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SMITHSONIAN CONTRIBUTIONS TO ZOOLOGY • NUMBER 640



Catalog of Type Specimens  
of Recent Mammals:  
Rodentia (Sciuroomorpha  
and Castorimorpha)  
in the National Museum  
of Natural History,  
Smithsonian Institution

*Robert D. Fisher and Craig A. Ludwig*

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# Catalog of Type Specimens of Recent Mammals: Rodentia (Sciuroomorpha and Castorimorpha) in the National Museum of Natural History, Smithsonian Institution

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WASHINGTON D.C.  
2012

## ABSTRACT

Fisher, Robert D., and Craig A. Ludwig. Catalog of Type Specimens of Recent Mammals: Rodentia (Sciromorpha and Castorimorpha) in the National Museum of Natural History, Smithsonian Institution. *Smithsonian Contributions to Zoology*, number 640, iv + 97 pages, 2012.—The type collection of Recent mammals in the Division of Mammals, National Museum of Natural History, Smithsonian Institution, contains 843 specimens bearing names of 820 species group taxa of Rodentia (Sciromorpha and Castorimorpha) as of July 2011. This catalog presents a list of these holdings, which comprise 798 holotypes, 14 lectotypes, seven syntypes (30 specimens), and one neotype. In addition, we include three holotypes and 10 specimens that are part of syntype series that should be in the collection but cannot be found and three syntypes that were originally in this collection but are now known to be in other collections. One specimen that no longer has name-bearing status is included for the record. Forty-one of the names are new since the last type catalog. One new lectotype is designated. Suborders and families are listed as in Wilson and Reeder. Within families, currently recognized genera are arranged alphabetically. Within each currently recognized genus, accounts are arranged alphabetically by original published name. Information in each account includes original name and abbreviated citation thereto, current name if other than original, citation for first use of current name combination for the taxon (or new name combination if used herein for the first time), type designation, U.S. National Museum catalog number(s), preparation, age and sex, type locality, date of collection and name of collector, collector's original number, and comments or additional information as appropriate. Digital photographs of each specimen serve as a condition report and will be linked to each electronic specimen record.

Cover images: Holotype of *Callospermophilus chrysodeirus mitratus* A. H. Howell, 1931 (USNM 138125). Left to right: dorsal, lateral, and ventral views of cranium. Photographs by D. F. Schmidt.

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Published by Smithsonian Institution Scholarly Press  
P.O. Box 37012, MRC 957  
Washington, D.C. 20013-7012  
[www.scholarlypress.si.edu](http://www.scholarlypress.si.edu)

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

National Museum of Natural History (U.S.)

Catalog of type specimens of recent Mammals: Rodentia (Sciromorpha and Castorimorpha) in the National Museum of Natural History, Smithsonian Institution / Robert D. Fisher and Craig A. Ludwig.

p. cm. — (Smithsonian contributions to zoology ; no. 640)

Includes bibliographical references and index.

1. Rodents—Type specimens—Catalogs and collections—Washington (D.C.) 2. National Museum of Natural History (U.S.)—Catalogs. I. Fisher, Robert D. II. Ludwig, Craig A. III. Title.

QL737.R6N227 2012

599.35074'753--dc23

2012014838

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

∞ 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.

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# Catalog of Type Specimens of Recent Mammals: Rodentia (Sciuroomorpha and Castorimorpha) in the National Museum of Natural History, Smithsonian Institution

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## INTRODUCTION

The collection of primary type specimens in the Division of Mammals, National Museum of Natural History (NMNH), Smithsonian Institution, formerly the U.S. National Museum (USNM) is the second largest in the world, numbering 3,213 specimens. Type specimens are “the international standards of reference that provide objectivity in zoological nomenclature” and as such “every institution in which name-bearing types are deposited should publish lists of name-bearing types in its possession or custody” (International Commission on Zoological Nomenclature, 1999:79).

This is the third type catalog for USNM mammals following Lyon and Osgood (1909), 1,415 specimens reported, and Poole and Schantz (1942) 2,824 specimens reported. However, we deviate from the previous catalogs and follow the precedent set by the Division of Fishes (Vari and Howe, 1991) and the Division of Amphibians and Reptiles (Reynolds et al., 2007) in which the entire type collection is not addressed as one but rather divided into smaller, more manageable units. We anticipate the current work to be the first of at least four such publications.

## TYPE CATEGORIES INCLUDED

Specimens included in this catalog are one of the following as defined by the International Commission on Zoological Nomenclature (1999).

*Holotype.* The single specimen upon which a new nominal species group taxon is based in the original publication (Article 73.1).

*Syntype.* One of multiple specimens on which a species group name is equally based when no holotype is specified in the original publication and no subsequent designation of a lectotype has been published (Article 73.2). Syntypes are referred to as cotypes in Lyon and Osgood (1909) and Poole and Schantz (1942) as well as in other early literature.

*Lectotype.* One of multiple specimens upon which a species group name is originally based, designated in a publication subsequent to the original description to become the unique name bearer (Article 74.1).

*Neotype.* A specimen chosen as the name bearer of a species group taxon if no holotype, lectotype, syntype, or prior neotype is believed to be extant (Article 75.1).

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*Robert D. Fisher, U.S. Geological Survey, Patuxent Wildlife Research Center, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20013-7012, USA; Craig A. Ludwig, Division of Mammals, Department of Vertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20013-7012, USA; Correspondence: fisherr@si.edu; ludwicg@si.edu. Manuscript received 30 September 2011; accepted 3 April 2012.*

## ORGANIZATION

Suborders and families are arranged following Wilson and Reeder (2005). Within families, currently recognized genera are arranged alphabetically. Within each currently recognized genus, the accounts are arranged alphabetically by original published name.

## FORMAT OF ACCOUNTS

We follow the format set by Lyon and Osgood (1909) and Poole and Schantz (1942) with two notable exceptions. At the time of these earlier catalogs the collections of the Division of Mammals and those of the Biological Survey/U.S. Fish and Wildlife Service were housed separately, as were their respective type collections. The earlier catalogs thus stated in which collection a specimen was located. The two collections, including the types, were merged many years ago, and thus no such designation is given here. The earlier catalogs also stated in general terms or code the condition of each specimen. We use digital photography combined with additional comments in the photographic metadata as necessary to report specimen condition.

Each account reads as follows: (1) Original name in bold followed by the authors' name; (2) citation of original description including publication, volume, page, and date; (3) currently used name if different from the original followed by citation for the first use of current name combination for the taxon. Author names in parentheses indicate the generic name used in the original description was different than the current. Current usage follows the authors in Wilson and Reeder (2005) unless more recent authors are cited. (4) type designation and USNM catalog number (s); (5) preparation of specimen; (6) age and sex; (7) collecting locality; (8) date collected and collector(s) name(s); (9) original number, which is usually the field number; and (10) comments that seem appropriate.

Further explanatory comments are in order for some of the information in these accounts. Every effort has been made to make obvious what was included in the original description as opposed to that added later from various sources. Added information, such as amended or restricted localities, is given with citations. Brackets enclose additional data not in the original description and, when not from commonly used sources such as maps or online gazetteers, are attributed to collector's Field Catalog (FC), Museum Catalog (MC), Merriam Collection Catalog (MCC), skin label (SL), X-Catalog (XC), or a citation. Brackets surround USNM numbers of type specimens described prior to becoming part of the National Collection. Parentheses are used around metric equivalents and current place names when this information was not included in the original publication. In the early years of the U.S. National Museum a double number catalog system was used in which skins and alcoholics were entered in one catalog and skeletal material in another. Many specimens therefore have two numbers associated with them and the complete number is indicated by a fraction such as 23651/31045. This numerator on

the skin label indicates 23651 as the skin to which skull 31045 belongs; on the skull label 31045/23651 the numerator indicates 31045 as the skull to which skin 23651 belongs. This catalog system was abandoned at the end of 1892 when a single numbering system was implemented in which all parts to a specimen were assigned the same number. The new system was put in place in January 1893 with number 50001. The C. Hart Merriam private collection (MCC), donated to the U.S. National Museum and mentioned in many accounts, also used the double numbering system. Finally, the X-Catalog requires explanation. Beginning with the Biological Survey and continuing with the Fish and Wildlife Service, specimens acquired by these agencies through exchange or purchase or specimens received from or collected by persons other than permanent staff, were entered in this catalog prior to being transferred to the Division of Mammals for cataloging. Frequently, these entries have data that were never entered into the Museum Catalog or onto the skin labels. The last entry in the X-Catalog was on 5 October 1951.

## APPROACH

In the early 1970s the accounts in a copy of Poole and Schantz (1942) were cut out and pasted onto 5 × 7 index cards to create a card file of types. Additional cards were created and added to the file as new types were installed in the collection. The information on each card for the taxa included in this catalog was checked against the original description, the original skin label (when present), and the field catalog entry (when available). Other catalogs such as the Museum Catalog, Merriam Collection Catalog, and X-Catalog were consulted as needed. Information on each index card, often annotated by hand, was used to create each of the accounts.

Authors in Wilson and Reeder (2005) are followed for currently accepted names unless an online search of Zoological Record, conducted through 2009 for Sciromorpha and 2010 for Castomorpha, uncovered more recent taxonomic conclusions. Each specimen record in the collection database was corrected as needed to reflect new information. The type publication citation was added to the electronic record if not already present. Each Museum Catalog record was checked and updated with publication data as required in the hand ledgers.

Digital images are being created for each specimen and include the following: dorsal, lateral, and ventral views of crania; dorsal and lateral views of mandibles; dorsal and ventral views of skins (lateral if possibly diagnostic); and both sides of all labels. Additional views are included when deemed appropriate. In the case of lateral images, the traditional view of the left aspect is presented except in instances where the right aspect is more complete owing to damage on the left side. Specimen damage not captured in these images is recorded in the associated image metadata when readily apparent. No concerted effort was made to minutely examine specimens for damage. All images feature a metric scale bar. Images will be linked to the specimen database as they

become available and can be accessed via the Internet. Images are being created in the order in which accounts are presented. We anticipate it will take about two years for all images to be completed for specimens in this catalog. These images will serve not only as specimen condition indicators, but in many instances they also will allow researchers to examine type specimens without having to travel to the U.S. National Museum and handle the specimens, thereby providing a convenience to researchers and minimizing possible damage to irreplaceable specimens.

#### ACKNOWLEDGMENTS

We thank our supervisors, Robert P. Reynolds, USGS Patuxent Wildlife Research Center, NMNH, and Kristofer L. Helgen, Division of Mammals, NMNH, respectively, for support, encouragement, and time to devote to this project. Funds to purchase the photographic setup, in order of significance, were provided by Carol E. Butler, Chief of Collections, NMNH; Don E. Wilson, Chair, Department of Vertebrate Zoology, NMNH; and Robert P. Reynolds, to whom we are thankful. We are greatly indebted to David F. Schmidt, Division of Mammals, NMNH, with support from Linda K. Gordon, Division of Mammals, NMNH, who spent a considerable amount of time researching photographic equipment and methods, ordered the equipment, set up the photographic lab, and created images of the first 100 or so specimens before and for some time following his retirement. Advice on photographic equipment, setup, and technique was graciously provided to David by Melvin J. Wachowiak and Elizabeth Webb, Museum Conservation Institute, Smithsonian Institution; Roy and Jason Larimer, Visionary Digital; and James L. Di Loreto, Office of Imaging and Photographic Services, NMNH. Joelle Mintz, USGS Patuxent Wildlife Research Center, NMNH, checked the museum catalog hand ledgers and added publication data for all type records as needed. Alfred L. Gardner, USGS Patuxent Wildlife Research Center, NMNH, provided valuable insight to numerous taxonomic issues and guidance in interpreting various provisions of the International Code of Zoological Nomenclature. Alfred L. Gardner, Robert P. Reynolds, and David F. Schmidt provided comments that greatly improved the manuscript.

