data as USNM 55277, except collected 19 Apr 1916.

Type Locality: "Lake Cushman, Washington."

Other Type Material: Holotype: UMMZ 48607. Paratypes: UMMZ 48608, 49945–49949. (See Remarks.)

Etymology: The species was named after the Olympic Mountains, Washington, location of the type locality.

Remarks: The paratypes were not listed by museum number; the original description listed "six adult specimens examined . . . four immature specimens" for a total of 10 specimens. It is not clear whether the six adult specimens included the holotype or not. There should be a total of either 10 or 11 specimens in the type series, and only 9 are accounted for in the original USNM and UMMZ specimens. UMMZ 48608 was exchanged to the Museum of Comparative Zoology and is presently cataloged as MCZ 4103. The whereabouts of any additional paratypes are unknown.

FAMILY SALAMANDRIDAE

***Diemictylus viridescens evergladensis* Peterson, 1952**

[= *Notophthalmus viridescens piaropicola* (Schwartz and Duellman, 1952); *fide*, Mecham, 1967: 3]

Peterson, 1952, *Herpetologica*, 8: 103.

Paratype: USNM 134287, 26 miles W of Miami, Dade County, Florida, collected by H. W. Peterson, 1 May 1952.

Type Locality: "60 mi. W Miami, on U.S. Highway 94, Monroe County, Florida."

Other Type Material: Holotype: UIMNH 28740. Paratypes: UIMNH 28738, 28739, 28741, 28742, 28743–28765, 30000–30029 (actually UIMNH 30467–30496). (See Remarks.)

Etymology: The name *evergladensis* is from the Everglades, location of the type locality.

Remarks: USNM 134287 was received in exchange from the University of Illinois Museum of Natural History and cataloged on 10 Mar 1954. It was listed by UIMNH number in the original description. A typographical error in the original description indicates UIMNH 30000–30029 are paratypes; this should be UIMNH 30467–30496 (see Smith et al., 1964: 10). USNM 134287 was formerly UIMNH 30492. UIMNH 30493 and 30494 were exchanged to the Carnegie Museum of Natural History, where they are presently cataloged as CM 39989 and 39990.

***Diemictylus miniatus meridionalis* Cope, 1880**

[= *Notophthalmus meridionalis* (Cope, 1880); *fide*, Stejneger and Barbour, 1917: 7; confirmed by Reilly, 1990: 53]

Cope, 1880, *Bull. U.S. Natl. Mus.*, 17: 30.

Syntype (holotype?): USNM uncataloged, "sent to the Smithsonian Institution from Matamoros, Mexico."

Type Locality: “Matamoros, Mexico.”

Other Type Material: See Remarks.

Etymology: The name *meridionalis* is from the Latin *meridionalis*, meaning “southern,” and refers to the southern distribution of this species.

Remarks: It is not clear whether Cope had only a single specimen or more than one. In the original description, he mentioned that G. W. Marnock found this form “in the tributaries of the Medina River and southward” but did not say whether he examined any of those specimens. This species was not mentioned in the USNM type list by Cochran (1961). The specimen “sent to the Smithsonian Institution” was apparently never received at the U.S. National Museum and therefore never received a catalog number.

***Diemyctylus viridescens* var. *vittatus* Garman, 1896**

[= *Notophthalmus viridescens dorsalis* (Harlan, 1829); *fide*, Mecham, 1967: 2]

Garman, 1896, *J. Cincinnati Soc. Nat. Hist.*, 19: 49.

Syntypes: USNM 23797–23799, Wilmington, New Hanover County, North Carolina, collected by H. Garman, 22 Jul 1882.

Type Locality: “In shallow pools near Wilmington, North Carolina.”

Other Type Material: Syntypes: Specimens not listed by museum number in the original description. A total of 15 specimens had measurements given in the original description. (See Remarks.)

Etymology: The name *vittatus* is from the Latin *vittatus*, “decorated with a ribbon,” in reference to the subdorsal stripes mentioned in the original description.

Remarks: In addition to the USNM syntypes listed above, MCZ 1992 (two specimens) are likely syntypes, according to Barbour and Loveridge (1929: 252). One specimen out of MCZ 1992 has been recataloged as MCZ A-125741. The remaining syntypes could not be found.

***Salamandra salamandra giglioli* Eiselt and Lanza, 1956**

[currently accepted; *fide*, Steward, 1969: 39]

Eiselt and Lanza, 1956, *Abb. Ber. Naturkd. Magdeburg*, 9: 3.

Paratype: USNM 142735, Marchesale, Catanzaro Province, Calabria Region, Italy, collected by D. Lendvai, 9 May 1955. (See Remarks.)

Type Locality: “Monte Pecoraro bei Mongiana, Provinz Catanzaro, Süditalien, aus ungefähr 1000 m Seehöhe.”

Other Type Material: Holotype: MZUF KL 200 (formerly Lanza 200). Paratypes: MZUF KF 952–956, 975; MZUF KL 201–252; NMF Mag. 553/Coll. 36, 605/Coll. 160; NMW 9248, 14905:1–18.

Etymology: The name *giglioli* is a patronym for Henrico H. Giglioli, professor of zoology and comparative anatomy at the University of Florence.

Remarks: USNM 142735 was received in exchange from the Department of Zoology, University of Florence, and cataloged

on 29 Dec 1960. It was listed as MZUF KL 243 in the original description.

***Taricha laevis* Baird and Girard, 1853**

[= *Taricha torosa* (Rathke, 1833); *fide*, Boulenger, 1882: 20]

Baird and Girard, 1853, *Proc. Acad. Nat. Sci. Philadelphia*, 6: 302.

Syntypes: USNM 4014 (five specimens), San Francisco, San Francisco County, California, collected by J. Le Conte, data unknown, cataloged 2 Aug 1858.

Type Locality: “San Francisco.”

Etymology: The name *laevis* is from the Latin *laevis*, “on the left hand,” although what the authors meant by this is not clear from the original description.

***Triton blasii* de l’Isle, 1862**

[= *Triturus cristatus* (Laurenti, 1768) X *Triturus marmoratus* (Latreille, 1800); *fide*, Peracca, 1886: 12]

de l’Isle, 1862, *Ann. Sci. Nat., Paris*, ser. 4, 17: 364.

Syntypes: USNM 11011, 548154, Nantes, Loire-Atlantique, France, collector and date of collection unknown, cataloged (as USNM 11011) 29 Jul 1881.

Type Locality: “Environs de Nantes,” Loire-Atlantique, France.

Other Type Material: Syntypes: MNHNP 191 (two specimens), 5915, 5915A; MSNVR 343 (two specimens). (See Remarks.)

Etymology: The name *blasii* is a patronym honoring Johann Heinrich Blasius, German zoologist.

Remarks: Guibé (1950 [1948]) considered MNHNP 191 (two specimens) to be the syntypes. However, Thireau (1986) considered the specimens reported by Guibé not to be types and instead regarded MNHNP 5915 and 5915A as the syntypes. He also noted that there were likely syntypes in the U.S. National Museum and Museo Civico di Storia Naturale, Verona. Boulenger (1882) suggested the hybrid origin of this form, and it was confirmed by Peracca (1886). One of two specimens out of USNM 11011 was recataloged as USNM 548154 on 7 Jan 2002.

***Triton ensicauda* Hallowell, 1861**

[= *Cynops ensicauda* (Hallowell, 1861); *fide*, Wolterstorff and Herre, 1935: 224]

Hallowell, 1861 [1860], *Proc. Acad. Nat. Sci. Philadelphia*, 12: 494.

Syntypes: USNM 7410 (three specimens), Ousima (= Amami-Oshima), Amami Island Group, Ryukyu Islands, collected by Squires and Macomb, Apr 1855.

Type localities: “Paddyfields at the Amakarima Isle” and “Ralousima . . . the northern half of Ousima proper.”

Etymology: The name *ensicauda* is derived from the Latin *ensis*, “sword,” and *cauda*, “tail,” in reference to the long, compressed tail mentioned in the original description.

Remarks: Cochran (1961) listed the collector as W. Stimpson, which is dittoed from the entry for USNM 7408. The entry

of collectors as Squires and Macomb is later written in pencil over the ditto mark.

***Trituroides hongkongensis* Myers and Leviton, 1962**

[= *Paramesotriton hongkongensis* (Myers and Leviton, 1962); *fide*, Freytag, 1962: 452]

Myers and Leviton, 1962, *Occas. Pap. Div. Syst. Biol. Stanford Univ.*, 10: 1.

Paratypes: USNM 136019, 136020, Lan Tao Island, Hong Kong, China, collector unknown, collected Apr 1953.

Type Locality: "A mountain stream, on the Peak, Hong Kong Island," China.

Other Type Material: Holotype: SU 6378. Paratypes: SU 6379, 6381, 6714, 20280. (See Remarks.)

Etymology: The name is derived from Hong Kong Island, location of the type locality.

Remarks: The SU specimens are presently at the California Academy of Sciences and are maintained under their original catalog numbers except that the prefix is now CAS-SU.

***Triturus ensicaudus popei* Inger, 1947**

[*Cynops ensicauda popei*; *fide*, Tominaga et al., 2010: 917]

Inger, 1947, *Fieldiana, Zool.*, 32: 319.

Paratypes: USNM 7451 (two specimens), Okinawa, Ryukyu Islands, collected by W. Heine, May 1853; USNM 36555, Okinawa, Ryukyu Islands, collector and date of collection unknown, cataloged 20 Apr 1906; USNM 122118, Okinawa, Ryukyu Islands, collected by W. B. Thomas, 5 Oct 1945; USNM 122119, same data as USNM 122118, except collected 19 Oct 1945; USNM 122120–122133, same data as USNM 122118, except collected 20 Oct 1945; USNM 123032, Chizuka Canyon, Okinawa, Ryukyu Islands, collected by R. Bohart, 14 Sep 1945; USNM 123033, Hentona, Okinawa, Ryukyu Islands, collected by D. H. Johnson, 15 Sep 1945; USNM 123034, same locality as USNM 123033, collected by O. A. Muennink, 26 Aug 1945; USNM 123035–123130, same data as USNM 123034, except collected 11 Sep 1945.

Type Locality: "Kin, Okinawa," Ryukyu Islands, Japan.

Other Type Material: Holotype: CNHM 45039. Paratypes: CNHM 45037, 45038, 45040–45046; CAS 22309–22333. (See Remarks.)

Etymology: The name *popei* is a patronym honoring Clifford H. Pope, American herpetologist.

Remarks: The holotype and paratypes from the Chicago Natural History Museum are presently cataloged as FMNH 45039 and 45037, 45038, and 45040–45046, respectively.

***Triturus perstriatus* Bishop, 1941**

[= *Notophthalmus perstriatus* (Bishop, 1941); *fide*, Smith, 1953: 98]

Bishop, 1941, *Occas. Pap. Mus. Zool. Univ. Michigan*, 451: 3.

Paratype: USNM 118791, 3 miles SW of Gainesville, Alachua County, Florida, collected by A. Carr, 14 Feb 1933.

Type Locality: "Dodge Pond, 2 miles east of Chesser's Island, Charlton County, Georgia."

Other Type Material: Holotype: UMMZ 89761. Paratypes: UMMZ 89762, 74434 (5), 74437 (5); Bishop Collection (six specimens, unnumbered); CU 965 (28); U. Fla. 43 (15). (See Remarks.)

Etymology: The name *perstriatus* is from the Latin *per*, "throughout," and *striatus*, "lined," in reference to the complete dorso-lateral red stripes mentioned in the original description.

Remarks: USNM 118791 was received in exchange from the University of Michigan Museum of Zoology and cataloged on 3 Jun 1944. It was listed as UMMZ 74437 (5) in the original description. An additional specimen out of UMMZ 74437 was exchanged to the Museum of Comparative Zoology, where it is presently cataloged as MCZ 25559.

FAMILY SIRENIDAE

***Pseudobranchius striatus axanthus* Netting and Goin, 1942**

[= *Pseudobranchius axanthus* Netting and Goin, 1942; *fide*, Moler and Kezer, 1993: 44]

Netting and Goin, 1942, *Ann. Carnegie Mus.*, 29: 183.

Paratypes: USNM 67352, 67353, Gainesville, Alachua County, Florida, collected by T. Van Hyning, 1924; USNM 92566, Gainesville, Alachua County, Florida, collected by M. K. Brady, 1931; USNM 107288–107294, Newnan's Lake, near Gainesville, Alachua County, Florida, collected by C. R. Aschmeier, 24 Feb 1938; USNM 118790, Payne's Prairie, near Gainesville, Alachua County, Florida, collected by W. Clanton, 4 Oct 1932.

Type Locality: "Eastern edge of Payne's Prairie, where Prairie Creek enter the River Styx, about five miles southeast of Gainesville, Alachua County, Florida."

Other Type Material: Holotype: CM 20339. Paratypes: AMNH 23156, 32055–32067, 32150–32155, 32755, 32757–32772, 32899–32901, 32902 (7), 34244, 34245, 35840, 37151 (11), 37508, 37582, 37583, 38001–38006, 38025–38031; CFW 704–706, 707 (29); CJG 452 (26); CM 6171, 6172, 9399, 9511–9517, 10998, 10999, 12175, 12176, 20130 (45), 20131 (21), 20132; DBUF 1142 (3), 1159 (27); FMNH 25007; MCZ 23735–23744 (+2); UMMZ 77150 (6), 79594 (3), 84470 (3). (See Remarks.)

Etymology: The name *axanthus* is from the Greek *a-*, "not," and *xanthos*, "yellow," in reference to the pale gray ventrolateral stripes, rather than yellow as in *Pseudobranchius striatus striatus*.

Remarks: USNM 107289 was exchanged to Zoologische Sammlung des Bayerischen Staates on 13 Oct 1952 and is presently cataloged as ZSM 62/1952. USNM 118790 was received in exchange from the University of Michigan Museum of Zoology and cataloged on 3 Jun 1944. It was listed as UMMZ 77150 in the original description. The two duplicates out of MCZ 23735–23744 were recataloged as MCZ A-126106 and A-126107. Twenty-seven of the 29 specimens

of CFW 707 are presently cataloged as UMMZ 100237 (Kluge, 1983). Six specimens of AMNH 32902 were recataloged as AMNH A-144337–144342. The additional paratypes from the Charles F. Walker private collection (CFW 704–706 and two specimens of CFW 707) and the paratypes CJG 452 (26) could not be located and must be considered missing, although there are 26 specimens cataloged as TU 18168 that may be the missing CJG paratypes.

***Pseudobranchius striatus spheniscus* Goin and Crenshaw, 1949**

[currently accepted; *fide*, Highton et al., 2017: 35]

Goin and Crenshaw, 1949, *Ann. Carnegie Mus.*, 31: 277.

Paratypes: USNM 128140–128144, Putney Pond, Baker County, Georgia, collected by J. W. Crenshaw Jr. and G. B. Rabb, 1 Jul 1948.

Type Locality: “Seven miles south of Smithville, Lee County, Georgia.”

Other Type Material: Holotype: CM 29015. Paratypes: AMNH 34626; CHAS 15246 (3); CM 20160 (2), 21440, 21441, 21466; DBUF 52, 1855 (4); UMMZ 99390. (See Remarks.)

Etymology: The name *spheniscus* is from the Greek *spheniskos*, “small wedge,” in reference to the narrow, wedge-shaped head mentioned in the original description.

Remarks: The paratypes DBUF 52 and 1855 are presently cataloged as UF 52 and 1855.

***Siren intermedia nettingi* Goin, 1942**

[currently accepted; *fide*, Highton et al., 2017: 37]

Goin, 1942, *Ann. Carnegie Mus.*, 29: 211.

Paratype: USNM 118793, Imboden, Lawrence County, Arkansas, collected by B. C. Marshall, 3 May 1929.

Type Locality: “Imboden, Lawrence County, Arkansas.”

Other Type Material: Holotype: CM 7580. Paratypes: AMNH 22923–22928, 36285–36289, 37232; ANSP 552, 21962; ChM 39.2277.5 (2); CM 7581, 19078–19081, 20142–20155; FMNH 31797; MCZ 941, 8601–8604; MNSS 272 (33 + 96 unnumbered specimens), 273 (2); SCB (five specimens); UMMZ 68381 (2), 68382 (2), 84354–84536, 86391; UR 948, 949. (See Remarks.)

Etymology: The name *nettingi* is a patronym honoring M. Graham Netting, curator of herpetology at the Carnegie Museum of Natural History.

Remarks: USNM 118793 was received in exchange from the University of Michigan Museum of Zoology. It was listed as UMMZ 68382 in the original description. ChM 39.2277.5 (2) are presently cataloged as ChM CA4583 and CA4584. AMNH 36287 was exchanged to the University of Illinois Museum of Natural History, where it is presently cataloged as UIMNH 40628. The paratypes UR 948 and 949 were deposited at the Field Museum of Natural History, where they are presently cataloged as FMNH 93214 and 93215. The paratypes MNSS 272 (33 + 96 unnumbered specimens), 273 (2 specimens), and SCB (5 specimens) could not be located and must be considered missing.

***Siren intermedia texana* Goin, 1957**

[= *Siren intermedia nettingi* Goin, 1942; *fide*, Flores-Villela and Brandon, 1992: 291]

Goin, 1957, *Herpetologica*, 13: 37.

Paratypes: USNM 4048, 4075, 576275–576280, Matamoros, Tamaulipas, Mexico, collected by Lt. D. N. Couch, date of collection unknown, cataloged 2 Aug 1858; USNM 10853, 10857, 10861, Upson, Maverick County, Texas, collected by A. Turpe, 1880; USNM 10855, Cameron County, Texas; no further locality data, collected by A. Turpe, 1880. (See Remarks.)

Type Locality: “Texas, Cameron County, seven miles north of Brownsville.”

Other Type Material: Holotype: TCWC 10567. Paratypes: BCB 75–78, 349, 351, 6917, 7572–7577; TCWC 5038–5040, 9002, 9003, 10566; TNHC 90, 6015–6018, 13987, 13988, 15287.

Etymology: The name *texana* is for the state of Texas, location of the type locality.

Remarks: USNM 10861 was exchanged to Instituto Miguel Lillo on 23 May 1946. USNM 10857 was exchanged to the Museum of Comparative Zoology on 7 Aug 1958, where it is now cataloged as MCZ A-30594. Four specimens out of USNM 4068 (now cataloged as USNM 576277–576280) and USNM 10853 were reidentified as *Siren lacertina* by Flores-Villela and Brandon (1992). The paratypes BCB 75–78 and 349–351 are presently cataloged as BU-MMC 15679–15685, and BCB 6917 and 7572–7577 are presently cataloged as BU-MMC 15695–15701.

ORDER GYMNOPIHONA

FAMILY CAECILIIDAE

***Caecilia inca* Taylor, 1973**

[currently accepted; *fide*, Nussbaum and Wilkinson, 1989: 34]

Taylor, 1973, *Univ. Kansas Sci. Bull.*, 50: 206.

Holotype: USNM 119008, Fundo Sinchona (= Fundo Cinchona), east slope of Andes, 72 km E of Tingo Maria, Loreto, Peru, collected by J. G. Sanders, Jan–Jul 1944.

Type Locality: “Fundo Sinchona, Loreto, Peru.”

Etymology: The name is derived from the name of the pre-Columbian Inca Empire of Peru.

***Caecilia isthmica* Cope, 1877**

[currently accepted; *fide*, Savage and Wake, 2001: 56]

Cope, 1877, *Proc. Am. Philos. Soc.*, 17: 91–92.

Holotype: USNM 25188, Isthmus of Darien, Atlantic (east) side of, Panama, collected by Thomas O. Selfridge, date of collection unknown, cataloged (as “Returned by Cope’s estate”) on 12 Apr 1898.

Type Locality: “East side of the isthmus of Darien.”

Etymology: The name *isthmica* refers to the Isthmus of Darien.

***Coecilia ochrocephala* Cope, 1866**

[= *Oscaecilia ochrocephala* (Cope, 1866); *fide*, Taylor, 1968: 598, 611]

Cope, 1866, *Proc. Acad. Nat. Sci. Philadelphia*, 18: 132.

Holotype: USNM 29764, Panama, no further locality data, collector and date of collection unknown, cataloged (as "Returned from Cope's estate") on 25 Jan 1902.

Type Locality: "Panama"; rendered as the "Atlantic side, Isthmus of Darien" by Taylor (1968: 611).

Etymology: The name *ochrocephala* is derived from the Greek *ochros*, "pale yellow," and *kephale*, "head," in reference to the yellowish coloration of the throat and head mentioned in the original description.

***Caecilia orientalis* Taylor, 1968**

[currently accepted; *fide*, Nussbaum and Wilkinson, 1989: 34]

Taylor, 1968, *Caecilians of the World*: 417.

Holotype: USNM 159789, La Bonita, Napo Province, Ecuador, elevation 6,350 feet, collected by J. A. Peters, 26–27 Jun 1962.

Type Locality: "La Bonita, Napo-Pastaza Prov., Ecuador, elevation 6300 ft."

Paratypes: USNM 159790, 160347–160353, same data as holotype; USNM 160354, same data as holotype, except collected 24 Jun 1962. USNM 159791, 159792, 160339–160346, 166410–166413, La Alegria on Rio Chingual, 3 km N of Sebundoy, 20 km N of La Bonita, Napo Province, Ecuador, collected by J. A. Peters, R. K. Mullen, and local collectors, 24 Jun 1962.

Other Type Material: Paratype: EHT-HMS 4677. (See Remarks.)

Etymology: The name *orientalis* is from the Latin *orientalis*, "of the east," apparently in reference to this species being found on the eastern slopes of the Andes.

Remarks: The holotype USNM 159789 was listed as JAP 4688 in the original description. All the USNM paratypes were also listed by their JAP numbers. EHT-HMS 4677 is presently at the Field Museum of Natural History, where it is cataloged as FMNH 189203. USNM 160354 was exchanged to the Field Museum of Natural History on 18 Sep 1974 and is presently cataloged as FMNH 197827. USNM 160346 was exchanged to the Museum of Comparative Zoology on 19 Apr 1976 and is presently cataloged as MCZ A-89456.

***Caecilia perdita* Taylor, 1968**

[currently accepted; *fide*, Nussbaum and Wilkinson, 1989: 34]

Taylor, 1968, *Caecilians of the World*: 399.

Paratype: USNM 124261, Opogodo River drainage, Choco, Colombia, collected by M. K. Brady, 26 Jan 1947.

Type Locality: "Andagoya, Condoto, Choco, Colombia."

Other Type Material: Holotype: UMMZ 121036. Paratypes: AMNH 13678; No. 113 Thornton Collection; UMMZ 121037. (See Remarks.)

Etymology: The name *perdita* is from the Latin *perditus*, "ruined" or "lost," although what the author meant by this is unknown.

Remarks: The paratype "No. 113 Thornton Collection" is presently at the University of Kansas Museum of Natural History, where it is cataloged as KU 203033.

***Caecilia tenuissima* Taylor, 1973**

[currently accepted; *fide*, Nussbaum and Wilkinson, 1989: 34]

Taylor, 1973, *Univ. Kansas Sci. Bull.*, 50: 219.

Holotype: USNM 12353, Guayaquil, Guayas Province, Ecuador, collector and date of collection unknown, cataloged 19 Dec 1881.

Type Locality: "Guayaquil, Ecuador."

Etymology: The name *tenuissima* is from the Latin *tenuis*, "thin," and *-imus*, "having the quality of," in reference to the slender elongate form mentioned in the original description.

***Oscaecilia equatorialis* Taylor, 1973**

[currently accepted; *fide*, Nussbaum and Wilkinson, 1989: 36]

Taylor, 1973, *Univ. Kansas Sci. Bull.*, 50: 221.

Holotype: USNM 166421, Dyott's farm, 6 km E of Santo Domingo de los Colorados, km 121 from Quito, collected by R. K. Mullen and P. D. Spoecker, 16 Jun 1962.

Type Locality: "Dyott Farm, Km 121 from Quito, 6 km E Santo Domingo de los Colorados, Pichincha, Ecuador."

Etymology: The name *equatorialis* is from the Latin, apparently in reference to the type locality being near the equator.

Remarks: Taylor (1973) listed James Peters as the collector of the holotype, in error. The actual collectors are listed above.

FAMILY DERMOPHIIDAE***Siphonops oligozonus* Cope, 1877**

[= *Gymnopsis syntrema* (Cope, 1866); *fide*, Nussbaum, 1988: 923]

Cope, 1877, *Proc. Am. Philos. Soc.*, 17: 91.

Holotype: USNM 25187, no locality data, collector and date of collection unknown, cataloged (as "Returned from Cope's estate") on 12 Apr 1898.

Type Locality: "Uncertain."

Etymology: The name *oligozonus* is from the Greek *oligos*, "few," and *zone*, "belt," apparently in reference to the low number of annuli reported in the original description.

Remarks: Nussbaum (1988) showed that *Siphonops syntremus* Cope, 1866 and *Siphonops oligozonus* Cope, 1877 were based on the same specimen.

***Siphonops proximus* Cope, 1877**

[= *Gymnopsis multiplicata* Peters, 1874; *fide*, Dunn, 1928: 75; confirmed by Savage and Wake, 1972: 691]

Cope, 1877, *Proc. Am. Philos. Soc.*, 17: 90.

Lectotype: USNM 29763, Limon, from the forest country near the coast at, Limon Province, Costa Rica, collected by W. M. Gabb, date of collection unknown, cataloged (as "Returned from Cope's estate") on 25 Jan 1902. Lectotype designation by Taylor (1968: 525).

Type Locality: “Coast of Eastern Costa Rica”; restricted to “from the forest country near the coast at Limón, east coast of Costa Rica” by Taylor (1968: 525).

Paralectotype: USNM 29762, same data as lectotype.

Etymology: The name *proximus* is from the Latin *proximus*, “nearest,” apparently because of the similarity to *Siphonops mexicanus* (= *Dermophis mexicanus*) mentioned in the original description.

Remarks: Cochran (1961) listed (in error) USNM 29762 as the holotype and USNM 29763 as a paratype. Cope (1877) did not specify a type but gave counts from two specimens and then gave measurements of one specimen; Cochran (1961) apparently considered the listing of the measurements as sufficient indication of a type. Frost (2021) considered Cochran’s listing of USNM 29762 as the holotype as a lectotype designation by implication and therefore considered the subsequent selection of USNM 29763 as the lectotype by Taylor (1968) to be invalid. However, the International Code of Zoological Nomenclature (1999) is very clear that a lectotype designation by implication can occur only where it has been accepted that the species was based on a single specimen and not where it is known that there were additional specimens. Since the original description was clear that there were two specimens and neither one was clearly indicated as the type, the listing of USNM 29762 by Cochran (1961) as the holotype was in error, and the subsequent selection of USNM 29763 as the lectotype by Taylor (1968) was valid.

Siphonops simus Cope, 1877

[= *Gymnopsis multiplicata* Peters, 1874; *fide*, Dunn, 1928: 75; confirmed by Savage and Wake, 1972: 691]

Cope, 1877, *Proc. Am. Philos. Soc.*, 17: 91.

Holotype: USNM 29765, Costa Rica, no further locality data, collected by A. Von Franzius, date of collection unknown, cataloged (as “Returned from Cope’s estate”) on 1 Feb 1902.

Type Locality: “Costa Rica.”

Etymology: The name *simus* is from the Latin *simus*, “flat nosed,” in reference to the wide, truncate muzzle mentioned in the original description.

Siphonops syntremus Cope, 1866

[= *Gymnopsis syntrema* (Cope, 1866); *fide*, Nussbaum, 1988: 923] Cope, 1866, *Proc. Acad. Nat. Sci. Philadelphia*, 18: 129.

Holotype: USNM 25187, no locality data, collector and date of collection unknown, cataloged (as “Returned from Cope’s estate”) on 12 Apr 1898.

Type Locality: “Neighboring region of Honduras.”

Etymology: The name *syntremus* is from the Greek *syn-*, “with” (“together?”), and *trema*, “hole,” in reference to the close approximation of the narial and tentacular openings mentioned in the original description.

Remarks: Nussbaum (1988) has shown that *Siphonops syntremus* Cope, 1866 and *Siphonops oligozonus* Cope, 1877 were based on the same specimen.

FAMILY HERPELIDAE

Boulengerula taitanus Loveridge, 1935

[currently accepted; *fide*, Nussbaum and Hinkel, 1994: 754]

Loveridge, 1935, *Bull. Mus. Comp. Zool.*, 79: 16.

Paratypes: USNM 200061, 200062, Mount Mbololo, Taita Mountains, Coast Province, Kenya, collected by A. Loveridge, 14–24 Apr 1934. (See Remarks.)

Type Locality: “Absolute summit, 4800 ft., of Mt. Mbololo, Taita Mountains, Coast Province, Kenya Colony.”

Other Type Material: Holotype: MCZ 20001. Paratypes: MCZ 20002–20024 (total of 29 specimens). (See Remarks.)

Etymology: The name *taitanus* refers to the Taita Mountains, the site of the type locality.

Remarks: USNM 200061 and 200062 were received in exchange from the Museum of Comparative Zoology. They were listed as MCZ 20006 and MCZ 20013, respectively, in the original description. One of the duplicates out of MCZ 20002–20024 is presently cataloged as MCZ A-85094. Two of the duplicates out of MCZ 20002–20024 were exchanged to the American Museum of Natural History, where they are presently cataloged as AMNH A-51504 and A-51505. One of the duplicates out of MCZ 20002–20024 was exchanged to the University of Michigan Museum of Zoology, where it is presently cataloged as UMMZ 90660. In addition, MCZ 20019 was later exchanged to the University of Michigan Museum of Zoology, where it is presently cataloged as UMMZ 147025. One of the duplicates out of MCZ 20002–20024 was exchanged to the Field Museum of Natural History, where it is presently cataloged as FMNH 82608. In addition, MCZ 20022 and 20024 were later exchanged to the Field Museum of Natural History, where they are presently cataloged as FMNH 189140 and 189141, respectively. MCZ 20016 was exchanged to the Rijksmuseum van Natuurlijke Historie, Leiden, where it is presently cataloged as RMNH 6436 A.

FAMILY ICHTHYOPHIIDAE

Ichthyophis kohtaoensis Taylor, 1960

[currently accepted; *fide*, Taylor, 1968: 101]

Taylor, 1960, *Univ. Kansas Sci. Bull.*, 40: 110.

Holotype: USNM 72293, Koh Tao (= Ko Tao Island), Gulf of Thailand, collected by H. M. Smith, 1 Jan 1927.

Type Locality: “Koh Tao Island, west side, Gulf of Siam.”

Paratype(s): USNM 76138, same data as holotype, except collected 18 Sep 1928.

Etymology: The name is derived from Koh Tao Island, the type locality.

Remarks: USNM 76138 was erroneously listed as USNM 76131 in Cochran (1961). Also, Cochran (1961) listed the name as *Ichthyophis kotaoensis*, an incorrect subsequent spelling.

Ichthyophis nigroflavus Taylor, 1960

[currently accepted; *fide*, Nishikawa et al., 2012: 718]

Taylor, 1960, *Univ. Kansas Sci. Bull.*, 40: 101.

Holotype: USNM 129462, within 20 miles of Kuala Lumpur, Selangor, Malaysia, collected by R. E. Traub and V. Tipton, Apr 1950.

Type Locality: “‘Within 20 miles of Kuala Lumpur,’ Selangor, Malaya.”

Etymology: The name *nigroflavus* is from the Latin *nigro*, “black,” and *flavus*, “yellow,” in reference to the coloration, a black body with a cream or yellow lateral stripe.

***Ichthyophis paucidentulus* Taylor, 1960**

[currently accepted; *fide*, Nishikawa et al., 2012: 718]

Taylor, 1960, *Univ. Kansas Sci. Bull.*, 40: 49.

Holotype: USNM 70671, Kapahiang, Bengkulu Province, Sumatra, Indonesia, collected by H. C. Kellers, 12 Jan 1926.

Type Locality: “Kapahiang, Sumatra.”

Etymology: The name *paucidentulus* is from the Latin *paucus*, “few,” and *dentalus*, “toothed,” in reference to the fact that there are only three sets of teeth, rather than four.

***Ichthyophis paucisulcus* Taylor, 1960**

[currently accepted; *fide*, Taylor, 1968, 118]

Taylor, 1960, *Univ. Kansas Sci. Bull.*, 40: 103.

Holotype: USNM 103565, Siantar, Sumatera Utara, Sumatra, Indonesia, collector unknown (National Geographic-Smithsonian Expedition to Sumatra), collected 1937.

Type Locality: “Siantar, Sumatra.”

Etymology: The name *paucisulcus* is from the Latin *paucus*, “few,” and *sulcus*, “groove,” in reference to the relatively low number of primary and secondary folds.

Remarks: Taylor (1968: 118) stated, “Three other topotypic specimens, taken at the same time and locality, were not available to the describer. These, however, are equivalent to paratype specimens.” However, since there is no mention of these additional specimens (USNM 103566–103568) in the original description and they were not available when the original description was written, they are not considered paratypes.

***Ichthyophis sumatranus* Taylor, 1960**

[currently accepted; *fide*, Taylor, 1968: 140]

Taylor, 1960, *Univ. Kansas Sci. Bull.*, 40: 95.

Holotype: USNM 70672, Kepahiang, Bengkulu Province, Sumatra, Indonesia, collected by H. C. Kellers, 10 Dec 1925.

Type Locality: “Kapahiang, Sumatra.”

Paratypes: USNM 70667, Kaba Wetan, Kepahiang Regency, Bengkulu Province, Sumatra, Indonesia. Collected by H. C. Kellers, Dec 1925; USNM 70669, Kaba Wetan, Kepahiang Regency, Bengkulu Province, Sumatra, Indonesia. Collected by H. C. Kellers, 10 Jan 1926; USNM 70670, same data as holotype.

Etymology: The name *sumatranus* is derived from the island of Sumatra, location of the type locality.

FAMILY INDOTYPHLIDAE

***Gegeneophis ramaswamii* Taylor, 1964**

[currently accepted; *fide*, Taylor, 1968: 739]

Taylor, 1964, *Senckenb. Biol.*, 45: 227.

Paratype: USNM 200065, Tenmalai forest, Kerala, India, collected by L. S. Ramaswami, Jun 1957.

Type Locality: “Tenmalai forest (elevation 550 ft.), Kerala (state), southern India.”

Other Type Material: Holotype: MCZ 29453. Paratypes: MCZ 29451, 29452, 29454, 29456–29466.

Etymology: The name *ramaswamii* is a patronym for L. S. Ramaswami, collector of the type series.

Remarks: USNM 200065 was received in exchange from the Museum of Comparative Zoology. It was listed as MCZ 29459 in the original description. Also, Taylor (1968: 739) listed three additional specimens (EHT-HMS 4368–4370) that he considered paratypes but were accidentally omitted from the original designation.

***Hypogeophis alternans* Stejneger, 1894**

[= *Grandisonia alternans* (Stejneger, 1894); *fide*, Taylor, 1968: 750] Stejneger, 1894 [1893], *Proc. U.S. Natl. Mus.*, 16: 739.

Holotype: USNM 20418, Mahé, Granitic Seychelles, Seychelles Islands, collected by W. L. Abbott, Apr–May 1890 or Jul–Aug 1892.

Type Locality: “Mahé, Seychelles.”

Paratype: USNM 20404, Seychelles Islands, no further locality data, collector unknown, received from L. Vaillant, Museum National d’Histoire Naturelle, date of collection unknown, cataloged 14 Jun 1893.

Etymology: The name *alternans* is from the Latin *alternus*, “alternating,” in reference to the alternating primary and secondary rings mentioned in the original description.

FAMILY RHINATREMATIDAE

***Amazops amazops* Wilkinson, Reynolds, and Jacobs, 2021**

[currently accepted; *fide*, Frost, 2021]

Wilkinson, Reynolds, and Jacobs, 2021, *Herpetol. J.*, 31: 28.

Holotype: USNM 320729, Finca Virgen La Dolores, at km 57 sign on Hollin-Loreto Road, Orellana, Ecuador, 1,000 m, collected by J. F. Jacobs and R. P. Reynolds, 16 Aug 1990.

Type Locality: “Finca Virgen La Dolores, at km 57 sign on Hollin-Loreto Road (E20), Orellana, Ecuador, c. 0 degrees 43’ 50” South and 77 degrees 30’ 25” West, and c. 1,000 m above sea level.”

Etymology: The name *amazops* is a word combining the Amazonian locality of the type and the distinctive morphology of the eye and orbit, which is unknown in any other rhinatrematid.

***Epicrionops petersi petersi* Taylor, 1968**

[currently accepted; *fide*, Frost, 2021]

Taylor, 1968, *Caecilians of the World*: 224.

Holotype: USNM 159794, Agua Rica, a one-house posada on trail between Limon and Gualaceo, slightly south of west of Limon, Morona-Santiago, Ecuador, 6,200 feet, collected by J. A. Peters, 19 Aug 1962.

Type Locality: "Agua Rica between Limón and Gualaceo, Morona-Santiago Province, Ecuador."

Paratypes: USNM 159793, USNM 160355–160357, La Alegria on Rio Chingual, 3 km N of Sebundoy, 20 km N of La Bonita, Napo Province, Ecuador, 6,248 feet, collected by J. A. Peters, 24 Jun 1962; USNM 160358–160362, USNM 160414, same data as holotype.

Etymology: The name *petersi* is a patronym honoring James A. Peters, former curator of amphibians and reptiles at the U.S. National Museum and collector of the type series.

Remarks: The holotype, USNM 159794, was listed as J. Peters No. 7099 in the original description. The paratypes were also listed under field numbers in the original description: USNM 159793 as J. Peters No. 4597; USNM 160355–160357 as J. Peters Nos. 4598–4600; USNM 160358, 160359 as J. Peters Nos. 7097, 7098; USNM 160360, 160361 as J. Peters Nos. 7100, 7101; USNM 160362 as J. Peters No. 7077; and USNM 160414 as J. Peters No. 7096.

USNM 160361 is a cleared and stained specimen with the skin and viscera stored in ethanol and the skeleton stored in glycerin. USNM 160358 was exchanged to Field Museum of Natural History on 18 Sep 1974 and is presently cataloged as FMNH 197829.

FAMILY SCOLECOMORPHIDAE

Scolecomorphus uluguruensis Barbour and Loveridge, 1928

[currently accepted; *fide* Taylor, 1968: 649]

Barbour and Loveridge, 1928, *Mem. Mus. Comp. Zool.*, 50: 180.