### ACCOUNTS OF NAME-BEARING TYPE SPECIMENS

#### SUBORDER SCIROMORPHA BRANDT, 1855

#### FAMILY APLODONTIIDAE BRANDT, 1855

#### Genus *Apłodontia* Richardson, 1829

##### *Apłodontia major* Merriam

Ann. New York Acad. Sci. 3: 316, May 1886a.

= *Apłodontia rufa californica* (Peters, 1864). See Taylor (1918:473).

Lectotype: [186473] Skin and skeleton. Adult male. [SL and MCC: Blue Canyon], Placer County, California. Collected 7 Oct 1885 by C. A. Allen. Original number [MCC: 1]. Merriam collection number 1501/2101.

Type not designated by number in original description. Poole and Schantz (1942:253) list this as a Lectotype without comment, and we can find no earlier designation. The skull is the first figured and the first listed in specimens examined.

##### *Apłodontia major rainieri* Merriam

Proc. Biol. Soc. Washington 13: 21, 31 Jan 1899a.

= *Apłodontia rufa rainieri* Merriam, 1899. See Taylor (1918: 465).

Holotype: 90144. Skin and skull. Adult male. Paradise Creek [FC: Paradise Park], south side of Mount Rainier, altitude 5,200 ft (1,585 m), [Pierce County], Washington. Collected 6 Aug 1897 by V. Bailey. Original number 6122.

##### *Apłodontia olympica* Merriam

Proc. Biol. Soc. Washington 13: 20, 31 Jan 1899a.

= *Apłodontia rufa rufa* (Rafinesque, 1817). See Dalquest and Sheffer (1945:37).

Holotype: 89549. Skin and skull. Young adult male. Quenault (Quinault) Lake, Olympic Mountains, [Grays Harbor County], Washington. Collected 24 Jul 1897 by R. T. Young. Original number 309.

##### *Apłodontia pacifica* Merriam

Proc. Biol. Soc. Washington 13: 19, 31 Jan 1899a.

= *Apłodontia rufa pacifica* Merriam, 1899. See Taylor (1918:467).

Holotype: 77372. Skin and skull. Adult female. Newport, [SL: 3 mi (4.8 km) north of town], mouth of Yaquina Bay, [Lincoln County], Oregon. Collected 20 [SL: 26, which is correct] Mar 1896 by B. J. Bretherton. Original number 2219.

##### *Apłodontia phaea* Merriam

Proc. Biol. Soc. Washington. 13: 20, 31 Jan 1899a.

= *Apłodontia rufa phaea* Merriam, 1899. See Taylor (1918:480).

Holotype: 186475. Skin and skull. Adult male. Point Reyes, Marin County, California. Collected 1 Aug 1886 by C. A. Allen. Original number 142. Merriam collection number 2645/3273.

### FAMILY SCIURIDAE G. FISCHER, 1814

#### Genus *Aeretes* G. M. Allen, 1940

##### *Petaurista sulcatus* A. B. Howell

J. Washington Acad. Sci. 17: 82, 19 Feb 1927.

= *Aeretes melanopterus melanopterus* (Milne-Edwards, 1867). See G. M. Allen (1940:746).

Holotype: 219206. Skin and skull. Adult female. Hsin-lung-shan, 65 mi (105 km) northeast of Peking (Beijing), altitude 3,000 ft (914 m), Chih-li (Hebei), China. Collected 18 Aug 1917 by A. de C. Sowerby. Original number 1017.

## Genus *Ammospermophilus* Merriam, 1892

### *Ammospermophilus leucurus extimus* Nelson and Goldman

J. Washington Acad. Sci. 19: 281, 19 Jul 1929a.

Holotype: 146587. Skin and skull. Adult female. Saccaton, 15 mi (24 km) north of Cape San Lucas, [SL and FC: altitude 1,000 ft (305 m)], Lower California (Baja California Sur), Mexico. Collected 29 Dec 1905 by E. W. Nelson and E. A. Goldman. Original number 18805.

### *Ammospermophilus leucurus insularis* Nelson and Goldman

Proc. Biol. Soc. Washington 22: 24, 10 Mar 1909.

Holotype: 146783. Skin and skull. Adult female. Espiritu Santo Island, [Gulf of California], Lower California (Baja California Sur), Mexico. Collected 7 Feb 1906 by E. W. Nelson and E. A. Goldman. Original number 19072.

### *Ammospermophilus leucurus pennipes* A. H. Howell

J. Mamm. 12: 162, 14 May 1931.

Holotype: 75683. Skin and skull. Adult female. Grand Junction, [Mesa County], Colorado. Collected 11 Nov 1895 by A. H. Howell. Original number 494.

### *Ammospermophilus leucurus tersus* Goldman

J. Washington Acad. Sci. 19: 435, 19 Nov 1929.

Holotype: 202645. Skin and skull. Young adult male. Lower end of Prospect Valley, altitude 4,500 ft (1,372 m), Grand Canyon, Hualapai Indian Reservation, [Mohave County], Arizona. Collected 3 Oct 1913 by E. A. Goldman. Original number 22269.

### *Spermophilus harrisii saxicolus* Mearns

Proc. U.S. Natl. Mus. 18: 2, 25 Mar 1896a. Preprint of Proc. U.S. Natl. Mus. 18: 444, 23 May 1896b.

= *Ammospermophilus harrisii saxicolus* (Mearns, 1896). See Mearns (1907:307).

Holotype: 59869. Skin, skull, [and body with six embryos in alcohol]. Adult female. Tinajas Altas, Gila Mountains, Yuma County, Arizona. Collected 17 Feb 1894 by E. A. Mearns and F. X. Holzner. Original number 2983.

### *Spermophilus nelsoni* Merriam

Proc. Biol. Soc. Washington 8: 129, 28 Dec 1893a.

= *Ammospermophilus nelsoni* (Merriam, 1893). See Lyon and Osgood (1909:172).

Holotype: 54651. Skin and skull. Adult male. Tipton, San Joaquin Valley, [FC: Tulare County], California. Collected 24 Jun 1893 by C. P. Streator. Original number 2968.

### *Tamias interpres* Merriam

N. Amer. Fauna 4: 21, 8 Oct 1890a.

= *Ammospermophilus interpres* (Merriam, 1890). See V. Bailey (1905:81).

Holotype: 18162/25060. Skin and skull. Adult female. El Paso, [El Paso County], Texas. Collected 10 Dec 1889 by V. Bailey. Original number 762.

### *Tamias leucurus* Merriam

N. Amer. Fauna 2: 20, 30 Oct 1889a.

= *Ammospermophilus leucurus leucurus* (Merriam, 1889). See Mearns (1907:299).

Holotype: [186466. Skin and skull]. Adult male. San Gorgonio Pass, [Riverside County], California. Collected 16 May 1885 by F. Stephens. Original number [MCC: 68]. Merriam collection number 1108/1600.

### *Tamias leucurus cinnamomeus* Merriam

N. Amer. Fauna 3: 51, 11 Sep 1890b.

= *Ammospermophilus leucurus cinnamomeus* (Merriam, 1890). See Mearns (1907:299).

Holotype: 17987/24898. Skin and skull. Adult female. Echo Cliffs, [SL and FC: Moa Ave.], Painted Desert, [Coconino County], Arizona. Collected 22 Sep 1889 by C. H. Merriam and V. Bailey. Original number [FC: VB] 510.

## Genus *Callosciurus* Gray, 1867

### *Callosciurus finlaysonii boonsongi* Moore and Tate

Fieldiana Zool. 48: 184, 28 May 1965.

Holotype: 307801. Skin and skull. Adult male [SL and FC: female]. Phu Phan, a mountain in Sakon Nakhon (Amphoe Muang Sakon Nakhon) District, Sakon Nakhon Province, eastern Thailand. Collected 14 Jun 1954 by R. E. Elbel and B. Lekagul. Original number [SL: RE 3700].

### *Sciurus abbottii* Miller

Proc. Washington Acad. Sci. 2: 224, 20 Aug 1900a.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 101662. Skin and skull. Adult female. Big Tambelan Island, [Tambelan Islands, Kepulauan Riau Province, Indonesia]. Collected 10 Aug 1899 by W. L. Abbott. No original number.

### *Sciurus adangensis* Miller

Smithsonian Misc. Coll. 45: 17, 6 Nov 1903a.

= *Callosciurus caniceps adangensis* (Miller, 1903). See Robinson and Kloss (1918a:209).

Holotype: 104389. Skin and skull. Adult male. Pulo Adang, Butang Islands [Satun, Thailand]. Collected 14 Dec 1899 by W. L. Abbott. Original number 153.

### *Sciurus altinsularis* Miller

Smithsonian Misc. Coll. 45: 21, 6 Nov 1903a.

= *Callosciurus caniceps* (Gray, 1842) Unassigned to subspecies by Thorington and Hoffmann (2005:776).

Holotype: 111975. Skin and skull. Adult female. High Island, Mergui Archipelago, [Tanintharyi, Myanmar]. Collected 31 Dec 1900 by W. L. Abbott. Original number 810.

***Sciurus anambensis* Miller**

Proc. Washington Acad. Sci. 2: 223, 20 Aug 1900a.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 101686. Skin and skull. Adult female. Pulo Siantan, Anambas Islands, [Kepulauan Riau Province, Indonesia]. Collected 12 Sep 1899 by W. L. Abbott. No original number.

***Sciurus aoris* Miller**

Smithsonian Misc. Coll. 45: 10, 6 Nov 1903a.

= *Callosciurus notatus miniatus* (Miller, 1900). See Corbet and Hill (1992:291).

Holotype: 112418. Skin and skull. Adult female. Pulo Aor, off the coast of Johore (Johor), [Malaysia]. Collected 5 Jun 1901 by W. L. Abbott. Original number 1002.

***Sciurus arendsis* Lyon**

Proc. U.S. Natl. Mus. 40: 87, 25 Apr 1911a.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 154276. Skin and skull. Adult male. Arends Island (Pulau Keramian) Java Sea, [Kalimantan Selatan, Borneo, Indonesia]. Collected 24 Nov 1908 by W. L. Abbott. Original number 6251.

***Sciurus armalis* Lyon**

Proc. U.S. Natl. Mus. 40: 82, 25 Apr 1911a.

= *Callosciurus prevostii atricapillus* (Schlegel, 1863). See Thorington and Hoffmann (2005:779).

Holotype: 145420. Skin and skull. Adult male. Pulo Panebangan, [Kalimantan Barat], off west coast of Borneo, [Indonesia]. Collected 19 May 1907 by W. L. Abbott. Original number 5257.