Paratypes: USNM 73236, 73237, Nyingwa, Uluguru Mountains, Morogoro, Tanzania, collected by A. Loveridge, 18 Oct 1926. (See Remarks.)

Type Locality: "Nyingwa, Uluguru Mountains, Tanganyika Territory."

Other Type Material: Holotype: MCZ 12193. Paratypes: MCZ 12194–12293 (128 specimens).

Etymology: The name *uluguruensis* is derived from the Uluguru Mountains, location of the type locality.

Remarks: USNM 73236 and 73237 were received in exchange from the Museum of Comparative Zoology. They were part of the unnumbered duplicates from the original 128 paratypes listed in the original description. Additional specimens from the unnumbered duplicates were exchanged to the American Museum of Natural History (four specimens presently cataloged as AMNH A-25220–25223), the California Academy of Sciences (two specimens presently cataloged as CAS 63082-63083), the Carnegie Museum of Natural History (two specimens presently cataloged as CM Herps 8694 and 8695), the Field Museum of Natural History (one specimen presently cataloged as FMNH 18343), the Naturhistorisches Museum Wien (one specimen presently cataloged as NMW 16144), and Stanford University (two specimens at the California Academy of Sciences, where they are presently cataloged as CAS-SU (Amp) 11519 and 11520). Also, MCZ 12213 was exchanged to the Florida Museum of Natural History, where it is presently cataloged as UF 11973. MCZ 12279 was exchanged to the Museum of Vertebrate Zoology, where it is presently cataloged as MVZ 32982. MCZ 12270, 12278, and 12281 were exchanged to Stellenbosch University, where they are presently cataloged as USEC-H4279, USEC-H4281, and USEC-H4282. MCZ 12211 and 12215 were exchanged to the University of Michigan Museum of Zoology, where they are presently cataloged as UMMZ 90661. MCZ 12252 was exchanged to E. H. Taylor in 1963 and was eventually deposited at the Field Museum of Natural History, where it is presently cataloged as FMNH 189149. In addition to the two FMNH paratypes mentioned above, MCZ 12190 and 12192 were also exchanged to the Field Museum of Natural History, where they are presently cataloged as FMNH 14975 and 14976. These two specimens are listed in the Field Museum database as paratypes. Although the original MCZ numbers are listed in the original description as part of the material examined, the paratype series is specifically restricted to the specimens collected at the type locality of Nyingwa, Uluguru Mountains. The locality for FMNH 14975 and 14976 is Bagilo, Uluguru Mountains. Therefore, they should not be considered paratypes.

Acknowledgments

This publication builds on the effort of the staff of the Division of Amphibians and Reptiles to develop a computerized list of both the type records in Cochran (1961) and all subsequently published records. 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, I thank the current and past staff of the Division of Amphibians and Reptiles: Ronald I. Crombie, Kevin de Queiroz, Traci D. Hartsell, W. Ronald Heyer, Roy W. McDiarmid, James A. Poindexter II, Robert V. Wilson, Addison H. Wynn, and George R. Zug. I thank Alfred L. Gardner of the 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. I extend special thanks to Leslie Overstreet and Daria Wingreen-Mason of the Special Collections Department, Smithsonian Libraries, for their help in locating rare or obscure literature and in providing citations for reports of early government surveys. I especially want to thank Robert P. Reynolds and an anonymous reviewer for their corrections and comments on an earlier draft of this manuscript that greatly improved this publication. I am also grateful to the following colleagues at other institutions for their help in tracking down and providing information on type specimens in their care: Tom Anton (CHAS), Christopher Austin (LSUMZ), Federico Bolaños (UCR), George Bradley (UAZ), Janalee Caldwell (OMNH), John M. Condit (OSUM), Trey Crumpton (BU-MMC), Harold Dundee (TU), John Ferner (CMC), Alex Flemming (Stellenbosch University), John P. Friel (CU), Ned Gilmore (ANSP), Bradford Hollingsworth (SDNHM), Mariko Kageyama (UCM), Gunther Köhler (SMF), Travis J. LaDuc (UTA), Christine Mayer (UIMNH), Christy M. McCain (UCM), Jim McGuire (MVZ), Richard Montanucci (Clemson University, South Carolina), Scott M. Moody (OUVC), Annemarie Ohler (MNHN), Christopher A. Phillips (UIMNH), José P. Pombal Jr. (Museu Nacional, Universidade Federal do Rio de Janeiro, Brazil), Alan Resetar (FMNH), Dawn Roberts (CHAS), Stephen P. Rogers (CM), Jose Rosado (MCZ), Al Sanders (ChM), Enrique Santoyo-Brito (UIMNH), Gregory Schneider (UMMZ), Gary Shugart (PSM), Skip Skidmore (BYU), Carol Spencer (MVZ), Bryan Stuart (NCSM), and Mark Wilkinson (Natural History Museum, London).

References

- Adler, K. K. 1976. New Genera and Species Described in Holbrook's "North American Herpetology." In *North American Herpetology; or, A Description of the Reptiles Inhabiting the United States*, by J. E. Holbrook, pp. xxix–xliii. Facsimile Reprints in Herpetology. [Athens, Ohio?]: Society for the Study of Amphibian and Reptiles. [Reprint of 2nd ed., 1842.]
- Adler, K. K. 1996. The Salamanders of Guerrero, Mexico, with Descriptions of Five New Species of *Pseudoeurycea* (Caudata: Plethodontidae). *Occasional Papers of the Museum of Natural History, University of Kansas*, 177: 1–28.
- Adler, K. K., and D. M. Dennis. 1962. *Plethodon longicrus*, a New Salamander (Amphibia: Plethodontidae) from North Carolina. *Ohio Herpetological Society Special Publication*, 4: 1–14.
- Anderson, J. D. 1961. The Life History and Systematics of *Ambystoma rosaceum*. *Copeia*, 1961(4): 371–377. <https://doi.org/10.2307/1439575>
- Baird, S. F. 1850 [1849]. Descriptions of Four New Species of North American Salamanders, and One New Species of Scink. *Journal of the Academy of Natural Sciences of Philadelphia*, ser. 2, 1: 292–294.
- Baird, S. F. 1859a [1857]. Report on the Reptiles Collected on the Survey. In *Reports of Explorations and Surveys, to Ascertain the Most Practicable and Economical Route for a Railroad from the Mississippi River to the Pacific Ocean, Made under the Direction of the Secretary of War, in 1853–4*, Volume 10, Part 4, no. 4, pp. 9–13. Washington, D.C.: Beverley Tucker.
- Baird, S. F. 1859b. *Reptiles of the Boundary. United States and Mexican Boundary Survey*, Volume 2, Part 2. 34th Cong., 1st Sess., Exec. Doc. 108.
- Baird, S. F. 1859c. *Siredon lichenoides*,? In Cooper (1859: 306).
- Baird, S. F. 1860. *Siredon lichenoides*,? In Cooper (1960: 306).
- Baird, S. F. 1868a. *Amblystoma obscurum*. In A Review of the Species of the Amblystomatidae, by E. D. Cope. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 19: 192.
- Baird, S. F. 1868b. *Amblystoma paroticum*. In A Review of the Species of the Amblystomatidae, by E. D. Cope. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 19: 200–201.
- Baird, S. F. 1868c. *Plethodon intermedius*. In A Review of the Species of the Amblystomatidae, by E. D. Cope. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 19: 209–210.
- Baird, S. F. 1889a. *Spelerpes bilineatus borealis*. In The Batrachia of North America, by E. D. Cope. *Bulletin of the United States National Museum*, 34: 165.
- Baird, S. F. 1889b. *Spelerpes ruber sticticeps*. In The Batrachia of North America, by E. D. Cope. *Bulletin of the United States National Museum*, 34: 178.
- Baird, S. F., and C. Girard. 1852a. Characteristics of Some New Reptiles in the Museum of the Smithsonian Institution. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 6: 68–70.
- Baird, S. F., and C. Girard. 1852b. Characteristics of Some New Reptiles in the Museum of the Smithsonian Institution. Third Part. Containing the Batrachians in the Collection Made by J. H. Clark, Esq., under Col. J. D. Graham, on the United States and Mexican Boundary. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 6: 173.
- Baird, S. F., and C. Girard. 1852c. 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: 174–177.
- Baird, S. F., and C. Girard. 1853. List of Reptiles Collected in California by Dr. John L. Le Conte, with Descriptions of New Species. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 6: 300–302.
- Barbour, R. W. 1950. A New Subspecies of the Salamander *Desmognathus fuscus*. *Copeia*, 1950(4): 277–278. <https://doi.org/10.2307/1437906>

- Barbour, T., and A. Loveridge. 1928. A Comparative Study of the Herpetological Fauna of the Uluguru and Usambara Mountains, Tanganyika Territory with Descriptions of New Species. *Memoirs of the Museum of Comparative Zoology*, 50(2): 87–265. <https://doi.org/10.5962/bhl.title.49344>
- Barbour, T., and A. Loveridge. 1929. Typical Reptiles and Amphibians in the Museum of Comparative Zoology. *Bulletin of the Museum of Comparative Zoology*, 69(10): 205–360.
- Bart, H. L., Jr., M. A. Bailey, R. E. Ashton Jr., and P. E. Moler. 1997. Taxonomic and Nomenclatural Status of the Upper Black Warrior River Waterdog. *Journal of Herpetology* 31(2): 192–201. <https://doi.org/10.2307/1565387>
- Besharse, J. C., and J. R. Holsinger. 1977. *Gyrinophilus subterraneus*, a New Troglolitic Salamander from Southern West Virginia. *Copeia*, 1977(4): 624–634. <https://doi.org/10.2307/1443160>
- Bishop, S. C. 1928a. A New Subspecies of the Red Salamander from Louisiana. *Occasional Papers of the Boston Society of Natural History*, 5: 247–249.
- Bishop, S. C. 1928b. Notes on Some Amphibians and Reptiles from the Southeastern States with a Description of a New Salamander from North Carolina. *Journal of the Elisha Mitchell Scientific Society*, 43(3–4): 153–170.
- Bishop, S. C. 1934. Description of a New Salamander from Oregon, with Notes on Related Species. *Proceedings of the Biological Society of Washington*, 47: 169–172.
- Bishop, S. C. 1937. A Remarkable New Salamander from Oregon. *Herpetologica*, 1(3): 92–95.
- Bishop, S. C. 1941. Notes on Salamanders with Descriptions of Several New Forms. *Occasional Papers of the Museum of Zoology, University of Michigan*, 451: 1–21.
- Bishop, S. C. 1942. An Older Name for a Recently Described Salamander. *Copeia*, 1942(4): 256. <https://doi.org/10.2307/1438017>
- Bishop, S. C. 1943. *Handbook of Salamanders; the Salamanders of the United States, of Canada, and of Lower California*. Ithaca, N.Y.: Comstock Publishing.
- Bishop, S. C. 1944. A New Neotenic Plethodont Salamander, with Notes on Related Species. *Copeia*, 1944(1): 1–5. <https://doi.org/10.2307/1438241>
- Bishop, S. C., and B. O. Valentine. 1950. A New Species of *Desmognathus* from Alabama. *Copeia*, 1950(1): 39–43. <https://doi.org/10.2307/1437580>
- Bishop, S. C., and M. R. Wright. 1937. A New Neotenic Salamander from Texas. *Proceedings of the Biological Society of Washington*, 50: 141–144.
- Blatchley, W. S. 1893. On a Collection of Batrachians and Reptiles from Mount Orizaba, Mexico, with Descriptions of Two New Species. *Proceedings of the United States National Museum*, 16(922): 37–42. <https://doi.org/10.5479/si.00963801.922.37>
- Bogert, C. M. 1967. New Salamanders of the Plethodontid Genus *Pseudoeurycea* from the Sierra Madre del Sur of Mexico. *American Museum Novitates*, 2314: 1–27.
- Bonett, R. M., and P. T. Chippindale. 2004. Speciation, Phylogeography and Evolution of Life History and Morphology in Plethodontid Salamanders of the *Eurycea multiplicata* complex. *Molecular Ecology*, 13(5): 1189–1203. <https://doi.org/10.1111/j.1365-294X.2004.02130.x>
- Boulenger, G. A. 1882. *Catalogue of the Batrachia Salientia s. Ecaudata in the Collection of the British Museum*. 2nd ed. London: Trustees of the British Museum of Natural History.
- Brame, A. H., Jr. 1967. A List of the World's Recent and Fossil Salamanders. *Herpeton*, 2(1): 1–26.
- Brame, A. H., Jr. 1968. Systematics and Evolution of the Mesoamerican Salamander Genus *Oedipina*. *Journal of Herpetology*, 2(1/2): 1–64. <https://doi.org/10.2307/1563029>
- Brame, A. H., Jr., and K. F. Murray. 1968. Three New Slender Salamanders (Batrachoseps) with a Discussion of Relationships and Speciation within the Genus. *Science Bulletin, Natural History Museum of Los Angeles County*, 4: 1–35.
- Brame, A. H., Jr., and D. B. Wake. 1962. A New Plethodontid Salamander (Genus *Magnadigita*) from the Cordillera Occidental of Colombia. *Proceedings of the Biological Society of Washington*, 75: 71–76. <https://doi.org/10.2307/1439493>
- Brame, A. H., Jr., and D. B. Wake. 1963. The Salamanders of South America. *Contributions in Science, Natural History Museum of Los Angeles County*, 69: 1–72. <https://doi.org/10.5962/p.241017>
- Brandon, R. A. 1966a. Systematics of the Salamander Genus *Gyrinophilus*. *Illinois Biological Monographs*, 35: 1–86. <https://doi.org/10.5962/bhl.title.50088>
- Brandon, R. A. 1966b. *Phaeognathus hubrichti*. *Catalogue of American Amphibians and Reptiles*, 26: 1–2.
- Brandon, R. A. 1988. Nomenclatural and Taxonomic Status of *Ambystoma lacustris*. *Herpetologica*, 44(4): 427–430.
- Brandon, R. A. 1989. Natural History of the Axolotl and Its Relationship to Other Ambystomatid Salamanders. In *Developmental Biology of the Axolotl*, ed. J. B. Armstrong and G. M. Malacinski, pp. 13–21. Oxford, U.K.: Oxford University Press.
- Brandon, R. A. 1992. *Ambystoma dumerilii*. *Catalogue of American Amphibians and Reptiles*, 532: 1–3.
- Brandon, R. A., and J. H. Black. 1970. The Taxonomic Status of *Typhlotriton braggi* (Caudata, Plethodontidae). *Copeia*, 1970(2): 388–391. <https://doi.org/10.2307/1441675>
- Brandon, R. A., E. J. Maruska, and W. T. Rumph. 1982 [1981]. A New Species of Neotenic *Ambystoma* (Amphibia, Caudata) Endemic to Laguna Alchichica, Puebla, Mexico. *Bulletin of the Southern California Academy of Sciences*, 80(3): 112–125.
- Brcko, I. C., M. S. Hoogmoed, and S. Neckel-Oliveira. 2013. Taxonomy and Distribution of the Salamander Genus *Bolitoglossa* Dumril, Bibron & Duméril, 1854 (Amphibia, Caudata, Plethodontidae) in Brazilian Amazonia. *Zootaxa*, 3686(4): 401–431. <https://doi.org/10.11646/zootaxa.3686.4.1>
- Brimley, C. S. 1912. Notes on the Salamanders of the North Carolina Mountains with Descriptions of Two New Forms. *Proceedings of the Biological Society of Washington*, 25: 135–140.
- Brimley, C. S. 1924. The Water Dogs (*Necturus*) of North Carolina. *Journal of the Elisha Mitchell Scientific Society*, 11(3–4): 166–168.
- Brimley, C. S. 1927. An Apparently New Salamander (*Plethodon clemsonae*) from S. C. *Copeia*, no. 164: 73–75. <https://doi.org/10.2307/1435652>
- Brodie, E. D., Jr. 1970. Western Salamanders of the Genus *Plethodon*: Systematics and Geographic Variation. *Herpetologica*, 26(4): 468–516.
- Brodie, E. D., Jr. 1971. *Plethodon stormi*. *Catalogue of American Amphibians and Reptiles*, 103: 1–2.
- Brown, W. C., and S. C. Bishop. 1947. A New Species of *Desmognathus* from North Carolina. *Copeia*, 1947(3): 163–166. <https://doi.org/10.2307/1438842>
- Bumzahem, C. B., and H. M. Smith. 1955. Additional Notes and Descriptions of Plethodontid Salamanders from Mexico. *Herpetologica*, 11(1): 73–75.
- Burns, D. M. 1954. A New Subspecies of the Salamander *Plethodon vandykei*. *Herpetologica*, 10(2): 83–87.
- Burns, D. M. 1962. The Taxonomic Status of the Salamander *Plethodon vandykei larselli*. *Copeia*, 1962(1): 177–181. <https://doi.org/10.2307/1439494>
- Camp, C. D. 2004. *Desmognathus folkertsi* Camp, Tilley, Austin, and Marshall. *Catalogue of American Amphibians and Reptiles*, 782: 1–3.
- Camp, C. D., T. Lamb, and J. R. Milanovich. 2012. *Ursperles Camp, Peterman, Milanovich, Lamb, Maerz, and Wake*. *Catalogue of American Amphibians and Reptiles*, 885: 1–3.
- Camp, C. D., W. E. Peterman, J. R. Milanovich, T. Lamb, J. C. Maerz, and D. B. Wake. 2009. A New Genus and Species of Lungless Salamander (family Plethodontidae) from the Appalachian Highlands of the South-eastern United States. *Journal of Zoology*, 279(1): 86–94. <https://doi.org/10.1111/j.1469-7998.2009.00593.x>
- Camp, C. D., S. G. Tilley, R. M. Austin, and J. L. Marshall. 2002. A New Species of Black-Bellied Salamander (genus *Desmognathus*) from the Appalachian Mountains of Northern Georgia. *Herpetologica*, 58(4): 471–484. [https://doi.org/10.1655/0018-0831\(2002\)058\[0471:ANSOBS\]2.0.CO;2](https://doi.org/10.1655/0018-0831(2002)058[0471:ANSOBS]2.0.CO;2)
- Camp, C. L. 1915. *Batrachoseps major* and *Bufo cognatus californicus*, New Amphibia from Southern California. *University of California Publications in Zoology*, 12: 327–334.
- Campbell, J. A., E. N. Smith, J. W. Streicher, M. E. Acevedo, and E. D. Brodie Jr. 2010. New Salamanders (Caudata: Plethodontidae) from Guatemala, with Miscellaneous Notes on Known Species. *Miscellaneous Publications, Museum of Zoology, University of Michigan* 200: iv + 60 pp.
- Chippindale, P. T., A. H. Price, J. T. Wiens, and D. M. Hillis. 2000. Phylogenetic Relationships and Systematic Revision of Central Texas Hemidactylinae Plethodontid Salamanders. *Herpetological Monographs*, 14: 1–80. <https://doi.org/10.2307/1467045>
- Cochran, D. M. 1961. Type Specimens of Reptiles and Amphibians in the U.S. National Museum. *Bulletin of the United States National Museum*, 220: xv + 291 pp. <https://doi.org/10.5962/bhl.part.26967>
- Condit, J. M. 1958. True Type Locality of the Salamander *Gyrinophilus porphyriticus inagnoscus*. *Copeia*, 1958(1): 46–47. <https://doi.org/10.2307/1439541>
- Cooper, J. G. 1859. *Report upon the Reptiles Collected on the Survey*. In *The Natural History of Washington Territory, with Much Relating to Minnesota, Nebraska, Kansas, Oregon, and California, between the Thirty-Sixth and Forty-Ninth Parallels of Latitude, Being Those Parts of the Final Reports on the Survey of the Northern Pacific Railroad Route, Containing the Climate and Physical Geography, with Full Catalogues and Descriptions of the Plants and Animals Collected from 1853 to 1857*, ed. J. G. Cooper and G. Suckley, pp. 292–306. New York: Baillière Brothers. <https://doi.org/10.5962/bhl.title.41313>

- Cooper, J. G. 1860. Report upon the Reptiles Collected on the Survey. In *Reports of Explorations and Surveys to Ascertain the Most Practicable and Economical Route for a Railroad from the Mississippi River to the Pacific Ocean*, Volume 12, Part 2, pp. 292–306. 36th Cong., 1st Sess., Exec. Doc. 56.
- Cope, E. D. 1863. On Trachycephalus, Scaphiopus and Other American Batrachia. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 15: 43–54.
- Cope, E. D. 1865. Third Contribution to the Herpetology of Tropical America. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 17: 185–198.
- Cope, E. D. 1866. Fourth Contribution to the Herpetology of Tropical America. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 18: 123–132.
- Cope, E. D. 1868a [1867]. A Review of the Species of the Amblystomidae. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 19: 166–211.
- Cope, E. D. 1868b. 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: 96–140.
- Cope, E. D. 1869. A Review of the Species of Plethodontidae and Desmognathidae. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 21: 93–118.
- Cope, E. D. 1874. On Some Batrachia and Nematognathi Brought from the Upper Amazon by Prof. Orton. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 26: 120–137.
- Cope, E. D. 1877. Tenth Contribution to the Herpetology of Tropical America. *Proceedings of the American Philosophical Society*, 17: 85–98.
- Cope, E. D. 1880. On the Zoological Position of Texas. *Bulletin of the United States National Museum*, 17: 1–51. <https://doi.org/10.5479/si.03629236.17>
- Cope, E. D. 1886. Synonymic List of the North American Species of *Bufo* and *Rana*, with Descriptions of Some New Species of Batrachia, from Specimens in the National Museum. *Proceedings of the American Philosophical Society*, 23: 514–526.
- Cope, E. D. 1889. The Batrachia of North America. *Bulletin of the United States National Museum*, 34: 1–525. <https://doi.org/10.5962/bhl.title.38254>
- Cusi, J. C., L. A. G. Gagliardi-Urrutia, I. C. Brcko, D. B. Wake, and R. von May. 2020. Taxonomic Status of the Neotropical Salamanders *Bolitoglossa altamazonica* and *Bolitoglossa peruviana* (Amphibia: Caudata: Plethodontidae), with the Description of a New Species from Northern Peru. *Zootaxa*, 4834: 365–406. <https://doi.org/10.11646/zootaxa.4834.3.3>
- Darda, D. M. 1994. Allozyme Variation and Morphological Evolution among Mexican Salamanders of the Genus *Chiropterotriton* (Caudata: Plethodontidae). *Herpetologica*, 50(2): 167–184.
- Darling, D. M., and H. M. Smith. 1954. A Collection of Reptiles and Amphibians from Eastern Mexico. *Transactions of the Kansas Academy of Science*, 57(2): 180–195. <https://doi.org/10.2307/3626018>
- Daugherty, C. H., F. W. Allendorf, W. W. Dunlap, and K. L. Knudsen. 1983. Systematic Implications of Geographic Patterns of Genetic Variation in the Genus *Dicamptodon*. *Copeia*, 1983(3): 679–691. <https://doi.org/10.2307/1444332>
- David, A. 1872 [1871]. Rapport sur un voyage au Thibet. *Nouvelles Archives du Muséum d'Histoire Naturelle de Paris*, 7(5): 75–100.
- De Kay, J. E. 1842a. *Salamandra granulata*. In *North American Herpetology; or, A Description of the Reptiles Inhabiting the United States*, by J. E. Holbrook, 2nd ed., Volume 5, pp. 63–64, plate 20. Philadelphia: J. Dobson. <https://doi.org/10.5962/p.326877>
- De Kay, J. E. 1842b. *Zoology of New York; or, The New York Fauna*. Part 3: *Reptiles and Amphibia*. Albany, N.Y.: Carroll and Cook.
- de l'Isle, A. d. D. 1862. Notice zoologique sur un nouveau Batracien urodele de France (*Triton blasii*). *Annales de Sciences Naturelles*, Paris, 4th ser., 17: 363–371.
- Dugès, A. 1870. Una nueva especie de ajolote. *La Naturaleza*, 1: 241–244.
- Dugès, A. A. D. 1888. Erpetología del Valle de México. *La Naturaleza*, ser. 2, 1: 97–146.
- Dugès, A. A. D. 1895. *Description d'un Axolotl des Montagnes de las Cruces* (Amblystoma altamirani, A. Dugès). [Mexico]: Institut Médico-Nacional, Imprimerie du Ministère de Fomento.
- Duméril, A. M. C., G. Bibron, and A. H. A. Duméril. 1854. *Erpétologie Générale ou Histoire Naturelle Complète des Reptiles*. vol. 9, pp. i–xx, 1–440, and Atlas, pp. 1–24, pls. 1–108. Paris: Librairie Encyclopedique de Roret.
- Duncan, R., and R. Highton. 1979. Genetic Relationships of the Eastern Large *Plethodon* of the Ouachita Mountains. *Copeia*, 1979(1): 95–110. <https://doi.org/10.2307/1443734>
- Dundee, H. A. 1950. Notes on the Type Locality of *Eurycea multiplicata* (Cope). *Herpetologica*, 6(2): 27–28.
- Dundee, H. A., and D. S. Dundee. 1965. Observations on the Systematics and Ecology of *Cryptobranchius* from the Ozark Plateaus of Missouri and Arkansas. *Copeia*, 1965(3): 369–370. <https://doi.org/10.2307/1440805>
- Dunn, E. R. 1916. Two New Salamanders of the Genus *Desmognathus*. *Proceedings of the Biological Society of Washington*, 29: 73–76.
- 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.
- Dunn, E. R. 1918. The Collection of Amphibia Caudata of the Museum of Comparative Zoology. *Bulletin of the Museum of Comparative Zoology*, 62(9): 446–471.
- Dunn, E. R. 1920. Notes on Two Pacific Coast Ambystomatidae. *Proceedings of the New England Zoological Club*, 7: 55–59. <https://doi.org/10.5962/bhl.part.12091>
- Dunn, E. R. 1922a. A New Salamander from Mexico. *Proceedings of the Biological Society of Washington*, 35: 5–6.
- Dunn, E. R. 1922b. Two New Insular *Batrachoseps*. *Copeia*, no. 109: 60–63. <https://doi.org/10.2307/1435922>
- Dunn, E. R. 1923a. II. New Species of *Hynobius* from Japan. *Proceedings of the California Academy of Sciences*, 4th ser., 12(2): 27–29.
- Dunn, E. R. 1923b. Mutanda *Herpetologica*. *Proceedings of the New England Zoological Club*, 8: 39–40. <https://doi.org/10.5962/bhl.part.4000>
- Dunn, E. R. 1923c. The Salamanders of the Family Hynobiidae. *Proceedings of the American Academy of Arts and Sciences*, 58: 445–523. <https://doi.org/10.2307/20026019>
- Dunn, E. R. 1924. New Salamanders of the Genus *Oedipus* with a Synoptical Key. Publication No. 221. *Field Museum of Natural History, Zoological Series*, 12(7): 95–100.
- Dunn, E. R. 1926a. *The Salamanders of the Family Plethodontidae*. Smith College Fiftieth Anniversary Publications 7. Northampton, Mass.: Smith College.
- Dunn, E. R. 1926b. The Status of *Siredon gracilis* Baird. *Copeia*, no. 154: 135–136. <https://doi.org/10.2307/1437298>
- Dunn, E. R. 1927. A New Mountain Race of *Desmognathus*. *Copeia*, no. 164: 84–86. <https://doi.org/10.2307/1435656>
- Dunn, E. R. 1928. Notes on Central American Caecilians. *Proceedings of the New England Zoological Club*, 10: 71–76.
- Dunn, E. R. 1929 [1928]. A New Salamander from Southern California. *Proceedings of the United States National Museum*, 74(2770): 1–3. <https://doi.org/10.5479/si.00963801.2770>
- Dunn, E. R. 1940. The Races of *Ambystoma tigrinum*. *Copeia*, 1940(3): 154–162. <https://doi.org/10.2307/1437975>
- Dunn, E. R. 1944. Notes on the Salamanders of the *Ambystoma gracile* group. *Copeia*, 1944(3): 129–130. <https://doi.org/10.2307/1437803>
- Dunn, E. R., and A. A. Heinze. 1933. A New Salamander from the Ouachita Mountains. *Copeia*, 1933(3): 121–122. <https://doi.org/10.2307/1436234>
- Eiselt, J., and B. Lanza. 1956. *Salamandra salamandra gigliolii*, subsp. nov. aus Italien. *Abhandlungen und Berichte für Naturkunde und Vorgeschichte, Museum für Kulturgeschichte Magdeburg*, 10(1): 3–11.
- Elias, P., and D. B. Wake. 1983. *Nyctanolis pernix*, a New Genus and Species of Plethodontid Salamander from Northwestern Guatemala and Chiapas, Mexico. In *Advances in Herpetology and Evolutionary Biology: Essays in Honor of Ernest E. Williams*, ed. G. J. Rhodin and K. Miyata, pp. 1–12. Cambridge, Mass.: Museum of Comparative Zoology.
- Eschscholtz, J. F. v. 1833. *Zoologischer Atlas, enthaltend Abbildungen und Beschreibungen neuer Thierarten, während des Flottcapitains von Kotzebue zweiter Reise um die Welt, auf Russisch-Kaiserlich Kriegsschupp Predpriaeti in den Jahren 1823–1826 . . . herausgegeben von D. Martin Heinrich Rathke*. Fünftes Heft. Berlin: G. Reimer. <https://doi.org/10.5962/bhl.title.38056>
- Feder, J. H., G. Z. Wurst, and D. B. Wake. 1978. Genetic Variation in Western Salamanders of the Genus *Plethodon*, and the Status of *Plethodon gordonii*. *Herpetologica*, 34(1): 65–69.
- Ferguson, D. E. 1961. The Geographic Variation of *Ambystoma macrodactylum* Baird, with the Description of Two New Subspecies. *American Midland Naturalist*, 65(2): 311–338. <https://doi.org/10.2307/2422958>
- Ferguson, D. E. 1963. *Ambystoma macrodactylum*. *Catalogue of American Amphibians and Reptiles*, 4: 1–2.
- Flores-Villela, O., and R. A. Brandon. 1992. *Siren lacertina* (Amphibia: Caudata) in Northeastern Mexico and Southern Texas. *Annals of the Carnegie Museum*, 61(4): 289–291.
- Fowler, H. W., and E. R. Dunn. 1917. Notes on Salamanders. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 69: 7–28.
- Freitag, G. E. 1962. Über die wassermolchgattungen *Paramesotriton* Chang 1935, *Pingia* Chang 1935 und *Hypselotriton* Wolterstorff 1934 (Salamandridae). *Mitteilungen aus dem Zoologischen Museum in Berlin*, 38: 451–459. <https://doi.org/10.1002/mmnz.4830380205>

- Frost, Darrel R. 2021. Amphibian Species of the World: An Online Reference. Version 6.1 (1 June 2022). <https://amphibiansoftheworld.amnh.org/index.php>. American Museum of Natural History, New York. <https://doi.org/10.5531/db.vz.0001>
- Fu, J., Y. Wang, X. Zeng, Z. Liu, and Y. Zheng. 2001. Genetic Diversity of Eastern *Batrachuperus* (Caudata: Hynobiidae). *Copeia*, 2001(4): 1100–1107. [https://doi.org/10.1643/0045-8511\(2001\)001\[1100:GDOEBC\]2.0.CO;2](https://doi.org/10.1643/0045-8511(2001)001[1100:GDOEBC]2.0.CO;2)
- Gaige, H. T. 1917. Description of a New Salamander from Washington. *Occasional Papers of the Museum of Zoology, University of Michigan*, 40: 1–3.
- García-París, M., G. Parra-Olea, A. H. Brame Jr., and D. B. Wake. 2002. Systematic Revision of the *Bolitoglossa mexicana* Group (Amphibia: Plethodontidae) with Description of a New Species from México. *Revista Espanola de Herpetologia*, 16: 43–71.
- García-París, M., G. Parra-Olea, and D. B. Wake. 2008. Description of a New Species of the *Bolitoglossa subpalmata* Group (Caudata: Plethodontidae) from Costa Rica. *Herpetological Journal*, 18(1): 23–31.
- García-París, M., and D. B. Wake. 2000. Molecular Phylogenetic Analysis of Relationships of the Tropical Salamander Genera *Oedipina* and *Nototriton*, with Descriptions of a New Genus and Three New Species. *Copeia*, 2000(1): 42–70. [https://doi.org/10.1643/0045-8511\(2000\)2000\[0042:MPAORO\]2.0.CO;2](https://doi.org/10.1643/0045-8511(2000)2000[0042:MPAORO]2.0.CO;2)
- Garman, H. 1896. *Diemyctylus viridescens* var. *vittatus*, a New Variety of the Red-Spotted Triton. *Journal of the Cincinnati Society of Natural History*, 19(2): 49–51.
- Garman, S. 1884. The North American Reptiles and Batrachians. A List of the Species Occurring North of the Isthmus of Tehuantepec, with References. *Bulletin of the Essex Institute*, 16: 1–46.
- Garnier, J. H. 1888. Synopsis of a Paper Read before the Biological Section by Dr. Garnier on a New Species of *Menobranchus*. *Proceedings of the Canadian Institute*, ser. 3, 5: 218–219.
- Gehlbach, F. R. 1959. New Plethodontid Salamanders of the Genus *Thorius* from Puebla, Mexico. *Copeia*, 1959(3): 203–206. <https://doi.org/10.2307/1440387>
- Gehlbach, F. R. 1966. Types and Type-Localities of Some Taxa in the Synonymy of *Ambystoma tigrinum* (Green). *Copeia*, 1966(4): 881–882. <https://doi.org/10.2307/1441423>
- Gehlbach, F. R. 1967. *Ambystoma tigrinum*. *Catalogue of American Amphibians and Reptiles*, 52: 1–4.
- Gibbes, L. R. 1850. On a New Species of *Menobranchus*, from South Carolina. *Proceedings of the American Association for the Advancement of Science*, 3: 159.
- Gibbes, L. R. 1853. Description (with Figure) of *Menobranchus punctatus*. *Boston Journal of Natural History*, 6: 369–373.
- Gilliams, J. 1818. Descriptions of Two New Species of Linnaean Lacerta. *Journal of the Academy of Natural Sciences of Philadelphia*, 1: 460–462.
- Girard, C. 1856. On a New Genus and Species of Urodela, from the Collections of the U.S. Expl. Exped., under Comm. Charles Wilkes, U.S.N. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 8: 140–141.
- 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.
- Goin, C. J. 1942. Art. IX. Description of a New Race of *Siren intermedia* Le Conte. *Annals of the Carnegie Museum*, 29(9): 211–217.
- Goin, C. J. 1950. A Study of the Salamander, *Ambystoma cingulatum*, with the Description of a New Subspecies. *Annals of the Carnegie Museum*, 31(14): 299–320.
- Goin, C. J. 1957. Description of a New Salamander of the Genus *Siren* from the Rio Grande. *Herpetologica*, 13(1): 37–42. <https://doi.org/10.2307/1439392>
- Goin, C. J., and J. W. Crenshaw. 1949. Description of a New Race of the Salamander *Pseudobranchius striatus* (Le Conte). *Annals of the Carnegie Museum*, 31(10): 277–280.
- Good, D. A. 1989. Hybridization and Cryptic Species in *Dicamptodon* (Caudata: Dicamptodontidae). *Evolution*, 43(4): 728–744. <https://doi.org/10.1111/j.1558-5646.1989.tb05172.x>
- Green, J. 1818. Descriptions of Several Species of North American Amphibia, Accompanied with Observations. *Journal of the Academy of Natural Sciences of Philadelphia*, 1: 348–359.
- Green, J. 1825. Description of a New Species of Salamander. *Journal of the Academy of Natural Sciences of Philadelphia*, 5: 116–118.
- Green, J. 1827. An Account of Some New Species of Salamanders. *Contributions of the Maclurian Lyceum to the Arts and Sciences*, 1(1): 3–8.
- Green, J. 1831. Descriptions of Two New Species of Salamander. *Journal of the Academy of Natural Sciences of Philadelphia*, 6: 253–255.
- Grinnell, J., and C. L. Camp. 1917. A Distributional List of the Amphibians and Reptiles of California. *University of California Publications in Zoology*, 17: 127–208.
- Grobman, A. B. 1943. Notes on Salamanders with the Description of a New Species of *Cryptobranchus*. *Occasional Papers of the Museum of Zoology, University of Michigan*, 470: 1–12.
- Grobman, A. B. 1944. The Distribution of the Salamanders of the Genus *Plethodon* in Eastern United States and Canada. *Annals of the New York Academy of Sciences*, 45(7): 261–316. <https://doi.org/10.1111/j.1749-6632.1944.tb47954.x>
- Grobman, A. B. 1945. The Identity of *Desmognathus phoca* (Matthes) and of *Desmognathus monticola* Dunn. *Proceedings of the Biological Society of Washington*, 58: 39–43.
- Grobman, A. B. 1949. Some Recent Collections of *Plethodon* from Virginia with the Description of a New Form. *Proceedings of the Biological Society of Washington*, 62: 135–142.
- Guibé, J. 1950 [1948]. *Catalogue des Types d'Amphibiens du Muséum National d'Histoire Naturelle*. Paris: Imprimerie Nationale.
- Gunter, G., and W. E. Brode. 1964. *Necturus* in the State of Mississippi, with Notes on Adjacent Areas. *Herpetologica*, 20(2): 114–126.
- Guttman, S. I., A. A. Karlin, and G. M. Labanick. 1978. A Biochemical and Morphological Analysis of the Relationship between *Plethodon longicrus* and *Plethodon yonahlossee* (Amphibia, Urodela, Plethodontidae). *Journal of Herpetology*, 12(4): 445–454. <https://doi.org/10.2307/1563348>
- Guyer, C., C. M. Murray, H. L. Bart Jr., B. I. Crother, R. E. Chabarria, M. A. Bailey, and K. Dunn. 2020. Colour and Size Reveal Hidden Diversity of *Necturus* (Caudata: Proteidae) from the Gulf Coastal Plain of the United States. *Journal of Natural History*, 54: 15–51. <https://doi.org/10.1080/00222933.2020.1736677>
- Hallowell, E. 1849 [1848]. Description of a New Salamander from Upper California. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 4: 126. <https://doi.org/10.1080/03745486009494804>
- Hallowell, E. 1853. On a New Genus and Three New Species of Reptiles Inhabiting North America. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 6: 206–209.
- Hallowell, E. 1854. Report on the Reptiles. In *Report of an Expedition Down the Zuni and Colorado Rivers*, ed. L. Sitgreaves, pp. 106–147. U.S. Senate, 33rd Cong., 1st Sess., Exec. Doc. 59.
- Hallowell, E. 1858a [1857]. Descriptions of Several New North American Reptiles. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 9: 215–216.
- Hallowell, E. 1858b. On the Caducibranchiate Urodele batrachians. *Journal of the Academy of Natural Sciences of Philadelphia*, ser. 2, 3: 337–366.
- Hallowell, E. 1861 [1860]. Report upon the Reptilia of the North Pacific Exploring Expedition, under Command of Capt. John Rogers, U.S.N. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 12: 480–510.
- Hanken, J. 1983. Genetic Variation in a Dwarfed Lineage, the Mexican Salamander Genus *Thorius* (Amphibia: Plethodontidae): Taxonomic, Ecologic and Evolutionary Implications. *Copeia*, 1983(4): 1051–1073. <https://doi.org/10.2307/1445108>
- Hanken, J., and D. B. Wake. 1998. Biology of Tiny Animals: Systematics of the Minute Salamanders (*Thorius*: Plethodontidae) from Veracruz and Puebla, Mexico, with Descriptions of Five New Species. *Copeia*, 1998(2): 312–345. <https://doi.org/10.2307/1447427>
- Hardy, J. D., Jr., and J. D. Anderson. 1970. *Ambystoma mabeei*. *Catalogue of American Amphibians and Reptiles*, 81: 1–2.
- Harlan, R. 1825. Description of a Variety of the *Coluber fulvius*, Linn., a New Species of *Scincus*, and Two New Species of *Salamandra*. *Journal of the Academy of Natural Sciences of Philadelphia*, 5: 154–158.
- Harlan, R. 1827. Genera of North American Reptilia, and a Synopsis of the Species. *Journal of the Academy of Natural Sciences of Philadelphia*, 5: 317–372.
- Harlan, R. 1829. Description of a New Species of *Salamandra*. *Journal of the Academy of Natural Sciences of Philadelphia*, 6: 101.
- Harrison, J. R. 1992. *Desmognathus aeneus*. *Catalogue of American Amphibians and Reptiles*, 534: 1–4.
- Harrison, J. R. 2000. *Desmognathus wrighti*. *Catalogue of American Amphibians and Reptiles*, 704: 1–7.
- Harrison, J. R., and S. I. Guttman. 2003. A New Species of *Eurycea* (Caudata: Plethodontidae) from North and South Carolina. *Southeastern Naturalist*, 2: 159–178. [https://doi.org/10.1656/1528-7092\(2003\)002\[0159:ANSOEC\]2.0.CO;2](https://doi.org/10.1656/1528-7092(2003)002[0159:ANSOEC]2.0.CO;2)
- Hay, O. P. 1885. Description of a New Species of *Amblystoma* (*Amblystoma Copeianum*) from Indiana. Publication No. 512. *Proceedings of the United States National Museum*, 8(14): 208–213. <https://doi.org/10.5479/si.00963801.8-512.209>