***Sciurus atratus* Miller**

Smithsonian Misc. Coll. 45: 13, 6 Nov 1903a.

= *Callosciurus melanogaster atratus* (Miller, 1903). See Hayman and Holt (1940:374).

Holotype: 121524. Skin and skull. Adult female. North Pagi Island (Pulau Pagai Utara), [Sumatera Barat], Sumatra, [Indonesia]. Collected 22 Nov 1902 by W. L. Abbott. Original number 2087.

***Sciurus atricapillus atrox* Miller**

Smithsonian Misc. Coll. 61 (21): 23, 29 Dec 1913.

= *Callosciurus prevostii* (Desmarest, 1822). Unassigned to subspecies by Thorington and Hoffmann (2005:779).

Holotype: 196669. Skin and skull. Adult female. Talisaian Mountain, [Kalimantan Timur], Dutch Southeast Borneo,

[Indonesia]. Collected 6 Feb 1913 by H. C. Raven. Original number 457.

***Sciurus atristriatus* Miller**

Smithsonian Misc. Coll. 61 (21): 22, 29 Dec 1913.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 196670. Skin and skull. Half-grown female. Lo Bon Bon, [SL: Mahakkan River, North bank], [FC: above Samamila], [Kalimantan Timur], Dutch Southeast Borneo, [Indonesia]. Collected 4 Jun 1912 by H. C. Raven. Original number 13.

***Sciurus atrodorsalis tachin* Kloss**

J. Nat. Hist. Soc. Siam. 2: 178, Dec 1916. See Kloss (1919) for full description.

= *Callosciurus erythraeus siamensis* (Gray, 1860). See Thorington and Hoffmann (2005:776).

Holotype: [221566]. Skin and skull. Adult female. Pak Bu, Tachin, [Samut Sakhon], Central Siam (Thailand). Collected 23 Oct 1916 by C. B. Kloss. Original number 2213.

***Sciurus bentinckanus* Miller**

Smithsonian Misc. Coll. 45: 19, 6 Nov 1903a.

= *Callosciurus caniceps* (Gray, 1842). Unassigned to subspecies by Thorington and Hoffmann (2005:776), but see Moore and Tate (1965:195) and Corbet and Hill (1992:288) who assign it to *C. c. domelicus* (Miller, 1903).

Holotype: 104383. Skin and skull. Adult female. Bentinck Island, Mergui Archipelago, [Tanintharyi, Myanmar]. Collected 11 Mar 1900 by W. L. Abbott. Original number 349.

***Sciurus bilimitatus* Miller**

Smithsonian Misc. Coll. 45: 8, 6 Nov 1903a.

= *Callosciurus nigrovittatus bilimitatus* (Miller, 1903). See Robinson and Kloss (1918a:222).

Holotype: 105072. Skin and skull. Adult female. Tanjung Laboha, Tringanu (Terengganu), [Malaysia]. Collected 29 Sep 1900 by C. B. Kloss. Original number W. L. Abbott 671.

***Sciurus billitonus* Lyon**

Proc. U.S. Natl. Mus. 31: 592, 18 Dec 1906a.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 124997. Skin and skull. Adult female. Budong Bay, Billiton Island, between Sumatra and Borneo, [Kepulauan Bangka Belitung, Indonesia]. Collected 5 Aug 1904 by W. L. Abbott. Original number 3539.

***Sciurus borneoensis palustris* Lyon**

Proc. U.S. Natl. Mus. 33: 553, 24 Dec 1907a.

= *Callosciurus prevostii* (Desmarest, 1822). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 142330. Skin and skull. Adult male. North (SL: Right) bank of the Kapaus River, below Pulo Limbang, [Kaliman-

tan Barat], western Borneo, [Indonesia]. Collected 22 Sep 1905 by W. L. Abbott. Original number 4467.

***Sciurus caniceps canigenus* A. B. Howell**

J. Washington Acad. Sci. 17: 81, 19 Feb 1927.

= *Callosciurus erythraeus styani* (Thomas, 1894). See G. M. Allen (1940:633).

Holotype: 241509. Skin and skull. Adult male. Hayehsien, Hangchow Bay, [SL: NE] Chekiang (Zhejiang), China. Collected 10 Dec 1925 by A. de C. Sowerby. Original number 1515.

***Sciurus caniceps helvus* Shamel**

J. Mamm. 11: 72, 11 Feb 1930.

= *Callosciurus caniceps* (Gray, 1842). Unassigned to subspecies by Thorington and Hoffmann (2005:776), but see Moore and Tate (1965:196), who assigned it to *C. c. caniceps* (Gray, 1842).

Holotype: 253433. Skin and skull. Adult male. Island of Koh Tau, [Surat Thani], off the east coast of the Malay Peninsula, [Thailand]. Collected 17 Sep 1928 by H. M. Smith. Original number [SL: 2362].

***Sciurus carimatae* Miller**

Proc. U.S. Natl. Mus. 31: 57, 23 Jul 1906a.

= *Callosciurus prevostii atricapillus* (Schlegel, 1863). See Corbet and Hill (1992:290).

Holotype: 125076. Skin and skull. Adult male. Telok Pai, Karimata Island, [Kalimantan Barat], off west coast of Borneo, [Indonesia]. Collected 27 Aug 1904 by W. L. Abbott. Original number 3662.

***Sciurus carimonensis* Miller**

Proc. U.S. Natl. Mus. 31: 261, 11 Sep 1906b.

= *Callosciurus prevostii* (Desmarest, 1822). Unassigned to subspecies by Thorington and Hoffmann (2005:779).

Holotype: 122800. Skin and skull. Adult female [FC: 11 mi (18 km) SW Tanjon Balie], Great Karimon Island [FC: Straits of Malacca], Rhio-Linga (Riau) Archipelago, [Kepulauan Riau, Sumatra, Indonesia]. Collected 24 May 1903 by W. L. Abbott. Original number 2423.

***Sciurus casensis* Miller**

Smithsonian Misc. Coll. 45: 20, 6 Nov 1903a.

= *Callosciurus caniceps casensis* (Miller, 1903). See Robinson and Kloss (1918a:208).

Holotype: 104370. Skin and skull. Adult female. Chance Island, Mergui Archipelago [Tanintharyi, Myanmar]. Collected 28 Dec 1899 by W. L. Abbott. Original number 185.

***Sciurus condurensis* Miller**

Proc. U.S. Natl. Mus. 31: 260, 11 Sep 1906b.

= *Callosciurus prevostii* (Desmarest, 1822). Unassigned to subspecies by Thorington and Hoffmann (2005:779).

Holotype: 122876. Skin and skull. Adult female. Pulo Kundur, Rhio-Linga (Riau) Archipelago, [FC: east coast of Sumatra], [Kepulauan Riau, Indonesia]. Collected 13 Jun 1903 by W. L. Abbott. Original number 2486.

***Sciurus datus* Lyon**

Proc. U.S. Natl. Mus. 40: 86, 25 Apr 1911a.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 145393. Skin and skull. Adult female. Pulo Datu, off west coast of Borneo, [Kalimantan Barat], [FC: South China Sea], [Indonesia]. Collected 2 May 1907 by W. L. Abbott. Original number 5153.

***Sciurus director* Lyon**

Proc. U.S. Natl. Mus. 36: 509, 7 Jun 1909a.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005: 778).

Holotype: 145392. Skin and skull. Immature male. Direction Island, South China Sea [Kalimantan Barat, Borneo, Indonesia]. Collected 1 May 1907 by W. L. Abbott. Original number 5152.

***Sciurus domelicus* Miller**

Smithsonian Misc. Coll. 45: 18, 6 Nov 1903a.

= *Callosciurus caniceps domelicus* (Miller, 1903). See Robinson and Kloss (1918a:207).

Holotype: 104381. Skin and skull. Adult female. Domel Island, Mergui Archipelago, [Tanintharyi, Myanmar]. Collected 24 Feb 1900 by W. L. Abbott. Original number 322.

***Sciurus dulitensis dilutus* Miller**

Smithsonian Misc. Coll. 61 (21): 23, 29 Dec 1913.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 196712. Skin and skull. Adult female. Tanjung Batu, [Kalimantan Timur], Dutch Southeast Borneo, [Indonesia]. Collected 24 Aug 1912 by H. C. Raven. Original number 177.

***Sciurus epomophorus inexpectatus* Kloss**

J. Nat. Hist. Soc. Siam, 2: 178, Dec 1916.

= *Callosciurus caniceps* (Gray, 1842). Unassigned to subspecies by Thorington and Hoffmann (2005:776) but see Moore and Tate (1965:196) who assign it to *C. c. caniceps* (Gray, 1842).

Holotype: 221557. Skin and skull. Adult female. Koh Lak, Pran, [Prachuap Khiri Khan], southwest Siam (Thailand). Collected 15 Nov 1916 by C. B. Kloss. Original number 2434.

***Sciurus erebus* Miller**

Proc. U.S. Natl. Mus. 26: 456, 3 Feb 1903b.

= *Callosciurus prevostii piceus* (Peters, 1866). See Robinson and Kloss (1918a:214).

Holotype: 114537. Skin and skull. Adult female. Tapanuli Bay, [Sumatera Utara], northwestern Sumatra, [Indonesia]. Collected 17 Mar 1902 by W. L. Abbott. Original number 1653.

***Sciurus erythraeus pranis* Kloss**

J. Nat. Hist. Soc. Siam, 2: 178, Dec 1916.

= *Callosciurus erythraeus pranis* (Kloss, 1916). See Thorington and Hoffmann (2005:776).

Holotype: 221568. Skin and skull. Adult male. Koh Lak, Pran, [Prachuap Khiri Khan], southwest Siam (Thailand). Collected 9 Nov 1916 by C. B. Kloss. Original number 2395.

***Sciurus finlaysoni trotteri* Kloss**

J. Nat. Hist. Soc. Siam, 2: 178, Dec 1916.

= *Callosciurus finlaysonii trotteri* (Kloss, 1916). See Robinson and Kloss (1918a:203).

Holotype: 236601. Skin and skull. Adult male. Koh Lan [SL: Island], [Chon Buri], inner Gulf of Siam (Thailand). Collected 29 Oct 1916 by C. B. Kloss. Original number 2266.

***Sciurus ictericus* Miller**

Smithsonian Misc. Coll. 45: 12, 6 Nov 1903a.

= *Callosciurus notatus vittatus* (Raffles, 1821). See Thorington and Hoffmann (2005:778).

Holotype: 121727. Skin and skull. Adult female. Tana Bala (Pulau Tanabala), Batu Islands [Sumatera Utara, Sumatra, Indonesia]. Collected 4 Feb 1903 by W. L. Abbott. Original number 2223.

***Sciurus klossii* Miller**

Proc. Washington Acad. Sci. 2: 225, 20 Aug 1900a.

= *Callosciurus nigrovittatus klossii* (Miller, 1900). See Robinson and Kloss (1918a: 223).

Holotype: 101678. Skin and skull. Adult male. Kaju Ara, or Saddle Island (Pulau Mendarik), [SL: near] Tambelan group, [Kepulauan Riau, Indonesia]. Collected 15 Aug 1899 by W. L. Abbott. No original number.