- Hecht, M. K. 1958. A Synopsis of the Mud Puppies of Eastern North America. *Proceedings of the Staten Island Institute of Arts and Sciences*, 21(1): 5–38.
- Highton, R. 1961. A New Genus of Lungless Salamander from the Coastal Plain of Alabama. *Copeia*, 1961(1): 65–68. <https://doi.org/10.2307/1440175>
- Highton, R. 1962. Revision of North American Salamanders of the Genus *Plethodon*. *Bulletin of the Florida State Museum*, 6(3): 235–367.
- Highton, R. 1972 [1971]. Distributional Interactions among Eastern North American Salamanders of the Genus *Plethodon*. In *The Distributional History of the Biota of the Southern Appalachians*, Part 3: Vertebrates, ed. C. Holt and R. A. Paterson, pp. 139–188. Research Division Monograph 4. Blacksburg: Virginia Polytechnic Institute.
- Highton, R. 1979. A New Cryptic Species of Salamander of the Genus *Plethodon* from the Southeastern United States (Amphibia: Plethodontidae). *Brimleyana*, 1: 31–36.
- Highton, R. 1984 [1983]. A New Species of Woodland Salamander of the *Plethodon glutinosus* Group from the Southern Appalachian Mountains. *Brimleyana*, 9: 1–20.
- Highton, R. 1986. *Plethodon fourchensis* Duncan and Highton. Fourche Mountain Salamander. *Catalogue of American Amphibians and Reptiles*, 391: 1–2.
- Highton, R. 1989. Biochemical Evolution in the Slimy Salamanders of the *Plethodon glutinosus* Complex in the Eastern United States. Part I. Geographic Protein Variation. *Illinois Biological Monographs*, 57: 1–78. <https://doi.org/10.5962/bhl.title.49905>
- Highton, R. 1997. Geographic Protein Variation and Speciation in the *Plethodon dorsalis* complex. *Herpetologica*, 53(3): 345–356.
- Highton, R. 1999. Geographic Protein Variation and Speciation in the Salamanders of the *Plethodon cinereus* Group with the Description of Two New Species. *Herpetologica*, 55(1): 43–90.
- Highton, R. 2004. A New Species of Woodland Salamander of the *Plethodon cinereus* Group from the Blue Ridge Mountains of Virginia. *Jeffersoniana*, 22: 1–22.
- Highton, R., R. M. Bonett, and E. L. Jockusch. 2017. Caudata - Salamanders. In *Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding*, 8th ed., ed. B. I. Crother. *Herpetological Circular*, 43: 25–37.
- Highton, R., and A. H. Brame. 1965. *Plethodon stormi* species. nov. *Pilot Register of Zoology*, Card 20: 1–2.
- Highton, R., and A. B. Grobman. 1956. Two New Salamanders of the Genus *Plethodon* from the Southeastern United States. *Herpetologica*, 12(3): 185–188. <https://doi.org/10.5962/bhl.title.34477>
- Highton, R., and A. Larson. 1979. The Genetic Relationships of the Salamanders of the Genus *Plethodon*. *Systematic Zoology*, 28(4): 579–599. <https://doi.org/10.2307/2412569>
- Highton, R., and J. R. MacGregor. 1983. *Plethodon kentucki* Mittleman: A Valid Species of Cumberland Plateau Woodland Salamander. *Herpetologica*, 39(3): 189–200.
- Highton, R., and R. B. Peabody. 2000. Geographical Protein Variation and Speciation in Salamanders of the *Plethodon jordani* and *Plethodon glutinosus* Complexes in the Southern Appalachian Mountains with the Description of Four New Species. In *The Biology of Plethodontid Salamanders*, ed. R. C. Bruce, R. G. Jaeger, and L. D. Houck, pp. 31–93. New York: Kluwer Academic/Plenum Publishers. https://doi.org/10.1007/978-1-4615-4255-1_3
- Highton, R., and R. D. Worthington. 1967. A New Salamander of the Genus *Plethodon* from Virginia. *Copeia*, 1967(3): 617–626. <https://doi.org/10.2307/1442241>
- Hoffman, R. L. 1951. A New Subspecies of Salamander from Virginia. *Journal of the Elisha Mitchell Scientific Society*, 67(2): 249–253.
- Holbrook, J. E. 1842. *North American Herpetology; or, A Description of the Reptiles Inhabiting the United States*. 2nd ed. Volume 5. Philadelphia: J. Dobson. <https://doi.org/10.5962/p.326764>
- Howard, J. H., R. L. Raesly, and E. L. Thompson. 1984. The Electrophoretic Detection of Unique Gene Pools: With Emphasis on the Cave Salamander *Gyrinophilus subterraneus*. In *Proceedings of the Workshop on Nongame Species and Ecological Communities*, ed. W. C. McComb, pp. 318–326. Lexington: Department of Forestry, University of Kentucky.
- Howard, J. H., L. W. Seeb, and R. Wallace. 1993. Genetic Variation and Population Divergence in the *Plethodon vandykei* Species Group (Caudata: Plethodontidae). *Herpetologica*, 49(2): 238–247.
- Inger, R. F. 1947. Preliminary Survey of the Amphibians of the Riukiu Islands. *Fieldiana: Zoology*, 32(5): 297–352. <https://doi.org/10.5962/bhl.title.2991>
- International Commission on Zoological Nomenclature. 1990. Opinion 1605. *Thorius pennatulius* Cope, 1869 (Amphibia, Caudata): Specific Name Conserved. *Bulletin of Zoological Nomenclature* 47: 168.
- International Commission on Zoological Nomenclature. 1999. *International Code of Zoological Nomenclature*, 4th ed. London: International Trust for Zoological Nomenclature.
- Ireland, P. H. 1979. *Eurycea longicauda*. *Catalogue of American Amphibians and Reptiles*, 221: 1–4.
- Irschick, D. J., and H. B. Shaffer. 1997. The Polytypic Species Revisited: Morphological Differentiation among Tiger Salamanders (*Ambystoma tigrinum*) (Amphibia: Caudata). *Herpetologica*, 53(1): 30–49.
- Jensen, J. B., and C. D. Camp. 2004. *Plethodon petraeus* Wynn, Highton, and Jacobs. *Catalogue of American Amphibians and Reptiles*, 783: 1–2.
- Jacobs, J. F. 1987. A Preliminary Investigation of Geographic Genetic Variation and Systematic of the Two-Lined Salamander, *Eurycea bislineata* (Green). *Herpetologica*, 43(4): 423–446.
- Jockusch, E. L., and D. B. Wake. 2002. Falling Apart and Merging: Diversification of Slender Salamanders (Plethodontidae: *Batrachoseps*) in the American West. *Biological Journal of the Linnean Society*, 76(3): 361–391. <https://doi.org/10.1046/j.1095-8312.2002.00071.x>
- Jockusch, E. L., D. B. Wake, and K. P. Yaney. 1998. New Species of Slender Salamanders, *Batrachoseps* (Amphibia: Plethodontidae), from the Sierra Nevada of California. *Contributions in Science, Natural History Museum of Los Angeles County*, 472: 1–17. <https://doi.org/10.5962/p.208101>
- Juterbock, J. E. 1984. Evidence for the Recognition of Specific Status for *Desmognathus welteri*. *Journal of Herpetology*, 18(3): 240–255. <https://doi.org/10.2307/1564077>
- King, W. 1936. A New Salamander (*Desmognathus*) from the Southern Appalachians. *Herpetologica*, 1(2): 57–60.
- Kluge, A. G. 1983. Type-Specimens of Amphibians in the University of Michigan Museum of Zoology. *Miscellaneous Publications of the Museum of Zoology, University of Michigan*, 166: 1–68.
- Krebs, S. L., and R. A. Brandon. 1984. A New Species of Salamander (Family Ambystomatidae) from Michoacan, Mexico. *Herpetologica*, 40(3): 238–245.
- Lara-Góngara, G. 2003. A New Cryptic Species of *Pseudoeurycea* (Amphibia, Caudata: Plethodontidae) of the *leprosa* Group from Central Mexico. *Bulletin of the Maryland Herpetological Society*, 39: 21–52.
- Latreille, P. A. 1800. *Histoire naturelle des salamandres de France: précédée d'un tableau méthodique des autres reptiles indigènes*. Paris: Chez Villier. <https://doi.org/10.5962/bhl.title.5045>
- Laurenti, J. N. 1768. *Specimen Medicum, Exhibens Synopsin Reptilium Emendatum cum Experimentis Circa Venena et Antidota Reptilium Austriacorum*. Vienna: Joan. Thom. nob. de Trattner. <https://doi.org/10.5962/bhl.title.5108>
- Lazell, J. D. 1971. Taxonomic Recognition of the Triploid *Ambystoma* Salamanders. *Herpetological Review*, 3: 53–54.
- Liner, E. A. 1994. Scientific and Common Names for the Amphibians and Reptiles of Mexico in English and Spanish. *Herpetological Circular*, 23: v + 113 pp.
- Liu, C. 1950. Amphibians of Western China. *Fieldiana: Zoology Memoirs*, 2: 400 pp. <https://doi.org/10.5962/bhl.part.4737>
- Loveridge, A. 1935. Scientific Results of an Expedition to Rain Forest Regions in Eastern Africa. I. New Reptiles and Amphibians from East Africa. *Bulletin of the Museum of Comparative Zoology*, 79(1): 1–19.
- Lowe, C. H. 1954. A New Salamander (Genus *Ambystoma*) from Arizona. *Proceedings of the Biological Society of Washington*, 67: 243–246.
- Lowe, C. H. 1955. The Salamanders of Arizona. *Transactions of the Kansas Academy of Science*, 58(2): 237–251. <https://doi.org/10.2307/3625766>
- 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.
- Matsui, M., T. Sato, S. Tanabe, and T. Hayashi. 1992. Electrophoretic Analyses of Systematic Relationships and Status of Two Hynobiid Salamanders from Hokkaido (Amphibia: Caudata). *Herpetologica*, 48(4): 408–416.
- McCoy, C. J. 1992. Rediscovery of the Mud Salamander (*Pseudotriton montanus*, Amphibia, Plethodontidae) in Pennsylvania, with Restriction of Its Type Locality. *Journal of the Pennsylvania Academy of Science*, 66: 92–93.
- McCrane, J. R. 2006. New Species of *Oedipina* (Amphibia: Caudata) from Parque Nacional El Cusuco, Northwestern Honduras. *Journal of Herpetology*, 40(3): 292–293. [https://doi.org/10.1670/0022-1511\(2006\)40\[291:NSOAC\]2.0.CO;2](https://doi.org/10.1670/0022-1511(2006)40[291:NSOAC]2.0.CO;2)
- McCrane, J. R. 2008. *Bolitoglossa oresbia*. *Catalogue of American Amphibians and Reptiles*, 843: 1–2.
- McCrane, J. R., M. R. Espinal, and L. D. Wilson. 2005. New Species of Montaine Salamander of the *Bolitoglossa dummi* Group from Northern Comayagua, Honduras (Urodela: Plethodontidae). *Journal of Herpetology*, 39(1): 108–112. [https://doi.org/10.1670/0022-1511\(2005\)039\[0108:NSOMSO\]2.0.CO;2](https://doi.org/10.1670/0022-1511(2005)039[0108:NSOMSO]2.0.CO;2)