***Sciurus lamucotanus* Lyon**

Proc. U.S. Natl. Mus. 40: 85, 25 Apr 1911a.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 145405. Skin and skull. Adult female. Pulo Lamukotan, [Kalimantan Barat], [FC: about 10 mi (16 km) off west coast of Borneo, [Indonesia]. Collected 8 May 1907 by W. L. Abbott. Original number 5201.

***Sciurus lancavensis* Miller**

Smithsonian Misc. Coll. 45: 16, 6 Nov 1903a.

= *Callosciurus caniceps* (Gray, 1842). Unassigned to subspecies by Thorington and Hoffmann (2005:776) but see Moore and Tate (1965:187) who assign it to *C. c. concolor* (Blyth, 1856).

Holotype: 104390. Skin and skull. Adult male. Pulo (Pulau) Lankawi, off west coast of Malay Peninsula, about 75 mi

(121 km) north of Penang, [Kedah, Malaysia]. Collected 1 Dec 1899 by W. L. Abbott. Original number 101.

***Sciurus lautensis* Miller**

Proc. Washington Acad. Sci. 3: 128, 26 Mar 1901a.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 104683. Skin and skull. Adult female. Pulo Laut, North Natuna Islands, South China Sea, between Malay Peninsula and Borneo, [Kepulauan Riau, Indonesia]. Collected 6 Aug 1900 by W. L. Abbott. Original number 612.

***Sciurus lucas* Miller**

Smithsonian Misc. Coll. 45: 20, 6 Nov 1903a.

= *Callosciurus caniceps* (Gray, 1842). Unassigned to subspecies by Thorington and Hoffmann (2005:776) but see Moore and Tate (1965:190), who assign it to *C. c. bimaculatus* (Temminck, 1853).

Holotype: 104385. Skin and skull. Adult female. St. Luke Island, Mergui Archipelago, [Tanintharyi, Myanmar]. Collected 20 Jan 1900 by W. L. Abbott. Original number 256.

***Sciurus lutescens* Miller**

Proc. Washington Acad. Sci. 3: 124, 26 Mar 1901a.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 104668. Skin and skull. Adult male. Sirhassen Island, South Natuna Islands, [Kepulauan Riau, Indonesia]. Collected 3 Jun 1900 by W. L. Abbott. Original number 429.

***Sciurus marinularis* Lyon**

Proc. U.S. Natl. Mus. 40: 89, 25 Apr 1911a.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 151777. Skin and skull. Adult male. Pulo Laut, [FC: Saratok], off southeastern Borneo, [Kalimantan Selatan, Indonesia]. Collected 17 Dec 1907 by W. L. Abbott. Original number 5619.

***Sciurus matthaeus* Miller**

Smithsonian Misc. Coll. 45: 19, 6 Nov 1903a.

= *Callosciurus caniceps* (Gray, 1842). Unassigned to subspecies by Thorington and Hoffmann (2005:776) but see Moore and Tate (1965:190) who assign it to *C. c. bimaculatus* (Temminck, 1853).

Holotype: 111920. Skin and skull. Adult female. St. Matthew Island, Mergui Archipelago, [Tanintharyi, Myanmar]. Collected 11 Dec 1900 by W. L. Abbott. Original number 774.

***Sciurus melanops* Miller**

Proc. Acad. Nat. Sci. Philadelphia 54: 151, 11 Jun 1902.

= *Callosciurus prevostii melanops* (Miller, 1902). See Robinson and Kloss (1918a: 211).

Holotype: 113152. Skin and skull. Adult female. Indragiri River, [FC: at Tjenako], [Riau], eastern Sumatra, [Indonesia]. Collected 15 Sep 1901 by W. L. Abbott. Original number 1307.

***Sciurus melanops penaius* Lyon**

Proc. U.S. Natl. Mus. 34: 637, 14 Sep 1908.

= *Callosciurus prevostii melanops* (Miller, 1902). See Thorington and Hoffmann (2005:779).

Holotype: 144364. Skin and skull. Adult female. Pulo Penjalei, at the mouth of the Kampar River, [Riau], eastern Sumatra, [Indonesia]. Collected 5 Feb 1907 by W. L. Abbott. Original number 5040.

***Sciurus mendanauus* Lyon**

Proc. U.S. Natl. Mus. 31: 589, 18 Dec 1906a.

= *Callosciurus prevostii* (Desmarest, 1822). Unassigned to subspecies by Thorington and Hoffmann (2005:779).

Holotype: 124916. Skin and skull. Adult male. Pulo Mendanau, [FC: Kampong Petaling], west of Billiton Island, Malay Archipelago, [Kepulauan Bangka Belitung, Sumatra, Indonesia]. Collected 14 Jul 1904 by W. L. Abbott. Original number 3475.

***Sciurus mimellus* Miller**

Proc. Washington Acad. Sci. 2: 218, 20 Aug 1900a.

= *Callosciurus prevostii* (Desmarest, 1822). Unassigned to subspecies by Thorington and Hoffmann (2005:779).

Holotype: 101668. Skin and skull. Adult male. Pulo Wai (Pulau Uwi), Tambelan Islands, South China Sea, between Malay Peninsula and Borneo, [Kepulauan Riau, Indonesia]. Collected 13 Aug 1899 by W. L. Abbott. No original number.

***Sciurus mimiculus* Miller**

Proc. Washington Acad. Sci. 2: 219, 20 Aug 1900a.

= *Callosciurus prevostii* (Desmarest, 1822). Unassigned to subspecies by Thorington and Hoffmann (2005:779).

Holotype: 101616. Skin and skull. Adult male. Ste. (Saint) Barbe Island (Pulau Penjantan), South China Sea, between Sumatra and Borneo, [Kepulauan Riau, Indonesia]. Collected 1 Aug 1899 by W. L. Abbott. No original number.

***Sciurus notatus miniatus* Miller**

Proc. Washington Acad. Sci. 2: 79, 25 Jul 1900b.

= *Callosciurus notatus miniatus* (Miller, 1900). See Corbet and Hill (1992:291).

Holotype: 88415. Skin and skull. Adult female. On or near Khow Nom Plu, Trong (Trang), [SL: about 1,000 ft (305 m)], Lower Siam (Thailand). Collected 25 Feb 1897 by W. L. Abbott. No original number.

***Sciurus nyx* Lyon**

Proc. U.S. Natl. Mus. 34: 638, 14 Sep 1908.

= *Callosciurus prevostii melanops* (Miller, 1902). See Thorington and Hoffmann (2005:779).

Holotype: 143392. Skin and skull. Adult female. Pulo Rupat, off east coast of Sumatra, [Riau, Indonesia]. Collected 10 Mar 1906 by W. L. Abbott. Original number 4691.

***Sciurus pannovianus* Miller**

Smithsonian Misc. Coll. 45: 11, 6 Nov 1903a.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 112351. Skin and skull. Adult male. Pulo Pannow (Penau), Atas (Badas) Islands, South China Sea, [Kepulauan Riau, Indonesia]. Collected 28 May 1901 by W. L. Abbott. Original number 952.

***Sciurus pelapius* Lyon**

Proc. U.S. Natl. Mus. 40: 82, 25 Apr 1911a.

= *Callosciurus prevostii atricapillus* (Schlegel, 1863). See Corbet and Hill (1992:290).

Holotype: 145417. Skin and skull. Adult female. Pulo Pelapis, South Island, off west coast of Borneo, [Kalimantan Barat, Indonesia]. Collected 30 May 1907 by W. L. Abbott. Original number 5335.

***Sciurus pemangilensis* Miller**

Smithsonian Misc. Coll. 45: 9, 6 Nov 1903a.

= *Callosciurus notatus miniatus* (Miller, 1900). See Corbet and Hill (1992:291).

Holotype: 112460. Skin and skull. Adult female. Pulo Pemangil, off coast of Johore (Johor), [SL and FC: South China Sea], [Malaysia]. Collected 12 Jun 1901 by W. L. Abbott. Original number 1062.

***Sciurus peninsularis* Miller**

Smithsonian Misc. Coll. 45: 10, 6 Nov 1903a.

= *Callosciurus notatus miniatus* (Miller, 1900). See Corbet and Hill (1992:291).

Holotype: 112511. Skin and skull. Adult male. North bank of Endau River, Pahang, [Malaysia]. Collected 21 Jun 1901 by W. L. Abbott. Original number 1078.

***Sciurus poliopus* Lyon**

Proc. U.S. Natl. Mus. 40: 88, 25 Apr 1911a. Primary junior homonym of *Sciurus variegatus poliopus* Fitzinger, 1867. Replaced with *Sciurus conicus* by Lyon (1911b:98).

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 151789. Skin and skull. Adult male. Pamukang (Pamu-kan) Bay, [Kalimantan Selatan], southern Borneo, [Indonesia]. Collected 5 Apr 1908 by W. L. Abbott. Original number 5923.

***Sciurus pretiosus* Miller**

Proc. U.S. Natl. Mus. 26: 454, 3 Feb 1903b.

= *Callosciurus notatus vittatus* (Raffles, 1821). See Corbet and Hill (1992:292).

Holotype: 114325. Skin and skull. Adult female. Pulo Bangkaru, Banjak Islands, [Aceh, Sumatra, Indonesia]. Collected 20 Jan 1902 by W. L. Abbott. Original number 1442.

***Sciurus proserpinae* Lyon**

Smithsonian Misc. Coll. 48: 275, 4 Feb 1907b.

= *Callosciurus prevostii atricapillus* (Schlegel, 1863). See Corbet and Hill (1992:290).

Holotype: 142285. Skin and skull. Adult female. Pulo Temaju, about 4 mi (6.5 km) off west coast of Borneo, [Kalimantan Barat, Indonesia]. Collected 9 Jun 1905 by W. L. Abbott. Original number 4180.

***Sciurus rubeculus* Miller**

Smithsonian Misc. Coll. 45: 22, 6 Nov 1903a.

= *Callosciurus erythraeus rubeculus* (Miller, 1903). See Robinson and Kloss (1918a:199).

Holotype: 86777. Skin and skull. Adult male. Khow Sai Dow, altitude 1,000 ft (305 m), Trong (Trang), Lower Siam (Thailand). Collected 21 Feb 1899 by W. L. Abbott. No original number.

***Sciurus rubidiventris* Miller**

Proc. Washington Acad. Sci. 3: 127, 26 Mar 1901a.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 104671. Skin and skull. Adult female. Bunguran Island, North Natunas (Natuna Islands), [Kepulauan Riau, Indonesia]. Collected 22 Jun 1900 by W. L. Abbott. Original number 498.

***Sciurus rutiliventris* Miller**

Proc. Washington Acad. Sci. 3: 126, 26 Mar 1901a.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 104658. Skin and skull. Adult male. Pulo Midei (Pulau Midai), Low Island, South Natuna Islands, [Kepulauan Riau, Indonesia]. Collected 24 May 1900 by W. L. Abbott. Original number 405.

***Sciurus sanggaus* Lyon**

Proc. U.S. Natl. Mus. 33: 554, 24 Dec 1907a.

= *Callosciurus prevostii atricapillus* (Schlegel, 1863). See Corbet and Hill (1992:290).

Holotype: 142296. Skin and skull. Adult female. Sanggau, south bank of Kapuas River, [Kalimantan Barat], western Borneo, [Indonesia]. Collected 21 Aug 1905 by W. L. Abbott. Original number 4357.

***Sciurus saturatus* Miller**

Proc. U.S. Natl. Mus. 26: 453, 3 Feb 1903b.

= *Callosciurus notatus vittatus* (Raffles, 1821). See Corbet and Hill (1992:292).

Holotype: 114629. Skin and skull. Adult female. Pulo Mansalar (Pulau Musala), off Tapanuli Bay, [Sumatera Utara], Sumatra, [Indonesia]. Collected 9 Mar 1902 by W. L. Abbott. Original number 1633.

***Sciurus seraiae* Miller**

Proc. Washington Acad. Sci. 3: 125, 26 Mar 1901a.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 104660. Skin and skull. Adult male. Pulo Seraia, South Natuna Islands, [Kepulauan Riau, Indonesia]. Collected 29 May 1900 by W. L. Abbott. Original number 415.

***Sciurus serutus* Miller**

Proc. U.S. Natl. Mus. 31: 58, 23 Jul 1906a.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 125025. Skin and skull. Adult male. Pulo Serutu, Karimata Islands, [Kalimantan Barat, Borneo, Indonesia]. Collected 17 Aug 1904 by W. L. Abbott. Original number 3584.

***Sciurus siriensis* Lyon**

Proc. U.S. Natl. Mus. 40: 87, 25 Apr 1911a.

= *Callosciurus notatus* (Boddaert, 1785). Unassigned to subspecies by Thorington and Hoffmann (2005:778).

Holotype: 151768. Skin and skull. Adult male. Pulo Mata Siri, Java Sea, [Kalimantan Selatan, Borneo, Indonesia]. Collected 7 Dec 1907 by W. L. Abbott. Original number 5580.

***Sciurus sullivanus* Miller**

Smithsonian Misc. Coll. 45: 17, 6 Nov 1903a.

= *Callosciurus caniceps* (Gray, 1842). Unassigned to subspecies by Thorington and Hoffmann (2005:776) but see Moore and Tate (1965:190) who assign it to *C. c. bimaculatus* (Temminck, 1853).

Holotype: 104377. Skin and skull. Adult female. Sullivan Island, Mergui Archipelago, [Tanintharyi, Myanmar]. Collected 1 Feb 1900 by W. L. Abbott. Original number 294.

***Sciurus tedongus* Lyon**

Proc. U.S. Natl. Mus. 31: 591, 18 Dec 1906a.

= *Callosciurus notatus vittatus* (Raffles, 1821). See Corbet and Hill (1992:292).

Holotype: 124717. Skin and skull. Adult male. Tanjung Tedong, island of Banka (Bangka), [Kepulauan Bangka Belitung], east coast of Sumatra, [Indonesia]. Collected 1 Jun 1904 by W. L. Abbott. Original number 3285.

***Sciurus tenuirostris* Miller**

Proc. Washington Acad. Sci. 2: 221, 20 Aug 1900a.

= *Callosciurus notatus miniatus* (Miller, 1900). See Corbet and Hill (1992:291).

Holotype: 101753. Skin and skull. Adult female. Tioman Island, [Pahang, Malaysia]. Collected 30 Sep 1899 by W. L. Abbott. No original number.

***Sciurus ubericolor* Miller**

Proc. U.S. Natl. Mus. 26: 455, 3 Feb 1903b.

= *Callosciurus notatus vittatus* (Raffles, 1821). See Corbet and Hill (1992:292).

Holotype: 114373. Skin and skull. Adult female. [FC: Ujong Tambaga, east side] Pulo Tuangku, Banjak Islands, [Aceh, Sumatra, Indonesia]. Collected 5 Feb 1902 by W. L. Abbott. Original number 1517.

***Sciurus vittatus rupatius* Lyon**

Proc. U.S. Natl. Mus. 34: 640, 14 Sep 1908.

= *Callosciurus notatus vittatus* (Raffles, 1821). See Corbet and Hill (1992:292).

Holotype: 143406. Skin and skull. Adult female. Pulo Rupat, [Riau], off east coast of Sumatra, [Indonesia]. Collected 17 Mar 1906 by W. L. Abbott. Original number 4733.

***Sciurus vittatus tapanuliensis* Lyon**

Smithsonian Misc. Coll. 48: 280, 4 Feb 1907c.

= *Callosciurus notatus vittatus* (Raffles, 1821). See Corbet and Hill (1992:292).

Holotype: 114519. Skin and skull. Adult male. Tapanuli Bay, [Sumatera Utara], west coast of Sumatra, [Indonesia]. Collected 21 Feb 1902 by W. L. Abbott. Original number 1560.

***Sciurus vittatus tarussanus* Lyon**

Smithsonian Misc. Coll. 48: 279, 4 Feb 1907c.

= *Callosciurus notatus vittatus* (Raffles, 1821). See Corbet and Hill (1992:292).

Holotype: 141038. Skin and skull. Adult female. [FC: Njalo], Tarusan (Tarusan) Bay, [Sumatera Barat], west coast of Sumatra, [Indonesia]. Collected 28 Dec 1904 by W. L. Abbott. Original number 3857.

**Genus *Callospermophilus* Merriam, 1897**

***Callospermophilus chrysodeirus connectens* A. H. Howell**

J. Mamm. 12: 161, 14 May 1931.

= *Callospermophilus lateralis connectens* A. H. Howell, 1931. See Helgen et al. (2009:285).

Holotype: 212461. Skin and skull. Adult male. Homestead, [SL and FC: altitude 1,800 ft (549 m)], [Baker County], Oregon. Collected 1 Jun 1916 by H. H. Sheldon. Original number 535.

***Callospermophilus chrysodeirus mitratus* A. H. Howell**

J. Mamm. 12: 161, 14 May 1931.

= *Callospermophilus lateralis mitratus* A. H. Howell, 1931. See Helgen et al. (2009:285).

Holotype: 138125. Skin and skull. Adult male. South Yolla Bolly Mountain, [Tehama County] California. Collected 30 Jul 1905 by J. F. Ferry. Original number 13.

***Callospermophilus chrysodeirus trinitatis* Merriam**

Proc. Biol. Soc. Washington 14: 126, 19 Jul 1901a.

= *Callospermophilus lateralis trinitatis* Merriam, 1901. See Helgen et al. (2009:285).

Holotype: 95531. Skin and skull. Adult female. Trinity Mountains east of Hoopa Valley, [FC: summit east of Hoopa at Little Lake], altitude 5,700 ft (1737 m), [Humboldt County] California. Collected 10 Sep 1898 by V. Bailey. Original number 6693.

***Callospermophilus lateralis arizonensis* V. Bailey**

Proc. Biol. Soc. Washington 26: 130, 21 May 1913a.

Holotype: 17527/24463. Skin and skull. Adult male. San Francisco Mountain (Peaks), [Coconino County], Arizona. Collected 8 Aug 1889 by C. H. Merriam and V. Bailey. Original number [FC: VB] 308.

***Callospermophilus lateralis caryi* A. H. Howell**

Proc. Biol. Soc. Washington 30: 105, 23 May 1917.

= *Callospermophilus lateralis castanurus* (Merriam, 1890). See Helgen et al. (2009:285).

Holotype: 176826. Skin and skull. Adult female. Seven mi (11 km) south of Fremont Peak, Wind River Mountains (Range), altitude 10,400 ft (3,170 m), [Fremont County], Wyoming. Collected 19 Jul 1911 by M. Cary. Original number 2211.

***Callospermophilus lateralis certus* Goldman**

J. Mamm. 2: 232, 29 Nov 1921.

Holotype: 208891. [Skin and skull]. Adult male. North base of Charleston Peak, [Clark County], Nevada. Collected 29 Jun 1915 by L. J. Goldman. Original number 2270.

***Callospermophilus lateralis tescorum* Hollister**

Smithsonian Misc. Coll. 56(26): 2, 5 Dec 1911a.

Holotype: 174165. Skin and skull. Adult male. Head of Moose Pass branch of Smoky River, near Moose Pass, British Columbia, altitude 7,000 ft (2,134 m), Alberta, [Canada]. Collected 2 Aug 1911 by N. Hollister. Original number 3863.

***Callospermophilus madrensis* Merriam**

Proc. Washington Acad. Sci. 3: 563, 29 Nov 1901b.

Holotype: 95363. [Skin and skull]. Adult female. Sierra Madre, near Guadalupe y Calvo, altitude 7,000 ft (2,134 m), Chihuahua, Mexico. Collected 27 Aug 1898 by E. W. Nelson and E. A. Goldman. Original number 12923.

***Spermophilus chrysodeirus brevicaudus* Merriam**

Proc. Biol. Soc. Washington 8: 134, 28 Dec 1893a. Primary junior homonym of *Spermophilus brevicauda* Brandt, 1844.

Replaced with *Spermophilus* (*Callospermophilus*) *bernardinus* by Merriam (1898a:782).

= *Callospermophilus lateralis bernardinus* (Merriam, 1898). See Helgen et al. (2009:285).

Holotype: 56661. Skin and skull. Adult female. San Bernardino Peak, [FC: altitude 9,500 ft (2,896 m)], [San Bernardino County], California. Collected 9 Oct 1893 by J. E. McLellan. Original number 274.

#### *Tamias castanurus* Merriam

N. Amer. Fauna 4: 19, 8 Oct 1890a.

= *Callospermophilus lateralis castanurus* (Merriam, 1890). See Helgen et al. (2009:285).

Holotype: 22733/30197. Skin and skull. Adult male. Park City, Wasatch Mountains, altitude 7,000 ft (2,134 m), [Summit County], Utah. Collected 3 Jul 1890 by V. Bailey. Original number 1383.

#### *Tamias chrysodeirus* Merriam

N. Amer. Fauna 4: 19, 8 Oct 1890a.

= *Callospermophilus lateralis chrysodeirus* (Merriam, 1890). See Helgen et al. (2009:285).

Holotype: [186464]. Skin and skull. Adult male. Fort Klamath, [Klamath County], Oregon. Collected 31 Jul 1888 by S. Parker. Original number 143. Merriam collection number 4966/5720.

#### *Tamias cinerascens* Merriam

N. Amer. Fauna 4: 20, 8 Oct 1890a.

= *Callospermophilus lateralis cinerascens* (Merriam, 1890). See Helgen et al. (2009:285).

Holotype: [186465]. Skin and skull. Adult female. Helena, altitude 4,500 ft (1,372 m), [Lewis and Clark County], Montana. Collected 13 Aug 1888 by C. H. Merriam. Original number 4. Merriam Collection number 4525/5177.

### Genus *Cynomys* Rafinesque, 1817

#### *Cynomys gunnisoni zuniensis* Hollister

N. Amer. Fauna 40: 32, 20 Jun 1916.

Holotype: 137555. Skin and skull. Adult male. Wingate, McKinley County, New Mexico. Collected 26 Jun 1905 by N. Hollister. Original number 2374.

#### *Cynomys leucurus* Merriam

N. Amer. Fauna 3: 59, 11 Sep 1890b. See Merriam (1890c:33) for complete description.

Holotype: [186472]. Skin and skull. Adult female. Fort Bridger, [Uinta County], Wyoming. Collected 15 Sep 1888 by V. Bailey. Original number 224. Merriam collection number 4668/5319.

#### *Cynomys mexicanus* Merriam

Proc. Biol. Soc. Washington 7: 157, 27 Jul 1892a.