- McCranie, J. R., and J. H. Townsend. 2011. Description of a New Species of Worm Salamander (Caudata, Plethodontidae, *Oedipina*) in the Subgenus *Oedipinola* from the Central Portion of the Cordillera Nombre de Dios, Honduras. *Zootaxa*, 2990: 59–68.
- McCranie, J. R., D. R. Vieites, and D. B. Wake. 2008. Description of a New Divergent Lineage and Three New Species of Honduran Salamanders of the Genus *Oedipina* (Caudata, Plethodontidae). *Zootaxa*, 1930(1): 1–17. <https://doi.org/10.11646/zootaxa.1930.1.1>
- McCranie, J. R., and L. D. Wilson. 1995a. A New Species of Salamander of the *Bolitoglossa dunni* Group (Caudata: Plethodontidae) from Northern Honduras. *Herpetologica*, 51(2): 131–140.
- McCranie, J. R., and L. D. Wilson. 1995b. A New Species of the Genus *Bolitoglossa* (Caudata: Plethodontidae) from Parque Nacional El Cusuco, Honduras. *Journal of Herpetology*, 29(3): 447–452. <https://doi.org/10.2307/1564996>
- McCranie, J. R., and L. D. Wilson. 1997. Two New Species of Salamanders (Caudata: Plethodontidae) of the Genera *Bolitoglossa* and *Nototriton* from Parque Nacional La Muralla, Honduras. *Proceedings of the Biological Society of Washington*, 110(3): 366–372.
- McCranie, J. R., and L. D. Wilson. 2003. *Nototriton lignicola*. *Catalogue of American Amphibians and Reptiles*, 762: 1–2.
- McCranie, J. R., L. D. Wilson, and K. L. Williams. 1993. A New Species of *Oedipina* (Amphibia: Caudata: Plethodontidae) from Northern Honduras. *Proceedings of the Biological Society of Washington*, 106(2): 385–389.
- Means, D. B. 1993. *Desmognathus apalachicola*. *Catalogue of American Amphibians and Reptiles*, 556: 1–2.
- Means, D. B., and A. A. Karlin. 1989. A New Species of *Desmognathus* from the Eastern Gulf Coastal Plain. *Herpetologica*, 45(1): 37–46.
- Mecham, J. S. 1967. *Notophthalmus viridescens*. *Catalogue of American Amphibians and Reptiles*, 53: 1–4.
- Mitchell, R. W., and J. R. Reddell. 1965. *Eurycea tridentifera*, a New Species of Troglitic Salamander from Texas and a Reclassification of *Typhlomolge rathbuni*. *Texas Journal of Science*, 17(1): 12–27.
- Mittleman, M. B. 1942a. Notes on Salamanders of the Genus *Gyrinophilus*. *Proceedings of the New England Zoological Club*, 20: 25–42.
- Mittleman, M. B. 1942b. A New Long-Tailed *Eurycea* from Indiana, and Notes on the *longicauda* Complex. *Proceedings of the New England Zoological Club*, 21: 101–105.
- Mittleman, M. B. 1947. American Caudata. I. Geographic Variation in *Manculus quadridigitatus*. *Herpetologica*, 3(6): 209–224.
- Mittleman, M. B. 1948. American Caudata. II. Geographic Variation in *Ambystoma macrodactylum*. *Herpetologica*, 4(3): 82–95.
- Mittleman, M. B. 1949. American Caudata. VI. The Races of *Eurycea bislineata*. *Proceedings of the Biological Society of Washington*, 62: 89–96.
- Mittleman, M. B. 1951. American Caudata. VII. Two New Salamanders of the Genus *Plethodon*. *Herpetologica*, 7(3): 105–112.
- Mittleman, M. B. 1967 [1966]. *Eurycea bislineata*. *Catalogue of American Amphibians and Reptiles*, 45: 1–4.
- Mittleman, M. B., and H. G. Jopson. 1941. A New Salamander of the Genus *Gyrinophilus* from the Southern Appalachians. Publication No. 3638. *Smithsonian Miscellaneous Collections*, 101(2): 5 pp.
- Moler, P. E., and J. Kezer. 1993. Karyology and Systematics of the Salamander Genus *Pseudobranchius* (Sirenidae). *Copeia*, 1993(1): 39–47. <https://doi.org/10.2307/1446293>
- Moore, G. A., and R. C. Hughes. 1939. A New Plethodontid from Eastern Oklahoma. *American Midland Naturalist*, 22(3): 696–699. <https://doi.org/10.2307/2420347>
- Moore, G. A., and R. C. Hughes. 1941. A New Plethodontid Salamander from Oklahoma. *Copeia*, 1941: 139–142. <https://doi.org/10.2307/1437736>
- Mount, R. H. 1975. *The Reptiles and Amphibians of Alabama*. Auburn, Ala.: Auburn University, Agricultural Experiment Station.
- Muchmore, W. B. 1955. Brassy Flecking in the Salamander *Plethodon c. cinereus*, and the Validity of *Plethodon hulda*. *Copeia*, 1955(3): 170–172. <https://doi.org/10.2307/1440456>
- Myers, G. S., and A. E. Leviton. 1962. The Hong Kong Newt Described as a New Species. *Occasional Papers of the Division of Systematic Biology of Stanford University*, 10: 1–4.
- Neill, W. T. 1948. Salamanders of the Genus *Pseudotriton* from Georgia and South Carolina. *Copeia*, 1948(2): 134–136. <https://doi.org/10.2307/1438427>
- Neill, W. T. 1957. Objections to Wholesale Revision of Type Localities. *Copeia*, 1957(2): 140–141. <https://doi.org/10.2307/1439402>
- Netting, M. G., and C. J. Goin. 1942. Descriptions of Two New Salamanders from Peninsular Florida. *Annals of the Carnegie Museum*, 29(6): 175–196.
- Netting, M. G., and M. B. Mittleman. 1938. Description of *Plethodon richmondi*, a New Salamander from West Virginia and Ohio. *Annals of the Carnegie Museum*, 27(18): 287–293.
- Newman, W. B. 1954. A New Plethodontid Salamander from Southwestern Virginia. *Herpetologica*, 10(1): 9–14.
- Newman, W. B. 1955. *Desmognathus planiceps*, a New Salamander from Virginia. *Journal of the Washington Academy of Sciences*, 45(3): 83–86.
- Nicholls, J. C. 1949. A New Salamander of the Genus *Desmognathus* from East Tennessee. *Journal of the Tennessee Academy of Science*, 24(2): 127–129.
- Nishikawa, K., M. Matsui, H.-S. Yong, N. Ahmad, P. Yambun Imbun, D. M. Belabut, A. Sudin, A. Hamidy, N. L. Orlov, H. Ota, N. Yoshikawa, A. Tominaga, and T. Shimada. 2012. Molecular Phylogeny and Biogeography of Caecilians from Southeast Asia (Amphibia, Gymnophiona, Ichthyophiidae), with Special Reference to High Cryptic Species Diversity in Sundaland. *Molecular Phylogenetics and Evolution*, 63: 714–723. <https://doi.org/10.1016/j.ympev.2012.02.017>
- Noble, G. K. 1918. The Amphibians Collected by the American Museum Expedition to Nicaragua in 1916. *Bulletin of the American Museum of Natural History*, 38(10): 311–347.
- Nussbaum, R. A. 1970. *Dicamptodon copei*, n. sp., from the Pacific Northwest, U.S.A. (Amphibia: Caudata: Ambystomatidae). *Copeia*, 1970(3): 506–514. <https://doi.org/10.2307/1442278>
- Nussbaum, R. A. 1983. *Dicamptodon copei*. *Catalogue of American Amphibians and Reptiles*, 334: 1–2.
- Nussbaum, R. A. 1988. On the Status of *Copeotyphlinus syntremus*, *Gymnopsis oligozona*, and *Minascaecilia sartorial* (Gymnophiona, Caeciliidae): A Comedy of Errors. *Copeia*, 1988(4): 921–928. <https://doi.org/10.2307/1445715>
- Nussbaum, R. A., and H. Hinkel. 1994. Revision of East African Caecilians of the Genera *Afrocaecilia* Taylor and *Boulengerula* Tornier (Amphibia: Gymnophiona: Caeciliidae). *Copeia*, 1994(3): 750–760. <https://doi.org/10.2307/1447192>
- Nussbaum, R. A., and M. Wilkinson. 1989. On the Classification and Phylogeny of Caecilians (Amphibia: Gymnophiona), a Critical Review. *Herpetological Monographs*, 3: 1–42. <https://doi.org/10.2307/1466984>
- Parra-Olea, G., M. G. García-Castillo, S. M. Rovito, J. A. Maisano, J. Hanken, and D. B. Wake. 2020. Descriptions of Five New Species of the Salamander Genus *Chiropterotriton* (Caudata: Plethodontidae) from Eastern Mexico and the Status of Three Currently Recognized Taxa. *PeerJ*, 8(e8800): 1–71. <https://doi.org/10.7717/peerj.8800>
- Parra-Olea, G., M. G. García-París, and D. B. Wake. 2004. Molecular Diversification of Salamanders of the Tropical American Genus *Bolitoglossa* (Caudata: Plethodontidae) and Its Evolutionary and Biogeographical Implications. *Biological Journal of the Linnean Society*, 81(3): 325–346. <https://doi.org/10.1111/j.1095-8312.2003.00303.x>
- Pauly, G. B., O. Piskurek, and H. B. Shaffer. 2007. Phylogeographic Concordance in the Southeastern United States: The Flatwoods Salamander, *Ambystoma cingulatum*, as a Test Case. *Molecular Ecology*, 16(2): 415–429. <https://doi.org/10.1111/j.1365-294X.2006.03149.x>
- Peracca, M. G. 1886. Sulla bontà specifica del *Triton Blasii* de l'Isle e descrizione di una nuova forma ibrida di *Triton* francese. *Bollettino dei Musei di Zoologia e Anatomia Comparata della R. Università di Torino*, 1(12): 12. <https://doi.org/10.5962/bhl.part.4563>
- Peters, W. C. H. 1874. Über neue Amphibien (*Gymnopsis*, *Siphonops*, *Polypedates*, *Rhacophorus*, *Hyla*, *Clyclodus*, *Euprepes*, *Clemmys*). *Monatsberichte der Königlich Preussische Akademie des Wissenschaften zu Berlin*, 1874: 616–624.
- Peterson, H. W. 1952. A New Salamander from the Everglades of Southern Florida. *Herpetologica*, 8(3): 103–106.
- Petranks, J. W. 1998. *Salamanders of the United States and Canada*. Washington, D.C.: Smithsonian Institution Press.
- Phillips, C. A. 2009. *Herpetological Type-Specimens in the University of Illinois Museum of Natural History: An Update to the Primary Types*. Champaign: Illinois Natural History Survey, University of Illinois.
- Pope, C. H., and J. A. Fowler. 1949. A New Species of Salamander (*Plethodon*) from Southwestern Virginia. *Natural History Miscellaneous*, 47: 1–4.
- Pyron, R. A., and D. A. Beamer. 2020. The Herpetological Legacy of Jacob Green and the Nomenclature of Some North American Lizards and Salamanders. *Zootaxa*, 4838(2): 221–247. <https://doi.org/10.11646/zootaxa.4838.2.4>
- Pyron, R. A., and D. A. Beamer. 2022. Nomenclatural Solutions for Diagnosing 'Cryptic' Species Using Molecular and Morphological Data Facilitate a Taxonomic Revision of the Black-Bellied Salamanders (Urodela, *Desmognathus* 'quadramaculatus') from the Southern Appalachian Mountains. *Bionomina*, 27: 1–43. <https://doi.org/10.11646/bionomina.27.1.1>

- Pyron, R. A., K. A. O'Connell, J. Y. Lamb, and D. A. Beamer. 2022. A New, Narrowly Endemic Species of Swamp-Dwelling Dusky Salamander (Plethodontidae: *Desmognathus*) from the Gulf Coastal Plain of Mississippi and Alabama. *Zootaxa*, 5133(1): 53–82. <https://doi.org/10.11646/zootaxa.5133.1.3>
- Rabb, G. B. 1955. Observations on the Identity of the Salamander *Plethodon bulbosus*. *Copeia*, 1955(3): 261–262. <https://doi.org/10.2307/1440494>
- Rabb, G. B. 1958. On Certain Mexican Salamanders of the Plethodontid Genus *Chiropterotriton*. *Occasional Papers of the Museum of Zoology, University of Michigan*, 587: 1–37.
- Rafinesque, C. S. 1818. Farther Accounts of Discoveries in Natural History, in the Western States. *American Monthly Magazine and Critical Review* 4: 39–42.
- Rathke, M. H. 1833. *Triton torosus*. In *Zoologischer Atlas, enthaltend Abbildungen und Beschreibungen neuer Thierarten, während des Flottcapitains von Kotzebue zweiter Reise um die Welt, auf Russisch-Kaiserlich Kriegsschupp Predprieti in den Jahren 1823–1826 . . . herausgegeben von D. Martin Heinrich Rathke*, by J. F. v. Eschscholtz, p. 12. Fünftes Heft. Berlin: G. Reimer.
- Regester, K. J. 2000. *Plethodon electromorphus*. *Catalogue of American Amphibians and Reptiles*, 706: 1–2.
- Regester, K. J., C. G. Hoffman, E. R. Patterson, and P. C. Timashenko. 2020. *Desmognathus monticola* Dunn. Seal Salamander. *Catalogue of American Amphibians and Reptiles* 925: 1–60.
- Reilly, S. M. 1990. Biochemical Systematic and Evolution of the Eastern North American Newts, *Notophthalmus* (Caudata: Salamandridae). *Herpetologica*, 46(1): 51–59.
- Reilly, S. M., and R. A. Brandon. 1994. Partial Paedomorphosis in the Mexican Stream Ambystomatids and the Taxonomic Status of the Genus *Rhyacosiredon* Dunn. *Copeia*, 1994(3): 656–662. <https://doi.org/10.2307/1447181>
- Reynolds, R. P., S. W. Gotte, and C. H. Ernst. 2007. Catalog of Type Specimens of Recent Crocodilia and Testudines in the National Museum of Natural History, Smithsonian Institution. *Smithsonian Contributions to Zoology*, 626: 1–49. <https://doi.org/10.5479/si.00810282.626>
- Rose, F. L., and F. M. Bush. 1963. A New Species of *Eurycea* (Amphibia: Caudata) from the Southeastern United States. *Tulane Studies in Zoology*, 10(2): 121–128. <https://doi.org/10.5962/bhl.part.4640>
- Rovito, S. M., G. Parra-Olea, E. Recuero, and D. B. Wake. 2015. Diversification and Biogeographical History of Neotropical Plethodontid Salamanders. *Zoological Journal of the Linnean Society*, 175: 167–188. <https://doi.org/10.1111/zoj.12271>
- Rubenstein, N. M. 1971. Ontogenetic Allometry in the Salamander Genus *Desmognathus*. *American Midland Naturalist*, 85: 329–348. <https://doi.org/10.2307/2423761>
- Ruthven, A. G. 1912. Description of a New Salamander from Iowa. *Proceedings of the United States National Museum*, 41(1874): 517–519. <https://doi.org/10.5479/si.00963801.1874.517>
- Sabaj, M. H. 2020. Codes for Natural History Collections in Ichthyology and Herpetology. *Copeia*, 108(3): 593–669. <https://doi.org/10.1643/ASIHCONDON.52020>
- Sager, A. 1839. On American Amphibia. *American Journal of Science and Arts*, 36: 320–324.
- Sato, I. 1937. A Synopsis of the Family Hynobiidae of Japan. *Bulletin of the Biogeographical Society of Japan*, 7(3): 31–45.
- Sauvage, H.-E. 1876. *L'Institut. Journal des Académies et Sociétés Scientifiques de la France et de l'Etrangers, Paris*, 4: 274–275.
- Savage, J. M., and M. H. Wake. 1972. Geographic Variation and Systematics of the Middle American Caecilians, Genera *Dermophis* and *Gymnophis*. *Copeia* 1972(4): 680–695. <https://doi.org/10.2307/1442728>
- Savage, J. M., and M. H. Wake. 2001. A Re-evaluation of the Status of Taxa of Central American Caecilians (Amphibia: Gymnophiona), with Comments on Their Origin and Evolution. *Copeia*, 2001(1): 52–64. [https://doi.org/10.1643/0045-8511\(2001\)001\[0052:ROTSOT\]2.0.CO;2](https://doi.org/10.1643/0045-8511(2001)001[0052:ROTSOT]2.0.CO;2)
- Schmidt, K. P. 1936. Guatemalan Salamanders of the Genus *Oedipus*. *Field Museum of Natural History Publication. Zoological Series*, 20(17): 135–166.
- Schmidt, K. P. 1953. *A Check List of North American Amphibians and Reptiles*. 6th ed. American Chicago: Society of Ichthyologists and Herpetologists.
- Schwartz, A., and W. E. Duellman. 1952. The Taxonomic Status of the Newts, *Diemictylus viridescens* of Peninsular Florida. *Bulletin of the Chicago Academy of Sciences*, 9: 219–227.
- Sever, D. M. 1972. Geographic Variation and Taxonomy of *Eurycea bislineata* (Caudata: Plethodontidae) in the Upper Ohio River Valley. *Herpetologica*, 28(4): 314–324.
- Sever, D. M. 1983. *Eurycea junaluska*. *Catalogue of American Amphibians and Reptiles*, 321: 1–2.
- Sever, D. M. 1999. *Eurycea cirrigera*. *Catalogue of American Amphibians and Reptiles*, 684: 1–6.
- Sever, D. M., H. D. Dundee, and C. D. Sullivan. 1976. A New *Eurycea* (Amphibia: Plethodontidae) from Southwestern North Carolina. *Herpetologica*, 32(1): 26–29.
- Shaffer, H. B., and M. L. McKnight. 1996. The Polytypic Species Revisited: Genetic Differentiation and Molecular Phylogenetics of the Tiger Salamander *Ambystoma tigrinum* (Amphibia: Caudata) Complex. *Evolution*, 50(1): 417–433. <https://doi.org/10.1111/j.1558-5646.1996.tb04503.x>
- Shannon, F. A. 1951. Notes on a Herpetological Collection from Oaxaca and Other Localities in Mexico. Publication No. 3284. *Proceedings of the United States National Museum*, 101: 465–484. <https://doi.org/10.5479/si.00963801.101-3284.465>
- Shannon, F. A., and J. E. Werler. 1955. Report on a Small Collection of Amphibians from Veracruz, with a Description of a New Species of *Pseudoeurycea*. *Herpetologica*, 11(2): 81–85.
- Slater, J. R., and J. W. Slipp. 1940. A New Species of *Plethodon* from Northern Idaho. *Occasional Papers, Department of Biology, College of Puget Sound*, 8: 38–43.
- Smith, C. C. 1968. A New *Typhlotriton* from Arkansas (Amphibia, Caudata). *Wasmann Journal of Biology*, 26(1): 155–159.
- Smith, H. M. 1945. The Salamander Name *Bolitoglossa mexicana* Dumeril, Bibron and Dumeril. *Herpetologica*, 3(1): 14–19.
- Smith, H. M. 1953. The Generic Name of the Newts of Eastern North America. *Herpetologica*, 9(2): 95–99.
- Smith, H. M., D. A. Langebartel, and K. L. Williams. 1964. Herpetological Type-Specimens in the University of Illinois Museum of Natural History. *Illinois Biological Monographs*, 32: 1–80. <https://doi.org/10.5962/bhl.title.50204>
- Smith, H. M., and F. E. Potter. 1946. A Third Neotenic Salamander of the Genus *Eurycea* from Texas. *Herpetologica*, 3(4): 105–109.
- Smith, H. M., and E. H. Taylor. 1948. An Annotated Checklist and Key to the Amphibia of Mexico. *Bulletin of the United States National Museum*, 194: 1–118. <https://doi.org/10.5479/si.03629236.194>
- Smith, H. M., and E. H. Taylor. 1950. Type Localities of Mexican Reptiles and Amphibians. *University of Kansas Science Bulletin*, 33(8): 313–380.
- Snyder, R. C. 1963. *Ambystoma gracile*. *Catalogue of American Amphibians and Reptiles*, 6: 1–2.
- Stebbins, R. C. 1949. Speciation in Salamanders of the Plethodontid Genus *Ensatina*. *University of California Publications in Zoology*, 48: 377–526.
- Stebbins, R. C., and C. H. Lowe Jr. 1949. The Systematic Status of *Plethopsis* with a Discussion of Speciation in the Genus *Batrachoseps*. *Copeia*, 1949(2): 116–129. <https://doi.org/10.2307/1438486>
- Stebbins, R. C., and W. J. Riemer. 1950. A New Species of Plethodontid Salamander from the Jemez Mountains of New Mexico. *Copeia*, 1950(2): 73–80. <https://doi.org/10.2307/1438948>
- Stejneger, L. 1892. Preliminary Description of a New Genus and Species of Blind Cave Salamander from North America. *Proceedings of the United States National Museum*, 15(894): 115–117. <https://doi.org/10.5479/si.00963801.15-894.115>
- Stejneger, L. 1894 [1893]. On Some Collections of Reptiles and Batrachians from East Africa and the Adjacent Islands, Recently Received from Dr. W. L. Abbott and Mr. William Astor Chanler, with Descriptions of New Species. *Proceedings of the United States National Museum*, 16(970): 711–741. <https://doi.org/10.5479/si.00963801.970.711>
- Stejneger, L. 1895 [1894]. Description of a New Salamander from Arkansas with Notes on *Ambystoma annulatum*. *Proceedings of the United States National Museum*, 17(1023): 597–599. <https://doi.org/10.5479/si.00963801.1023.597>
- Stejneger, L. 1896 [1895]. Description of a New Genus and Species of Blind Tailed Batrachians from the Subterranean Waters of Texas. *Proceedings of the United States National Museum*, 18(1088): 619–621. <https://doi.org/10.5479/si.00963801.1088.619>
- Stejneger, L. 1906. A New Salamander from North Carolina. *Proceedings of the United States National Museum*, 30(1457): 559–562. <https://doi.org/10.5479/si.00963801.30-1457.559>
- Stejneger, L. 1907. A New Salamander from Nicaragua. *Proceedings of the United States National Museum*, 32(1538): 465. <https://doi.org/10.5479/si.00963801.1538.465>
- Stejneger, L. 1911. Descriptions of Three New Batrachians from Costa Rica and Panama. *Proceedings of the United States National Museum*, 41(1857): 285–288. <https://doi.org/10.5479/si.00963801.1857.285>
- Stejneger, L. 1925. Chinese Amphibians and Reptiles in the United States National Museum. *Proceedings of the United States National Museum*, 66(2562): 1–115. <https://doi.org/10.5479/si.00963801.66-2562.1>