Holotype: 26423/33836. Skin and skull. Adult male. La Ventura, [FC: about 5,600 ft (1,707 m)], Coahuila, Mexico. Collected 24 Mar 1891 by C. P. Streator. Original number 625.

#### *Spermophilus gunnisoni* Baird

Proc. Acad. Nat. Sci. Philadelphia 7: 334, reported favorably for publication 24 Apr 1855a, receipt acknowledged 16 Jun 1855 by the American Philosophical Society.

= *Cynomys gunnisoni gunnisoni* (Baird, 1855). See Hollister (1916:29).

Holotype: [501/1636]. Skin and skull. Young adult. Cochetopa Pass, [Saguache County, Colorado]. Collected [Lyon and Osgood (1909:161): first week of September 1853] by F. Kreutzfeldt. Original number [MC: Lt. E. G. Beckwith 22].

Type specimen not designated in the original description, but it is specified by number in Baird (1857:337).

### Genus *Dremomys* Heude, 1898

#### *Dremomys rufigenis lentsus* A. B. Howell

J. Washington Acad. Sci. 17: 80, 19 Feb 1927.

= *Dremomys pernyi pernyi* (Milne-Edwards, 1867). See G. M. Allen (1940:647).

Holotype: 240384. Skin and skull. Adult male. Near Wenchuan, altitude 6,000 ft (1,829 m), Szechwan (Sichuan), China. Collected 14 [SL and FC: 12] Aug 1924 by D. C. Graham. Original number 14.

### Genus *Exilisciurus* Moore, 1958

#### *Nannosciurus surutilus* Hollister

Proc. U.S. Natl. Mus. 46: 313, 31 Dec 1913.

= *Exilisciurus concinnus* (Thomas, 1888). See Heaney (1985:7).

Holotype: 144641. Skin and skull. Adult female. Summit [SL: of] Mount Bliss, altitude 5,750 ft (1,753 m), Mindanao, [SL: Philippine Islands] (Philippines). Collected 28 May 1906 by E. A. Mearns. Original number 6170.

### Genus *Glaucomys* Thomas, 1908

#### *Glaucomys bullatus* A. H. Howell

Proc. Biol. Soc. Washington 28: 113, 27 May 1915a.

= *Glaucomys sabrinus bangsi* (Rhoads, 1897). See Davis (1939:231).

Holotype: 24271/31675. Skin and skull. Adult female. Sawtooth (Alturas) Lake, [FC: altitude 7,200 ft (2,195 m)], [Poole and Schantz (1942:534): east base of Sawtooth Mountains, Blaine County], Idaho. Collected 28 Sep 1890 by V. Bailey and B. H. Dutcher. Original number [FC: VB] 1883.

#### *Glaucomys sabrinus coloratus* Handley

Proc. Biol. Soc. Washington 66: 191, 2 Dec 1953.

Holotype: 292278. Skin and skull. Young adult female. Bald Knob, 3.5 mi (5.6 km) south of the summit of Mount Mitchell, [SL:

200 yds (183 m) below Bald Knob Cabin], altitude 5,000 ft (1,524 m), Yancey County, North Carolina. Collected 1 Mar 1951 by M. G. Edwards. Original number [SL: 2].

***Glaucomys sabrinus columbiensis* A. H. Howell**

Proc. Biol. Soc. Washington 28: 111, 27 May 1915a.

Holotype: 94310. Skin and skull. Subadult male. Okanagan, British Columbia, [Canada]. Collected 9 May 1898 by A. C. Brooks. Original number 1214, [SL: 1762-X].

***Glaucomys sabrinus fuscus* Miller**

Proc. Biol. Soc. Washington 49: 143, 22 Aug 1936.

Holotype: 260420. Skin and skull. Adult female. Cranberry Glades, altitude 3,300 ft (1,006 m), Pocahontas County, West Virginia. Collected 13 Jun 1936 by W. Perrygo and C. Lingebach. Original number 109.

***Glaucomys sabrinus griseifrons* A. H. Howell**

J. Mamm. 15: 64, 15 Feb 1934

Holotype: 256993. Skin and skull. Adult female. Lake Bay, [SL: south of Wrangell], Prince of Wales Island, Alaska. Collected 18 Apr 1927 by F. R. Bates. Original number 10.

***Glaucomys sabrinus latipes* A. H. Howell**

Proc. Biol. Soc. Washington 28: 112, 27 May 1915a.

Holotype: 68753. [Skin and skull]. Adult female. Glacier [FC: House, 44 mi (71 km) east of Revelstoke], British Columbia, [Canada]. Collected 13 Aug 1894 by J. A. Loring. Original number 2111.

***Glaucomys volans guerreroensis* Diersing**

Southwestern Nat. 25: 162, 15 May 1980.

Holotype: 329704. Skin and skull. Adult male. One mile (1.6 km) SW Omiteme, altitude 7,300 ft (2,225 m) Guerrero, Mexico. Collected 16 Apr 1963 by A. D. Stock. Original number 1149.

***Glaucomys volans herreranus* Goldman**

J. Washington Acad. Sci. 26: 463, 15 Nov 1936a.

Holotype: 261695. Skin and skull. Young adult female. Mountains of Veracruz, Mexico. Collected 8 Nov 1924. Prepared by L. G. Rubio. No original number. 27589-X.

***Glaucomys volans madrensis* Goldman**

J. Washington Acad. Sci. 26: 463, 15 Nov 1936a.

Holotype: 261694. Skin and skull. Adult, sex undetermined. Sierra Madre, Chihuahua, Mexico. Received Mar 1926 from A. L. Herrera. Original number [SL: 2]. 27588-X.

***Glaucomys volans saturatus* A. H. Howell**

Proc. Biol. Soc. Washington 28: 110, 27 May 1915a.

Holotype: 178366. [Skin and skull]. Adult female. Dothan, [Houston County], Alabama. Collected 13 Mar 1912 by A. H. Howell. Original number 1960.

***Glaucomys volans texensis* A. H. Howell**

Proc. Biol. Soc. Washington 28: 110, 27 May 1915a.

Holotype: 136400. [Skin and skull]. Adult male. [FC: Big Thicket], 7 mi (11 km) northeast of Sour Lake, [Hardin County], Texas. Collected 15 Mar 1905 by J. H. Gaut. Original number 3480.

***Sciuropterus alpinus klamathensis* Merriam**

Proc. Biol. Soc. Washington 11: 225, 15 Jul 1897a.

= *Glaucomys sabrinus klamathensis* (Merriam, 1897). See A. H. Howell (1918:52).

Holotype: 87310. [Skin and skull]. Adult female. Fort Klamath, altitude 4,200 ft (1,280 m), [Klamath County], Oregon. Collected 11 [XC and MCC: 17, which is correct] Jan 1897 by B. L. Cunningham. Original number [XC: 25]. 355-X.

***Sciuropterus alpinus zaphaeus* Osgood**

Proc. Biol. Soc. Washington 18: 133, 18 Apr 1905.

= *Glaucomys sabrinus zaphaeus* (Osgood, 1905). See A. H. Howell (1918: 43).

Holotype: 136137. [Skin and skull]. Adult female. Helm Bay, Cleveland Peninsula, southeastern Alaska. Collected 21 Jan 1905 by C. Catt. No original number. [SL: 5196-X].

***Sciuropterus oregonensis stephensi* Merriam**

Proc. Biol. Soc. Washington 13: 151, 13 Jun 1900a.

= *Glaucomys sabrinus stephensi* (Merriam, 1900). See A. H. Howell (1918: 57).

Holotype: 99830. [Skin and skull]. Young adult female. Sherwood [SL and XC: s], altitude 2,500 ft (762 m), Mendocino County, California. Collected 10 May 1894 by F. Stephens. Original number 2307 [SL: 2624-X].

***Sciuropterus sabrinus macrotis* Mearns**

Proc. U.S. Natl. Mus. 21: 353, 4 Nov 1898a.

= *Glaucomys sabrinus macrotis* (Mearns, 1898). See A. H. Howell (1915a: 111).

Holotype: 83152. [Skin and skull]. Adult female. Hunter Mountain, altitude 3,300 ft (1,006 m), Catskills (Catskill Mountains), Greene County, New York. Collected 31 Aug 1896 by E. A. Mearns. Original number 4036.

***Sciuropterus volans goldmani* Nelson**

Proc. Biol. Soc. Washington 17: 148, 6 Oct 1904.

= *Glaucomys volans goldmani* (Nelson, 1904). See A. H. Howell (1918: 28).

Holotype: 132833. Skin and skull. Adult male. Twenty miles (32 km) southeast of Teopisca, Chiapas, Mexico. Collected 8 Apr 1904 by E. A. Goldman. Original number [FC: Nelson and Goldman] 16667.

***Sciuropterus yukonensis* Osgood**

N. Amer. Fauna 19: 25, 6 Oct 1900a.

= *Glaucomys sabrinus yukonensis* (Osgood, 1900). See A. H. Howell (1918: 41).

Holotype: 19909/35320. Skin and skull. Adult female. Camp Davidson, Yukon River, near Alaska-Canada boundary, Yukon, Canada. Collected 8 Dec 1890 by R. E. Carson. No original number.

### Genus *Heliosciurus* Trouessart, 1880

#### *Heliosciurus multicolor madogae* Heller

Smithsonian Misc. Coll. 56 (17): 1, 28 Feb 1911.

= *Heliosciurus gambianus madogae* Heller, 1911. See Hayman and Holt (1940:402).

Holotype: 164828. [Skin and skull]. Adult male. Uma, 50 mi (80 km) north of Nimule, Uganda (South Sudan). Collected 11 Feb 1910 by K. Roosevelt. Original number J. A. Loring 8991.

#### *Heliosciurus rufobrachiatus shindi* Heller

Smithsonian Misc. Coll. 63 (7): 7, 24 Jun 1914.

= *Heliosciurus undulatus* (True, 1892). See Grubb (1982:201).

Holotype: 182768. [Skin and skull]. Adult male. Summit of Mount Umengo, altitude 6,000 ft (1,829 m), Taiti (Taita) Hills, [Coast Province], British East Africa (Kenya). Collected 11 Nov 1911 by E. Heller. Original number 4731.

#### *Sciurus (Heliosciurus) rufobrachiatus libericus* Miller

Proc. Washington Acad. Sci. 2: 633, 28 Dec 1900c.

= *Heliosciurus rufobrachium maculatus* (Temminck, 1853). See Thomas (1923:524).

Holotype: 83834. Skin and skull. Adult male. Mount Coffee, [Montserrado], Liberia, Africa. Collected 22 Mar 1897 by R. P. Currie. Original number 16.

#### *Sciurus undulatus* True

Proc. U.S. Natl. Mus. 15: 465, 26 Oct 1892.

= *Heliosciurus undulatus* (True, 1892). See Hollister (1919:11).

Lectotype: 19005/34731. Skin and skull. Male. Mount Kilimanjaro (Kilimanjaro), altitude 6,000 ft (1,829 m) [Kilimanjaro, Tanzania]. Collected 12 Jun 1888 by W. L. Abbott. [MC: Original number 7]. Lectotype selected by Lyon and Osgood (1909:196).