- Stejneger, L., and T. Barbour. 1917. *A Check List of North American Amphibians and Reptiles*. Cambridge, Mass.: Harvard University Press. <https://doi.org/10.5962/bhl.title.54316>
- Stejneger, L., and T. Barbour. 1933. *A Check List of North American Amphibians and Reptiles*. 3rd ed. Cambridge, Mass.: Harvard University Press. <https://doi.org/10.5962/bhl.title.6834>
- Steward, J. W. 1969. *The Tailed Amphibians of Europe*. Newton Abbott, U.K.: David & Charles.
- Storm, R. M., and E. D. Brodie Jr. 1970. *Plethodon dunni*. *Catalogue of American Amphibians and Reptiles*, 82: 1–2.
- Stuart, L. C. 1943. Taxonomic and Geographic Comments on Guatemalan Salamanders of the Genus *Oedipus*. *Miscellaneous Publications of the Museum of Zoology, University of Michigan*, 56: 1–33.
- Stuart, L. C. 1952. Some New Amphibians from Guatemala. *Proceedings of the Biological Society of Washington*, 65: 1–12.
- Taylor, E. H. 1939 [1938]. Concerning Mexican Salamanders. *University of Kansas Science Bulletin*, 25(14): 259–313. <https://doi.org/10.5962/bhl.part.1703>
- Taylor, E. H. 1940a [1939]. New Salamanders from Mexico, with a Discussion of Certain Known Forms. *University of Kansas Science Bulletin*, 26(12): 407–438.
- Taylor, E. H. 1940b. A New *Rhyacosiredon* (Caudata) from Western Mexico. *Herpetologica*, 1(7): 171–176.
- Taylor, E. H. 1941a. New Plethodont Salamanders from Mexico. *Herpetologica*, 2(3): 57–65.
- Taylor, E. H. 1941b. Two New Species of Mexican Plethodontid Salamanders. *Proceedings of the Biological Society of Washington*, 54: 81–86.
- Taylor, E. H. 1941c. Herpetological Miscellany No. II. *University of Kansas Science Bulletin*, 27, part 1(7): 105–139.
- Taylor, E. H. 1941d. Two New Ambystomid Salamanders from Chihuahua. *Copeia*, 1941(3): 143–146. <https://doi.org/10.2307/1437737>
- Taylor, E. H. 1941e. New Amphibians from the Hobart M. Smith Mexican Collections. *University of Kansas Science Bulletin*, 27, part 1(8): 141–167.
- Taylor, E. H. 1942. New Caudata and Salientia from Mexico. *University of Kansas Science Bulletin*, 28(14): 295–323.
- Taylor, E. H. 1943a. A New Ambystomid Salamander Adapted to Brackish Water. *Copeia*, 1943(3): 151–156. <https://doi.org/10.2307/1438606>
- Taylor, E. H. 1943b. Herpetological Novelities from Mexico. *University of Kansas Science Bulletin*, 29, part 2(8): 343–361.
- Taylor, E. H. 1944a. A New Ambystomatid Salamander from the Plateau Region of Mexico. *University of Kansas Science Bulletin*, 30, part 1(5): 57–61. <https://doi.org/10.5962/bhl.part.6502>
- Taylor, E. H. 1944b. Present Location of Certain Herpetological and Other Type Specimens. *University of Kansas Science Bulletin*, 30(11): 117–187. <https://doi.org/10.5962/bhl.part.6507>
- Taylor, E. H. 1944c. The Genera of Plethodont Salamanders in Mexico, Pt 1. *University of Kansas Science Bulletin*, 30, part 1(12): 189–232. <https://doi.org/10.5962/bhl.part.6508>
- Taylor, E. H. 1960. On the Caecilian Species *Ichthyophis monochords* and *Ichthyophis glutinosus* and Related Species. *University of Kansas Science Bulletin*, 40(4): 37–120. <https://doi.org/10.5962/bhl.part.18735>
- Taylor, E. H. 1964. A New Species of Caecilian from India (Amphibia, Gymnophiona). *Senckenbergiana biologica*, 45(3–5): 227–231.
- Taylor, E. H. 1968. *The Caecilians of the World: A Taxonomic Review*. Lawrence: University of Kansas Press.
- Taylor, E. H. 1973. A Caecilian Miscellany. *University of Kansas Science Bulletin*, 50(5): 187–231. <https://doi.org/10.5962/bhl.part.25759>
- Taylor, E. H., and H. M. Smith. 1945. Summary of the Collections of Amphibians Made in México under the Walter Rathbone Bacon Traveling Scholarship. *Proceedings of the United States National Museum*, 95(3185): 521–613. <https://doi.org/10.5479/si.00963801.95-3185.521>
- Thireau, M. 1986. *Catalogue des Types d'Urodèles du Musée National d'Histoire Naturelle: Revue Critique*. Paris: Museum National d'Histoire Naturelle.
- Thurrow, G. R. 1956. A New Subspecies of *Plethodon welleri*, with Notes on Other Members of the Genus. *American Midland Naturalist*, 55(2): 343–356. <https://doi.org/10.2307/2422596>
- Thurrow, G. R. 1957. A New *Plethodon* from Virginia. *Herpetologica*, 13(1): 59–66.
- Tihen, J. A. 1958. Comments on the Osteology and Phylogeny of Ambystomatid Salamanders. *Bulletin of the Florida State Museum, Biological Sciences*, 3(1): 1–50.
- Tilley, S. G. 1981. A New Species of *Desmognathus* (Amphibia: Caudata: Plethodontidae) from the Southern Appalachian Mountains. *Occasional Papers of the Museum of Zoology, University of Michigan*, 695: 1–23.
- Tilley, S. G. 2000. *Desmognathus santeetlab*. *Catalogue of American Amphibians and Reptiles*, 703: 1–3.
- Tilley, S. G., R. L. Eriksen, and L. A. Katz. 2008. Systematics of Dusky Salamanders, *Desmognathus* (Caudata: Plethodontidae), in the Mountain and Piedmont Regions of Virginia and North Carolina, USA. *Zoological Journal of the Linnean Society*, 152(1): 115–130. <https://doi.org/10.1111/j.1096-3642.2007.00336.x>
- Tilley, S. G., and M. J. Mahoney. 1996. Patterns of Genetic Differentiation in Salamanders of the *Desmognathus ochropheus* Complex (Amphibia: Plethodontidae). *Herpetological Monographs*, 10: 1–42. <https://doi.org/10.2307/1466979>
- Tilley, S. G., R. B. Merritt, B. Wu, and R. Highton. 1978. Genetic Differentiation in Salamanders of the *Desmognathus ochropheus* Complex (Plethodontidae). *Evolution*, 32(1): 93–115. <https://doi.org/10.2307/2407413>
- Titus, T. A. 1990. Genetic Variation in Two Subspecies of *Ambystoma gracile* (Caudata: Ambystomatidae). *Journal of Herpetology*, 24(1): 107–111. <https://doi.org/10.2307/1564306>
- Tominaga, A., H. Ota, and M. Matsui. 2010. Phylogeny and Phylogeography of the Sword-Tailed Newt, *Cynops ensicauda* (Amphibia: Caudata), as Revealed by Nucleotide Sequences of Mitochondrial DNA. *Molecular Phylogenetics and Evolution*, 54(3): 910–921. <https://doi.org/10.1016/j.ympev.2009.11.002>
- Townsend, J. H. 2016. Taxonomic Revision of the Moss Salamander *Nototriton barbouri* (Schmidt) (Caudata: Plethodontidae), with Description of Two New Species from the Cordillera Nombre de Dios, Honduras. *Zootaxa*, 4196(4): 511–528. <https://doi.org/10.11646/zootaxa.4196.4.3>
- Townsend, J. H., M. Medina-Flores, J. L. Murillo, and J. D. Austin. 2011. Cryptic Diversity in Chortis Highland Moss Salamanders (Caudata: Plethodontidae: *Nototriton*) Revealed Using mtDNA Barcodes and Phylogenetics, with a New Species from Eastern Honduras. *Systematics and Biodiversity*, 9(3): 275–287. <https://doi.org/10.1080/14772000.2011.611188>
- Townsend, J. H., M. Medina-Flores, O. Reyes-Calderón, and J. D. Austin. 2013. A New *Nototriton* (Caudata: Plethodontidae) from Parque Nacional Montaña de Botaderos in Northeastern Honduras. *Zootaxa*, 3666(3): 358–368. <https://doi.org/10.11646/zootaxa.3666.3.6>
- Trapido, H. 1942. A New Salamander from Venezuela. *Separata del Boletín de la Sociedad Venezolana de Ciencias Naturales*, 8(51): 297–301.
- Trapido, H., and R. T. Clausen. 1938. Amphibians and Reptiles of Eastern Quebec. *Copeia*, 1938(3): 117–125. <https://doi.org/10.2307/1436589>
- Uzzell, T. M., Jr. 1964. Relations of the Diploid and Triploid Species of the *Ambystoma jeffersonianum* Complex (Amphibia, Caudata). *Copeia*, 1964(2): 257–300. <https://doi.org/10.2307/1441023>
- Valentine, B. D. 1963. The Salamander Genus *Desmognathus* in Mississippi. *Copeia*, 1963(1): 130–139. <https://doi.org/10.2307/1441280>
- Van Denburgh, J. 1905. The Reptiles and Amphibians of the Islands of the Pacific Coast of North America from the Farallons to Cape San Lucas and the Revilla Gigedos. *Proceedings of the California Academy of Sciences*, 3rd ser., 4(1): 1–41.
- Van Denburgh, J. 1916. Four Species of Salamanders New to the State of California, with a Description of *Plethodon elongatus*, a New Species, and Notes on Other Salamanders. *Proceedings of the California Academy of Sciences*, 4th ser., 6(7): 215–221.
- Viosca, P. 1937. A Tentative Revision of the Genus *Necturus* with Descriptions of Three New Species from the Southern Gulf Drainage Area. *Copeia*, 1937(2): 120–138. <https://doi.org/10.2307/1436953>
- Viosca, P. 1938. A New Waterdog from Central Louisiana. *Proceedings of the Biological Society of Washington*, 51: 143–146.
- Wake, D. B., and A. H. Brame Jr. 1963. The Status of the Plethodontid Salamander Genera *Bolitoglossa* and *Magnadigitia*. *Copeia*, 1963: 382–387. <https://doi.org/10.2307/1441357>
- Wake, D. B., A. H. Brame, and W. E. Duellman. 1973. New Species of Salamanders, Genus *Bolitoglossa*, from Panama. *Contributions in Science, Natural History Museum of Los Angeles County*, 248: 1–19. <https://doi.org/10.5962/p.241231>
- Wake, D. B., and P. Elias. 1983. New Genera and a New Species of Central American Salamanders, with a Review of the Tropical Genera (Amphibia, Caudata, Plethodontidae). *Contributions in Science, Natural History Museum of Los Angeles County*, 345: 1–19. <https://doi.org/10.5962/p.208170>
- Wake, D. B., and E. L. Jockusch. 2000. Detecting Species Borders Using Diverse Data Sets: Examples from Plethodontid Salamanders in California. In *The Biology of Plethodontid Salamanders*, ed. R. C. Bruce, R. G. Jaeger, and L. D. Houck, pp. 95–119. New York: Kluwer Academic/Plenum Publishers. https://doi.org/10.1007/978-1-4615-4255-1_4

- Wake, D. B., E. L. Jockusch, and T. J. Papenfuss. 1998. Does *Batrachoseps* Occur in Alaska? *Herpetological Review*, 29: 12–14.
- Wake, D. B., and J. F. Lynch. 1976. The Distribution, Ecology, and Evolutionary History of Plethodontid Salamanders in Tropical America. *Science Bulletin, Natural History Museum of Los Angeles County*, 25: 1–65.
- Wake, D. B., and J. F. Lynch. 1982. Evolutionary Relationships among Central American Salamanders of the *Bolitoglossa franklini* Group, with a Description of a New Species from Guatemala. *Herpetologica*, 38(2): 257–272.
- Wake, D. B., J. M. Savage, and J. Hanken. 2007. Montane Salamanders from the Costa Rica–Panama Border Region, with Descriptions of Two New Species of *Bolitoglossa*. *Copeia*, 2007: 556–565. [https://doi.org/10.1643/0045-8511\(2007\)2007\[556:MSFTCR\]2.0.CO;2](https://doi.org/10.1643/0045-8511(2007)2007[556:MSFTCR]2.0.CO;2)
- Walker, C. F. 1931. Description of a New Salamander from North Carolina. *Proceedings of the Junior Society of Natural History, Cincinnati*, 2: 48–51.
- Walker, C. F., and W. H. Weller. 1932. The Identity and Status of *Pseudotriton duryi*. *Copeia*, 1932(2): 81–83. <https://doi.org/10.2307/1435890>
- Webb, R. G. 2004. Observations on Tiger Salamanders (*Ambystoma tigrinum* Complex, Family Ambystomatidae) in Mexico with Description of a New Species. *Bulletin of the Maryland Herpetological Society*, 40: 122–143.
- Weisrock, D. W., and A. Larson. 2006. Testing Hypotheses of Speciation in the *Plethodon jordani* Species Complex with Allozymes and Mitochondrial DNA Sequences. *Biological Journal of the Linnean Society*, 89(1): 25–51. <https://doi.org/10.1111/j.1095-8312.2006.00655.x>
- Weller, W. H. 1930a. Notes on Amphibians Collected in Carter Co., Kentucky. *Proceedings of the Junior Society of Natural History, Cincinnati*, 1(5–6): 26–29.
- Weller, W. H. 1930b. A New Salamander from the Great Smoky Mountain National Park. *Proceedings of the Junior Society of Natural History, Cincinnati*, 1(7): 2 pp. [unnumbered].
- Weller, W. H. 1931. Corrections to Herpetological Notices. *Proceedings of the Junior Society of Natural Sciences, Cincinnati*, 2: 7–9.
- Wilkinson, M., R. P. Reynolds, and J. F. Jacobs. 2021. A New Genus and Species of Rhinatrematid Caecilian (Amphibia: Gymnophiona: Rhinatrematidae) from Ecuador. *Herpetological Journal*, 31: 27–34. <https://doi.org/10.33256/31.1.2734>
- Wolterstorff, W., and W. Herre. 1935. Die gattungen der wassermolche der familie Salamandridae. *Archiv für Naturgeschichte; Zeitschrift für systematische Zoologie*, 4: 217–229.
- Wray, K. P., D. B. Means, and S. J. Steppan. 2017. Revision of the Eurycea quadridigata (Holbrook 1842) Complex of Dwarf Salamanders (Caudata: Plethodontidae: Hemidactyliinae) with a Description of Two New Species. *Herpetological Monographs* 31: 18–46. <https://doi.org/10.1655/HERPMONOGRAPHS-D-16-00011>
- Wynn, A. H., R. Highton, and J. F. Jacobs. 1988. A New Species of Rock-Crevice Dwelling Plethodon from Pigeon Mountain, Georgia. *Herpetologica*, 44(2): 135–143.
- Yarrow, H. C. 1882. Check List of North American Reptilia and Batrachia with Catalogue of Specimens in U.S. National Museum. *Bulletin of the United States National Museum*, 24: 150. <https://doi.org/10.5479/si.03629236.24.1>
- Zhao, E. 1984. The Nomenclature of the Type Species of the Genus Liua Should Be Revised. *Acta Herpetologica Sinica*, 3(1): 40.
- Zhao, E., and Y. Jiang. 1988. Taxonomy and Distribution of Batrachuperus. In *Studies on Chinese Salamanders*, ed. E. Zhao, Y. Jiang, Q. Hu, and Y. Yang, pp. 49–53. *Contributions to Herpetology* 4. Oxford, Ohio: Society for the Study of Amphibians and Reptiles.

Index of Taxa

aeneus, 26, 27
agilis, 56
alabamensis, 65
alleganiensis, 17
altamazonica, 39
altamazonicus, 39
altamirani, 14
alternans, 72
amazops, 72
Amazops amazops, 72
Amblystoma annulatum, 5
Amblystoma aterrimum, 5
Amblystoma cingulatum, 5, 6
Amblystoma copeianum, 6
Amblystoma decorticatum, 6
Amblystoma lepturum, 6
Amblystoma obscurum, 6
Amblystoma opacum, 15
Amblystoma paroticum, 6
Amblystoma platineum, 7
Amblystoma proserpina, 7
Amblystoma proserpine, 7
Amblystoma tenebrosum, 7
Amblystoma trisruptum, 8
Amblystoma xiphias, 8
Ambystoma, 6
Ambystoma altamirani, 14
Ambystoma andersoni, 8
Ambystoma annulatum, 5
Ambystoma bishopi, 8
Ambystoma cingulatum, 5, 6
Ambystoma cingulatum bishopi, 8
Ambystoma dumerilii, 16
Ambystoma episcopus, 8
Ambystoma fluvinaturn, 9
Ambystoma gracile, 6, 16
Ambystoma granulolum, 9
Ambystoma jeffersonianum, 7, 15
Ambystoma jeffersonianum jeffersonianum, 7, 15
Ambystoma jeffersonianum platineum, 7
Ambystoma lacustris, 9, 10
Ambystoma laterale, 7
Ambystoma leorae, 14
Ambystoma lernaense, 16
Ambystoma mabeei, 10
Ambystoma macrodactyla, 10
Ambystoma macrodactylum, 12
Ambystoma macrodactylum columbianum, 10
Ambystoma macrodactylum krausei, 12
Ambystoma macrodactylum macrodactylum, 10
Ambystoma macrodactylum sigillatum, 10
Ambystoma maculatum, 10, 11
Ambystoma mavortia, 11
Ambystoma mavortium, 7, 8, 10, 16
Ambystoma mavortium diaboli, 13
Ambystoma mavortium mavortium, 11
Ambystoma mavortium melanostictum, 13
Ambystoma mavortium nebulosum, 11
Ambystoma mavortium stebbinsi, 13
Ambystoma nebulosum, 11
Ambystoma ordinaria, 11
Ambystoma ordinarium, 11
Ambystoma platineum, 7
Ambystoma rivulare, 14
Ambystoma rosaceum, 9, 12
Ambystoma rosaceum nigrum, 12
Ambystoma rosaceum sonoriensis, 12
Ambystoma stejnegeri, 12
Ambystoma subsalsum, 12
Ambystoma taylori, 13
Ambystomatidae, 2, 5
Ambystoma tigrinum, 6, 8, 15
Ambystoma tigrinum diaboli, 13
Ambystoma tigrinum slateri, 13
Ambystoma tigrinum stebbinsi, 13
Ambystoma tremblayi, 7
Ambystoma velasci, 9
amplus, 43
Anaides ferreus, 19
andersoni, 8