### Genus *Hylopetes* Thomas, 1908

#### *Sciuropterus amoenus* Miller

Proc. U.S. Natl. Mus. 31: 264, 11 Sep 1906b.

= *Hylopetes spadiceus spadiceus* (Blyth, 1847). See Corbet and Hill (1992:315).

Holotype: 122883. Skin and skull. Adult male. Pulo Kundur, Rhio-Linga (Riau) Archipelago, [Kepulauan Riau], [FC: east coast Sumatra], [Indonesia]. Collected 12 Jun 1903 by W. L. Abbott. Original number [SL: 2483].

### Genus *Ictidomys* J. A. Allen, 1877

#### *Citellus tridecemlineatus arenicola* A. H. Howell

Proc. Biol. Soc. Washington 41: 213, 18 Dec 1928.

= *Ictidomys tridecemlineatus arenicola* (A. H. Howell, 1928).

See Helgen et al. (2009:291).

Holotype: 87686. [Skin and skull]. Adult male. Pendennis, [FC: Lane County], Kansas. Collected 22 Apr 1897 by J. A. Loring. Original number 3988.

#### *Citellus tridecemlineatus hollisteri* V. Bailey

Proc. Biol. Soc. Washington 26: 131, 21 May 1913a.

= *Ictidomys tridecemlineatus hollisteri* (V. Bailey, 1913). See Helgen et al. (2009:291).

Holotype: 119025. Skin and skull. Adult female. Elk Valley, Mescalero Indian Reservation, Sacramento Mountains, altitude 8,000 ft (2,438 m), [Otero County], New Mexico. Collected 11 Sep 1902 by V. Bailey. Original number 7963.

#### *Citellus tridecemlineatus monticola* A. H. Howell

Proc. Biol. Soc. Washington 41: 214, 18 Dec 1928.

= *Ictidomys tridecemlineatus monticola* (A. H. Howell, 1928). See Helgen et al. (2009:291).

Holotype: 209255. Skin and skull. Adult male. Marsh Lake (also called Big Lake), White Mountains, altitude 9,000 ft (2,743 m), [Apache County], Arizona. Collected 15 Jun 1915 by E. A. Goldman. Original number 22626.

#### *Spermophilus mexicanus parvidens* Mearns

Proc. U.S. Natl. Mus. 18: 1, 1 Mar 1896a. Preprint of Proc. U.S. Natl. Mus. 18: 443, 23 May 1896b.

= *Ictidomys parvidens* (Mearns, 1896). See Helgen et al. (2009:290).

Holotype: 63073. Skin and skull. Adult male. Fort Clark (Brackettville), Kinney County, Texas. Collected 21 Mar 1893 by E. A. Mearns. Original number 2312.

#### *Spermophilus tridecemlineatus allenii* Merriam

Proc. Biol. Soc. Washington 12: 71, 24 Mar 1898b.

= *Ictidomys tridecemlineatus allenii* (Merriam, 1898). See Helgen et al. (2009:291).

Holotype: 56050. Skin and skull. Male. [SL: near summit] [FC: west slope] Bighorn Mountains, [SL and FC: altitude 8,000 ft (2,439 m)], [Washakie County], Wyoming. Collected 18 Sep 1893 by V. Bailey. Original number 4383.

#### *Spermophilus tridecemlineatus pallidus* J. A. Allen

Monogr. N. Amer. Rodentia 11: 872, Aug 1877.

= *Ictidomys tridecemlineatus pallidus* (J. A. Allen, 1877). See Helgen et al. (2009:293).

Lectotype: 16237. Skin only. Mouth of Yellowstone River, Montana. Collected 18 Aug 1857 by F. V. Hayden. No original number. Lectotype selected by A. H. Howell (1938:112).

#### *Spermophilus tridecemlineatus texensis* Merriam

Proc. Biol. Soc. Washington 12: 71, 24 Mar 1898b.

= *Ictidomys tridecemlineatus texensis* (Merriam, 1898). See Helgen et al. (2009:293).

Holotype: [186471]. Skin and skull. Adult male. Gainesville, Cooke County, Texas. Collected 15 Apr 1886 by G. H. Ragsdale. Original number [MCC: 25]. Merriam collection number 2117/2647.

### Genus *Iomys* Thomas, 1908

#### *Iomys lepidus* Lyon

Proc. U.S. Natl. Mus. 40: 78, 25 Apr 1911a.

= *Iomys horsfieldii thomsoni* (Thomas, 1900). See Corbet and Hill (1992:315).

Holotype: 153684. Skin, skull, [and skeleton]. Adult male. Batu Juring, [Kalimantan Barat], southwestern Borneo, [Indonesia]. Collected 27 Jun 1908 by W. L. Abbott. Original number 6005.

### Genus *Lariscus* Thomas and Wroughton, 1909

#### *Funambulus castaneus* Miller

Proc. Washington Acad. Sci. 2: 217, 20 Aug 1900a.

= *Lariscus insignis* (F. Cuvier, 1821). Unassigned to subspecies by Thorington and Hoffmann (2005:783).

Holotype: 101696. Skin and skull. Immature male. Pulo Siantan, Anambas Islands, [Kepulauan Riau, Indonesia]. Collected 10 Sep 1899 by W. L. Abbott. No original number.

#### *Funambulus obscurus* Miller

Smithsonian Misc. Coll. 45: 23, 6 Nov 1903a.

= *Lariscus obscurus obscurus* (Miller, 1903). See Corbet and Hill (1992:301).

Holotype: 121640. Skin and skull. Adult female. South Pagi Island (Pulau Pagai Selatan), [Sumatera Barat], [FC: west], Sumatra, [Indonesia]. Collected 22 Nov 1902 by W. L. Abbott. Original number 2086.

#### *Funambulus peninsulae* Miller

Smithsonian Misc. Coll. 45: 25, 6 Nov 1903a.

= *Lariscus insignis peninsulae* (Miller, 1903). See Thorington and Hoffmann (2005:783).

Holotype: 86776. Skin and skull. Adult male. Khow Sai Dow, [SL: altitude 1,000 ft (305 m)], Trong (Trang), Lower Siam (Thailand). Collected 18 Feb 1899 by W. L. Abbott. No original number.

#### *Funambulus rostratus* Miller

Smithsonian Misc. Coll. 45: 24, 6 Nov 1903a.

= *Lariscus insignis rostratus* (Miller, 1903). See Robinson and Kloss (1918a:234).

Holotype: 121801. Skin and skull. Adult female. Tana Bala (Pulau Tanahbala), Batu Islands, [Sumatera Utara, Sumatra, Indonesia]. Collected 12 Feb 1903 by W. L. Abbott. Original number 2281.

### Genus *Marmota* Blumenbach, 1779

#### *Arctomys dacota* Merriam

N. Amer. Fauna 2: 8, 30 Oct 1889b.

= *Marmota flaviventris dacota* (Merriam, 1889). See A. H. Howell (1914:15).

Holotype: [186474]. Skin and skull. Adult male. Custer, [Custer County], Black Hills [South] Dakota. Collected 21 Jul 1888 by V. Bailey. Original number [SL: 113]. Merriam collection number 4478/5113.

#### *Arctomys olympus* Merriam

Proc. Acad. Nat. Sci. Philadelphia 50: 352, 4 Oct 1898c.

= *Marmota olympus* (Merriam, 1898). See Trouessart (1904:344).

Holotype: 90518. [Skin and skull]. Adult male. [SL: near] timberline at [FC: near] head of Soleduck River, Olympic Mountains, [Clallam County], Washington. Collected 27 Aug 1897 by C. H. Merriam and V. Bailey. Original number VB 6210.

#### *Marmota caligata cascadensis* A. H. Howell

Proc. Biol. Soc. Washington 27: 17, 2 Feb 1914.

Holotype: 90134. [Skin and skull]. Adult female. Mount Rainier, [SL and FC: Indian Henrys' Hunting Grounds], altitude 6,000 ft (1,829 m), [Pierce County], Washington. Collected 11 Aug 1897 by W. K. Fisher. Original number 422.

#### *Marmota caligata nivaria* A. H. Howell

Proc. Biol. Soc. Washington 27: 17, 2 Feb 1914.

= *Marmota caligata okanagana* (King, 1836). See Thorington and Hoffmann (2005:800).

Holotype: 72235. [Skin and skull]. Adult female. Mountains near Upper Saint Mary's Lake, altitude about 6,100 ft (1,859 m), [Glacier County], Montana. [Note: FC: Saint Mary's Lake, Montana, 1,600 ft (488 m) above lake]. Collected 27 May 1895 by A. H. Howell. Original number 23.

#### *Marmota caligata sheldoni* A. H. Howell

Proc. Biol. Soc. Washington, 27: 18, 2 Feb 1914.

= *Marmota caligata caligata* (Eschscholtz, 1829). See Thorington and Hoffmann (2005:800).

Holotype: 137319. [Skin and skull]. Adult male. Montague Island, [SL: Zaikof Bay], [FC: Prince William Sound], Alaska. Collected 24 May 1905 by C. Sheldon. Original number 12. 5461-X.

#### *Marmota flaviventer luteola* A. H. Howell

Proc. Biol. Soc. Washington 27: 15, 2 Feb 1914.

= *Marmota flaviventris luteola* A. H. Howell, 1914. See A. H. Howell (1915b:50).

Holotype: 186520. [Skin and skull]. Adult male. Woods Post Office, Medicine Bow Mountains, altitude about 7,500 ft (2,286 m), [Albany County], Wyoming. Collected 13 Aug 1888 by V. Bailey. Original number 148. Merriam collection number 4655/5306.

#### *Marmota flaviventer nosophora* A. H. Howell

Proc. Biol. Soc. Washington 27: 15, 2 Feb 1914.

= *Marmota flaviventris nosophora* A. H. Howell, 1914. See A. H. Howell (1915b:46).

Holotype: 168494. [Skin and skull]. Adult female. Willow Creek, altitude 4,000 ft (1,219 m), 7 mi (11 km) east of Corvallis, [Ravalli County], Montana. Collected 8 Apr 1910 by A. H. Howell. Original number 1723.

***Marmota flaviventer obscura* A. H. Howell**

Proc. Biol. Soc. Washington 27: 16, 2 Feb 1914.

= *Marmota flaviventris obscura* A. H. Howell, 1914. See A. H. Howell (1915b:53).

Holotype: 133505. [Skin and skull]. Adult female. Wheeler Peak, 5 mi (8 km) south of Twining, altitude 11,300 ft (3,442 m), [Taos County], New Mexico. Collected 24 Jul 1904 by V. Bailey. Original number 8181.

***Marmota flaviventer parvula* A. H. Howell**

Proc. Biol. Soc. Washington 27: 14, 2 Feb 1914.

= *Marmota flaviventris avara* (Bangs, 1899). See Thorington and Hoffmann (2005:801).

Holotype: 93690. [Skin and skull]. Adult female. [SL: Jefferson], Toquima Range, about 10 mi (16 km) north of Belmont, Nye County, Nevada. Collected 3 Jun 1898 by V. Bailey. Original number 6495.

***Marmota flaviventer warreni* A. H. Howell**

Proc. Biol. Soc. Washington 27: 16, 2 Feb 1914.

= *Marmota flaviventris luteola* A. H. Howell, 1914. See Warren (1936:392).