- Aneides ferreus*, 19
Aneides lugubris, 44
angusticlavius, 44
annulatum, 5
apalachicola, 26
aquatica, 31
Aquiloerycea cephalica, 20, 57
Aquiloerycea galeanae, 22
arborea, 19
arboreus, 19
aterrimum, 5
aterrimus, 5
attenuatus, 19
aureatagulus, 27
aureolus, 43
axanthus, 68
- Batrachoseps attenuatus*, 19
Batrachoseps catalinae, 19
Batrachoseps caudatus, 19
Batrachoseps leucopus, 19
Batrachoseps major, 19
Batrachoseps nigriventris, 19
Batrachoseps pacificus, 35
Batrachoseps wrighti, 54
Batrachuperus karlschmidti, 17
Batrachuperus pinchonii, 17, 18
Batrachuperus yenyuanensis, 17
beyeri, 65
bilineatus, 57
bishopi, 8, 17
bislineata, 31, 32, 57
blasii, 67
Bolitoglossa altamazonica, 39
Bolitoglossa arborea, 19
Bolitoglossa borburata, 20
Bolitoglossa cephalica
rubrimembris, 20
Bolitoglossa chica, 20
Bolitoglossa chondrostega, 20
Bolitoglossa cochraniae, 20
Bolitoglossa cuna, 21
Bolitoglossa decora, 21
Bolitoglossa diaphora, 21
Bolitoglossa dimidiata, 21
Bolitoglossa flavimembris, 39
Bolitoglossa flaviventris, 40
Bolitoglossa franklini, 40
Bolitoglossa franklini
nigroflavescens, 23
Bolitoglossa galaenae, 22
Bolitoglossa (Eladinea)
gomezi, 22
Bolitoglossa helmrichi, 40
Bolitoglossa hypacra, 35
Bolitoglossa larvae, 22
Bolitoglossa melanomolga, 22
Bolitoglossa mexicana, 23
Bolitoglossa moreleti, 23
Bolitoglossa morio, 41
Bolitoglossa nigroflavescens, 23
Bolitoglossa nigromaculata, 23
Bolitoglossa occidentalis, 24
Bolitoglossa odonnelli, 41
- Bolitoglossa oresbia*, 24
Bolitoglossa porrasorum, 24
Bolitoglossa rufescens, 42
Bolitoglossa savagei, 24
Bolitoglossa striatula, 42
Bolitoglossa tapajonica, 24
Bolitoglossa terrestris, 25
Bolitoglossa unguidentis, 25
Bolitoglossa xoloccalae, 25
borburata, 20
borealis, 57
Boulengerula taitanus, 71
braggi, 63
brimleyorum, 27
bromeliacia, 39
bromeliacius, 39
brucei, 64, 65
brunnata, 54
- Caecilia inca*, 69
Caecilia isthmica, 69
Caecilia orientalis, 70
Caecilia perdita, 70
Caecilia tenuissima, 70
Caeciliidae, 2, 69
carolinensis, 29
catalinae, 19
catesbeianus, 8
Caudata, 2, 5
caudatus, 19
cephalica, 20, 57
cephalicus, 57, 58
ceronorum, 26
chamberlaini, 32
chattahoochee, 43
cheoah, 43
chermocki, 27
chica, 20
Chiropterotriton arboreus, 19
Chiropterotriton ceronorum, 26
Chiropterotriton chiropterus, 57
Chiropterotriton
chondrostega, 20
Chiropterotriton dimidiatus, 21
Chiropterotriton larvae, 22
Chiropterotriton
multidentatus, 41
Chiropterotriton orculus, 59
Chiropterotriton terrestris, 25
chiropterus, 57, 58
chlorobryonis, 45
chondrostega, 20
cinereus, 44, 47, 56
cingulatum, 5, 6, 8
cirrigera, 56
clemsonae, 44
Cnemidophorus, 7
cochraniae, 20
Coecilia ochrocephala, 70
collaris, 58
columbianum, 10
copei, 14
copeianum, 6
crassulus, 44
- cristatus*, 67
croceater, 2, 44
Cryptobranchidae, 2, 17
Cryptobranchus alleganiensis
bishopi, 17
Cryptobranchus bishopi, 17
Cryptotriton nasalis, 41
cuna, 21
cylindracea, 56
cylindraceus, 56
Cynops ensicauda, 67
Cynops ensicauda popei, 68
- decora*, 21
decortiatum, 6
Dendrotriton bromeliacius, 39
Dendrotriton xoloccalae, 25
Dermodactylus pinchonii, 17, 18
Dermophiidae, 2, 70
Dermophis mexicanus, 71
Desmognathus aeneus, 26, 27
Desmognathus apalachicola, 26
Desmognathus aureatagulus, 27
Desmognathus brimleyorum, 27
Desmognathus carolinensis, 29
Desmognathus chermocki, 27
Desmognathus folkertsi, 27
Desmognathus fuscus
imitator, 28
Desmognathus fuscus
welteri, 28
Desmognathus
gunigeusgwotli, 28
Desmognathus imitator, 27, 28
Desmognathus mavrokoilius, 28
Desmognathus monticola, 28, 29
Desmognathus monticola
jeffersoni, 29
Desmognathus monticola
monticola, 29
Desmognathus ochrophaea
carolinensis, 29
Desmognathus ocoee, 29
Desmognathus pascagoula, 30
Desmognathus planiceps, 30
Desmognathus santeetlah, 30
Desmognathus welteri, 28
Desmognathus wrighti, 30
diaboli, 13
diaphora, 21
Dicamptodon aterrimus, 5
Dicamptodon copei, 14
Dicamptodon tenebrosus, 7
Diemictylus viridescens
evergladensis, 66
Diemyctylus miniatus
meridionalis, 66
Diemyctylus viridescens var.
vittatus, 67
dimidiata, 21
dimidiatus, 21
dixi, 44, 45
dorsalis, 44, 67
dubitus, 60, 62
- dumerilii*, 16
dunni, 34, 45, 46
duryi, 55
- Eladinea*, 22
electromorphus, 45, 50
Ensatina eschscholtzii, 31
Ensatina eschscholtzii
croceater, 44
Ensatina eschscholtzii
oregonensis, 35
Ensatina eschscholtzii
platensis, 64
Ensatina eschscholtzii
xanthoptica, 31
Ensatina klauberi, 31
ensicauda, 67, 68
ensicaudus, 68
Epicrionops petersi petersi, 72
episcopus, 8
equatorialis, 70
eschscholtzii, 31, 35, 44, 64
Eumeces fasciatus, 8
Eurycea, 65
Eurycea aquatica, 31
Eurycea bislineata, 31, 32, 57
Eurycea bislineata major, 31
Eurycea bislineata rivicola, 32
Eurycea chamberlaini, 32
Eurycea cirrigera, 56
Eurycea griseogaster, 32
Eurycea junaluska, 33
Eurycea latitans, 33
Eurycea longicauda
longicauda, 33
Eurycea longicauda pernix, 33
Eurycea lucifuga, 64
Eurycea multiplicata, 59
Eurycea neotenes, 33
Eurycea paludicola, 35, 36
Eurycea spelaea, 63, 64
Eurycea tridentifera, 34
Eurycea tynerensis, 32, 34
evergladensis, 66
- fasciatus*, 8
ferreus, 19
firscheini, 54
flavimembris, 39
flaviventris, 40
floridanus, 55, 56
fluvinatum, 9
folkertsi, 27
fourchensis, 45
franklini, 23, 40
fuscus, 28
- gadovii*, 40
galaenae, 22
galeanae, 22
Gegeneophis ramaswamii, 72
gephyra, 37

- gibbicaudus*, 58
gigliolii, 67
glutinosus, 45
goebeli, 40
gomezi, 22
gordoni, 46
gracile, 6, 16
gracilis, 16
Grandisonia alternans, 72
granulata, 15
granulosum, 9
griseogaster, 32
gunigeusgwotli, 28
Gymnophiona, 2, 69
Gymnopsis multiplicata, 70, 71
Gymnopsis syntrema, 70, 71
Gyrinophilus dunni, 34
Gyrinophilus porphyriticus dunni, 34
Gyrinophilus porphyriticus duryi, 55
Gyrinophilus porphyriticus inagnoscus, 34
Gyrinophilus porphyriticus porphyriticus, 34, 57
Gyrinophilus subterraneus, 35
- helmrichi*, 40, 41
Hemidactylum pacificum, 35
Heredia oregonensis, 35
Herpeliidae, 2, 71
hoffmani, 46
hongkongensis, 68
hubrichti, 43, 46
huldae, 47
Hynobiidae, 2, 17
Hynobius retardatus, 18
Hynobius shihi, 18
Hynobius stejnegeri, 18
hypacra, 35
Hypogeophis alternans, 72
- Ichthyophiidae*, 2, 71
Ichthyophis kohtaoensis, 71
Ichthyophis nigroflavus, 71
Ichthyophis paucidentulus, 72
Ichthyophis paucisulcus, 72
Ichthyophis sumatranus, 72
idahoensis, 47
ignea, 37
imitator, 27, 28
inagnoscus, 34
inca, 69
Indotyphlidae, 2, 72
intermedia, 69
intermedius, 47
isthmica, 69
- jacksoni*, 47
jeffersoni, 29
jeffersoniana, 15
jeffersonianum, 7, 15
- jordani*, 28
junaluska, 33
- karlschmidti*, 17
kasios, 37, 38
klauberi, 31
kohtaoensis, 71
krausei, 12
- lacertina*, 69
lacustris, 9, 10
laevis, 67
larselli, 52
latastei, 65
laterale, 7
latitans, 33
lavae, 22
leorae, 14
leprosa, 58, 59
leprosus, 58
lepturum, 6
lermaense, 16
lermaensis, 16
leucopus, 19
lewisi, 66
lichenoides, 16, 17
lignicola, 36
lineola, 58
lineolus, 58, 59
Lithobates catesbeianus, 8
Liua shihi, 18
lödingi, 65
longicauda, 33
longicrus, 48
louisianensis, 66
lucifuga, 64
lugubris, 44
lurida, 15, 16
- mabeei*, 10
macrodactyla, 10
macrodactylum, 10, 12
maculatum, 10, 11
maculosus, 65, 66
Magnadigita hypacra, 35
magnipes, 60
major, 19, 31
Manculus quadridigitatus paludicolus, 35, 36
Manculus quadridigitatus uvidus, 36
maritima, 38
marmoratus, 67
matudai, 40
mavortia, 11
mavortium, 7, 8, 10, 11, 13, 16
mavrokoilius, 28
maxillabrochus, 60
melanomolga, 22
melanosticta, 16, 17
melanostictum, 13
Menobranchus latastei, 65
- Menobranchus punctatus*, 65
meridianus, 48
meridionalis, 66, 67
metcalfi, 44, 48
mexicana, 23
mexicanus, 71
mime, 36
miniatus, 66
mississippi, 48
montanus, 49, 55, 60
monticola, 28, 29
moreleti, 23
morio, 41
multidentata, 41
multidentatus, 41
multiplicata, 59, 70, 71
multiplicatus, 59
munificus, 60, 61
- narisovalis*, 61
nasalis, 41
nebulosum, 11
Necturus alabamensis, 65
Necturus beyeri, 65
Necturus lewisi, 66
Necturus lödingi, 65
Necturus louisianensis, 66
Necturus maculosus lewisi, 66
Necturus maculosus louisianensis, 66
Necturus maculosus maculosus, 65
Necturus punctatus, 65
nelsoni, 36, 37
neomexicanus, 49
neotenes, 33, 34
nereus, 63, 64
nettingi, 69
nigriventris, 19
nigroflavescens, 23
nigroflavus, 71, 72
nigromaculata, 23
nigrum, 12
Notophthalmus meridionalis, 66
Notophthalmus perstriatus, 68
Notophthalmus viridescens dorsalis, 67
Notophthalmus viridescens piaropicola, 66
Nototriton lignicola, 36
Nototriton mime, 36
Nototriton nelsoni, 36
Nototriton oreadorum, 37
Nototriton picadoi, 59
Nototriton picucha, 37
Nyctanolis pernix, 37
- obscurum*, 6
occidentalis, 24
ochrocephala, 70
ochrophaea, 29
ocmulgee, 49
ocoe, 29
- odonnelli*, 41, 42
Oedipina collaris, 58
Oedipina gephyra, 37
Oedipina ignea, 37
Oedipina kasios, 37
Oedipina (Oedopinola) maritima, 38
Oedipina (Oedopinola) petiola, 38
Oedipina (Oedopinola) savagei, 38
Oedipina (Oedopinola) tomasi, 39
Oedipina quadra, 38
Oedipus altamazonicus, 39
Oedipus bromeliacia, 39
Oedipus cephalicus, 58
Oedipus flavimembris, 39
Oedipus flaviventris, 40
Oedipus franklini, 40
Oedipus gadovii, 40
Oedipus goebeli, 40
Oedipus helmrichi, 40
Oedipus morio, 41
Oedipus multidentata, 41
Oedipus nasalis, 41
Oedipus odonnelli, 41
Oedipus robertsi, 42
Oedipus rufescens, 42
Oedipus smithi, 25, 42
Oedipus striatulus, 42
Oedipus townsendi, 43, 61
Oedopinola, 38, 39
oligozonus, 70, 71
olympicus, 66
opacum, 15
orcus, 59
ordinaria, 11
ordinarium, 11
oreadorum, 37
oregonensis, 35
oresbia, 24
orientalis, 70
orizabensis, 59
Oscaecilia equatorialis, 70
Oscaecilia ochrocephala, 70
ouachitae, 49
- pacificum*, 35
pacificus, 35
paludicola, 35, 36
paludicolus, 35, 36
Paramesotriton hongkongensis, 68
paroticum, 6
Parvimolge townsendi, 43
pascagoula, 30
paucidentulus, 72
paucisulcus, 72
pennatulus, 43, 61
perdita, 70
pernix, 33, 37
perstriatus, 68
petersi, 72, 73

- petiola*, 38
petraeus, 49, 50
Phaeognathus hubrichti, 43
piaropicola, 66
picadoi, 59
picucha, 37
pinchonii, 17, 18
planiceps, 30
platensis, 64
platineum, 7
Plectrohyla matudai, 40
Plethodon amplus, 43
Plethodon angusticlavius, 44
Plethodon aureolus, 43
Plethodon chatahoochee, 43
Plethodon cheoah, 43
Plethodon chlorobryonis, 45
Plethodon cinereus, 47, 56
Plethodon cinereus
angusticlavius, 44
Plethodon cinereus dorsalis, 44
Plethodon clemsonae, 44
Plethodon crassulus, 44
Plethodon croceater, 2, 44
Plethodon cylindraceus, 56
Plethodon dixi, 44
Plethodon dorsalis, 44
Plethodon dunni, 45, 46
Plethodon electromorphus, 45, 50
Plethodon fourchensis, 45
Plethodon glutinosus
chlorobryonis, 45
Plethodon gordonii, 46
Plethodon hoffmani, 46
Plethodon hubrichti, 46
Plethodon huldae, 47
Plethodon idahoensis, 47
Plethodon intermedius, 47
Plethodon jacksoni, 47
Plethodon jordani, 28
Plethodon larselli, 52
Plethodon longiscus, 48
Plethodon meridianus, 48
Plethodon metcalfi, 44, 48
Plethodon mississippi, 48
Plethodon montanus, 49
Plethodon neomexicanus, 49
Plethodon ocmulgee, 49
Plethodon ouachitae, 49
Plethodon petraeus, 49
Plethodon punctatus, 50
Plethodon richmondi, 45, 50
Plethodon richmondi popei, 50
Plethodon richmondi
shenandoah, 51
Plethodon savannah, 51
Plethodon sequoyah, 51
Plethodon shenandoah, 51
Plethodon sherando, 52
Plethodon shermani, 52
Plethodon stormi, 52
Plethodontidae, 2, 19
Plethodon vandykei larselli, 52
Plethodon vandykei vandykei, 52
Plethodon variolatus, 57
Plethodon vehiculum, 47
Plethodon ventralis, 52
Plethodon virginia, 53
Plethodon websteri, 53
Plethodon wehrlei, 44, 47
Plethodon welleri, 53
Plethodon welleri
ventromaculatum, 53
Plethodon yonahlossee, 48, 54
Plethopsis wrighti, 54
Plethopsis wrightorum, 54
popei, 50, 51, 68
porphyritica, 57
porphyriticus, 34, 55, 57
porrasorum, 24
proserpina, 7
proserpine, 7
Proteidae, 2, 65
proximus, 70, 71
Pseudobranchius axanthus, 68
Pseudobranchius striatus
axanthus, 68
Pseudobranchius striatus
spheniscus, 69
Pseudoeurycea brunnata, 54
Pseudoeurycea cochraniae, 20
Pseudoeurycea firscheini, 54
Pseudoeurycea gadovii, 40
Pseudoeurycea goebeli, 40
Pseudoeurycea leprosa, 58, 59
Pseudoeurycea lineola, 58
Pseudoeurycea melanomolga, 22
Pseudoeurycea
nigromaculata, 23
Pseudoeurycea robertsi, 42
Pseudoeurycea smithi, 42
Pseudoeurycea tlahcuiloh, 55
Pseudoeurycea unguidentis, 25
Pseudoeurycea werleri, 55
Pseudotriton duryi, 55
Pseudotriton montanus, 55, 60
Pseudotriton montanus
floridanus, 55
Pseudotriton ruber schencki, 59
Pseudotriton ruber vioscai, 56
pulmonaris, 61
punctatus, 50, 65
quadra, 38
quadridigitatus, 35, 36
ramaswamii, 72
Ranodon olympicus, 66
rathbuni, 62, 63
retardatus, 18
Rhinatreumatidae, 2, 72
Rhyacosiredon leorae, 14
Rhyacosiredon rivularis, 14
Rhyacosiredon zempoalaensis, 14
Rhyacotritonidae, 2, 66
Rhyacotriton olympicus, 66
richmondi, 45, 50, 51
rivicola, 32
rivulare, 14
rivularis, 14
robertsi, 42
rosaceum, 9, 12
ruber, 56, 59, 60
rubrimembris, 20
rufescens, 42
salamandra, 67
Salamandra agilis, 56
Salamandra cirrigera, 56
Salamandra cylindracea, 56
Salamandra granulata, 15
Salamandra jeffersoniana, 15
Salamandra lurida, 15, 16
Salamandra porphyritica, 57
Salamandra salamandra
giglioli, 67
Salamandra variolata, 57
Salamandrella sinensis, 18
Salamandridae, 2, 66
santeetlah, 30
savagei, 24, 38, 39
savannah, 51
schencki, 59
schmidtii, 60, 62
Scolecomorphidae, 2, 73
Scolecomorphus
uluguruensis, 73
sequoyah, 51
shenandoah, 51
sherando, 52
shermani, 52
shihi, 18
sigillatum, 10
simus, 71
sinensis, 18
Siphonops mexicanus, 71
Siphonops oligozonus, 70, 71
Siphonops proximus, 70
Siphonops simus, 71
Siphonops syntremus, 70, 71
Siredon dumerilii, 16
Siredon gracilis, 16
Siredon lernaensis, 16
Siredon lichenoides, 16
Siredon lichenoides
melanosticta, 17
Siredon melanosticta, 16, 17
Sirenidae, 2, 68
Siren intermedia nettingi, 69
Siren intermedia texana, 69
Siren lacertina, 69
slateri, 13
smithi, 25, 42
sonoriense, 12
sonoriensis, 12
spelaea, 63, 64
spelaus, 64
Spelerpes, 64
Spelerpes bilineatus borealis, 57
Spelerpes cephalicus, 57
Spelerpes chiropterus, 57, 58
Spelerpes collaris, 58
Spelerpes gibbicaudus, 58
Spelerpes leprosus, 58
Spelerpes lineolus, 58
Spelerpes multiplicatus, 59
Spelerpes orculus, 59
Spelerpes orizabensis, 59
Spelerpes picadoi, 59
Spelerpes ruber schencki, 59
Spelerpes ruber sticticeps, 60
speleus, 64
spheniscus, 69
stebbinsi, 13
stejnegeri, 12, 18
sticticeps, 60
stormi, 52
striatula, 42
striatulus, 42, 43
striatus, 68, 69
subsalsum, 12
subterraneus, 35
sumatranus, 72
syntrema, 70, 71
syntremus, 70, 71
taitanus, 71
tapajonica, 24, 25
Taricha laevis, 67
Taricha torosa, 67
taylori, 13
tenebrosus, 7, 8
tenebrosus, 7
tenuissima, 70
terrestris, 25
texana, 69
Thorius dubitus, 60, 62
Thorius magnipes, 60
Thorius maxillabrochus, 60
Thorius munificus, 60
Thorius narisovalis, 61
Thorius pennatulus, 43, 61
Thorius pulmonaris, 61
Thorius schmidtii, 60, 62
Thorius troglodytes, 60, 62
tigrinum, 6, 8, 13, 15
tlahcuiloh, 55
tomasi, 39
torosa, 67
townsendi, 43, 61
tremblayi, 7
tridentifera, 34
trisruptum, 8
Triton blasii, 67
Triton ensicauda, 67
Trituroides hongkongensis, 68
Triturus cristatus, 67
Triturus ensicaudus popei, 68
Triturus marmoratus, 67
Triturus perstriatus, 68
trogodytes, 60, 62
tynerensis, 32, 34
Typhlomolge rathbuni, 62
Typhlotriton, 64
Typhlotriton braggi, 63

Typhlotriton nereus, 63, 64
Typhlotriton spelaeus, 64
Typhlotriton speleus, 64

uluguruensis, 73
unguidentis, 25
Urspelerpes, 64
Urspelerpes brucei, 64
uvidus, 36

vandykei, 52
variolata, 57
variolatus, 57
vehiculum, 47
velasci, 9
ventralis, 52, 53
ventromaculatum, 53, 54
vioscai, 56
virginia, 53
viridescens, 66, 67

vittatus, 67

websteri, 53
wehrlei, 44, 47
welleri, 53
welteri, 28
werleri, 55
wrighti, 30, 31, 54
wrightorum, 54

xanthoptica, 31
xiphias, 8
xolocalcae, 25, 26

yenyuanensis, 17
yonahlossee, 48, 54

zempoalaensis, 14