Holotype: 202937. [Skin and skull]. Adult female. Crested Butte, Colorado. Restricted by Warren (1936:393) to "Smith trail," 2 mi (3 km) west of Crested Butte, Gunnison County, Colorado, about 10,000 ft (3,049 m). Collected 11 Jul 1902 by E. R. Warren. Original number 35. 10639-X.

***Marmota flaviventris sierra* A. H. Howell**

N. Amer. Fauna 37: 43, 7 Apr 1915b.

= *Marmota flaviventris flaviventris* (Audubon and Bachman, 1841). See Thorington and Hoffmann (2005:801).

Holotype: 30984/42859. Skin and skull. Adult female. Head of Kern River, Mount Whitney, altitude 9,300 ft (2,835 m), [Tulare County], California. Collected 3 Sep 1891 by V. Bailey. Original number 3242.

***Marmota monax pretensis* A. H. Howell**

N. Amer. Fauna 37: 33, 7 Apr 1915b.

= *Marmota monax canadensis* (Erxleben, 1777). See Thorington and Hoffmann (2005:802).

Holotype: 203532. [Skin and skull]. Adult male. Revelstoke, British Columbia, [Canada]. Collected 12 May 1890 by W. Spreadborough. Original number 170 [SL: 10712-X]. Two additional numbers, 227 and 240, are on skin labels.

***Marmota monax preblorum* A. H. Howell**

Proc. Biol. Soc. Washington 27: 14, 2 Feb 1914.

= *Marmota monax rufescens* A. H. Howell, 1914. See Thorington and Hoffmann (2005:802).

Holotype: 78360. [Skin and skull]. Adult male. Wilmington, [Middlesex County], Massachusetts. Collected 19 Apr 1896 by E. A. Preble. Original number 127.

***Marmota monax rufescens* A. H. Howell**

Proc. Biol. Soc. Washington 27: 13, 2 Feb 1914.

Holotype: 186521. [Skin and skull]. Adult male. Elk River, [Sherburne County], Minnesota. Collected 9 Apr 1886 by V. Bailey. Original number 237. Merriam collection number 2563/3173.

***Marmota sibila* Hollister**

Smithsonian Misc. Coll. 56 (35): 1, 7 Feb 1912a. Secondary junior homonym of *Arctomys sibila* Wolf, 1808. Replaced with *Marmota oxytona* by Hollister (1914:251).

= *Marmota caligata okanagana* (King, 1836). See Thorington and Hoffmann (2005:800).

Holotype: 174503. Skin and skull. Adult female. Head of Moose Pass Branch of the Smoky River, altitude 7,200 ft (2,195 m), [Poole and Schantz (1942:541): near Moose Pass, British Columbia], Alberta, Canada. Collected 3 Aug 1911 by N. Hollister and C. D. Walcott, Jr. Original number [FC: NH] 3871.

**Genus *Menetes* Thomas, 1908**

***Lariscus berdmorei amotus* Miller**

Smithsonian Misc. Coll. 61 (21): 24, 29 Dec 1913

= *Menetes berdmorei berdmorei* (Blyth, 1849). See Moore and Tate (1965:297).

Holotype: 124152. Skin and skull. Adult male. Domel Island, Mergui Archipelago, [Tanintharyi, Myanmar]. Collected 30 Jan 1904 by W. L. Abbott. Original number 3081.

**Genus *Microsciurus* J. A. Allen, 1895**

***Microsciurus alfarei venustulus* Goldman**

Smithsonian Misc. Coll. 56 (36): 4, 19 Feb 1912a.

Holotype: 171030. Skin and skull. Adult female. Gatun, Canal Zone (Colon), Panama. Collected 1 Mar 1911 by E. A. Goldman. Original number [FC: Nelson and Goldman] 20995.

***Microsciurus isthmius vivatus* Goldman**

Smithsonian Misc. Coll. 60: 4, 20 Sep 1912b.

= *Microsciurus mimulus isthmius* (Nelson, 1899). See Handley (1966:778).

Holotype: 179565. [Skin and skull]. Adult female. Near Cana, altitude 3,500 ft (1,067 m), in the Pirri range of mountains, [Darien], eastern Panama. Collected 5 Jun 1912 by E. A. Goldman. Original number 21771.

***Sciurus (Microsciurus) isthmius* Nelson**

Bull. Amer. Mus. Nat. Hist. 12: 77, 14 Apr 1899a.

= *Microsciurus mimulus isthmius* (Nelson, 1899). See Handley (1966:778).

Holotype: 3399/37344. Skin and skull. Truando River, [Choco], Colombia. A footnote to the original description says "The Truando River is a tributary on the west side of the Rio Atrato at the extreme southeast end of the Isthmus of Darien." Collected by A. Schott, date unknown. Original number [SL: 232]. [Received from Lt. Michler. Skin cataloged 1 Mar 1859; skull, 25 Mar 1898].

### **Genus *Nannosciurus* Trouessart, 1880**

#### *Nannosciurus bancanus* Lyon

Proc. Biol. Soc. Washington 19: 55, 1 May 1906b.

= *Nannosciurus melanotis bancanus* Lyon, 1906. See Robinson and Kloss (1918a:249).

Holotype: 124880. Skin and skull. Adult female. Klabat Bay, Island of Banka (Bangka), [Kepulauan Bangka Belitung], east of Sumatra, [Indonesia]. Collected 24 Jun 1904 by W. L. Abbott. Original number 3430.

#### *Nannosciurus borneanus* Lyon

Proc. Biol. Soc. Washington 19: 54, 1 May 1906b.

= *Nannosciurus melanotis borneanus* Lyon, 1906. See Robinson and Kloss (1918a:249).

Holotype: 142271. Skin and skull. Adult female. Sanggau, [FC: Kapuas River], [Kalimantan Barat], western Borneo, [Indonesia]. Collected 23 Aug 1905 by W. L. Abbott. Original number 4368.

#### *Nannosciurus pulcher* Miller

Proc. Acad. Nat. Sci. Philadelphia 54: 153, 11 Jun 1902.

= *Nannosciurus melanotis pulcher* Miller, 1902. See Robinson and Kloss (1918a:249).

Holotype: 113131. Skin and skull. Adult female. Sinkep (Singkep) Island, [FC: Sakana Bay], South China Sea, [Lingga Archipelago, Kepulauan Riau, Sumatra, Indonesia]. Collected 4 Sep 1901 by W. L. Abbott. Original number 1274.

#### *Nannosciurus sumatranaus* Lyon

Proc. Biol. Soc. Washington 19: 53, 1 May 1906b.

= *Nannosciurus melanotis pulcher* Miller, 1902. See Thorington and Hoffmann (2005:784).

Holotype: 141058. Skin and skull. Adult male. [FC: Nyalo], Tarussan (Tarusan) Bay, [Sumatera Barat], Sumatra, [Indonesia]. Collected 16 Jan 1905 by W. L. Abbott. Original number 3946.

### **Genus *Notocitellus* A. H. Howell, 1938**

#### *Citellus adocetus* Merriam

Proc. Biol. Soc. Washington 16: 79, 29 May 1903a.

= *Notocitellus adocetus* (Merriam, 1903). See Helgen et al. (2009:277)

Holotype: 126129. [Skin and skull]. Adult female. La Salada, 40 mi (64 km) south of Uruapan, Michoacan, Mexico. Col-

lected 17 Mar 1903 by E. W. Nelson and E. A. Goldman. Original number 16183.

#### *Spermophilus annulatus goldmani* Merriam

Proc. Biol. Soc. Washington 15: 69, 22 Mar 1902a.

= *Notocitellus annulatus goldmani* (Merriam, 1902). See Helgen et al. (2009:278).

Holotype: 91259. Skin and skull. Adult female. Santiago, [FC: altitude 200 ft (61 m)], Tepic (Nayarit), Mexico. Collected 18 Jun 1897 by E. W. Nelson and E. A. Goldman. Original number 11223.

### **Genus *Otospermophilus* Brandt, 1844**

#### *Citellus beecheyi parvulus* A. H. Howell

J. Mamm. 12: 160, 14 May 1931.

= *Otospermophilus beecheyi parvulus* (A. H. Howell, 1931). See Helgen et al. (2009:284).

Holotype: 28068/40167. Skin and skull. Subadult female. Sheepherd Canyon, Argus Mountains, [Inyo County], California. Collected 30 Apr 1891 by A. K. Fisher. Original number 569.

#### *Citellus beecheyi sierra* A. H. Howell

N. Amer. Fauna 56: 153, 18 May 1938.

= *Otospermophilus beecheyi sierra* (A. H. Howell, 1938). See Helgen et al. (2009:284).

Holotype: 88421. Skin and skull. Adult female. Emerald Bay, Lake Tahoe, [Eldorado County], California. Collected 23 May 1897 by J. A. Loring. Original number 4166.

#### *Citellus grammurus utah* Merriam

Proc. Biol. Soc. Washington 16: 77, 29 May 1903b.

= *Otospermophilus variegatus utah* (Merriam, 1903). See Helgen et al. (2009:284).

Holotype: [186468]. Skin and skull. Adult female. Foot of Wasatch Mountains, near Ogden, [Weber County], Utah. Collected 10 Oct 1888 by V. Bailey. Original number 291. Merriam collection number 4767/5427.

#### *Citellus variegatus juglans* V. Bailey

Proc. Biol. Soc. Washington 26: 131, 21 May 1913a.

= *Otospermophilus variegatus grammurus* (Say, 1823). See Helgen et al. (2009:284).

Holotype: 148289. [Skin and skull]. Adult male. Glenwood, altitude 5,000 ft (1,524 m), [FC: mouth of White Water Creek] on the Rio San Francisco at the southwest base of the Mogollon Mountains, [Catron County], New Mexico. Collected 2 Nov 1906 by V. Bailey. Original number 8587.

#### *Spermophilus beecheyi fisheri* Merriam

Proc. Biol. Soc. Washington 8: 133, 28 Dec 1893a.

= *Otospermophilus beecheyi fisheri* (Merriam, 1893). See Helgen et al. (2009:284).

Holotype: 29318/41385. Skin and skull. Adult male. Kern Valley, [FC: Kern River (South Branch)], 25 mi (40 km) above Kernville, Kern County, California. Restricted to South Fork of Kern River 3 mi (5 km) above Onyx, Kern County, California by A. B. Howell (1923:266). Collected 6 Jul 1891 by A. K. Fisher. Original number 741.

#### *Spermophilus couchii* Baird

Proc. Acad. Nat. Sci. Philadelphia 7: 332, reported favorably for publication 24 Apr 1855b.  
= *Otospermophilus variegatus couchii* (Baird, 1855). See Helgen et al. (2009:284).

Lectotype: [338/1255]. Skin and skull. Santa Catarina, [Baird (1857:713): a few miles west of Monterrey], [Baird (1857:312): Nuevo Leon], Mexico. Collected Apr 1853 by D. N. Couch. Original number [Baird (1857:312): 190].

No type designated in the original description. Measurements given in the original description match those of this specimen as given by Baird (1857:312) and was therefore considered the type by Lyon and Osgood (1909:165). However, since Baird had two specimens before him when he described the taxon, the specimen selected by Lyon and Osgood is the Lectotype.

### Genus *Paraxerus* Forsyth Major, 1893

#### *Paraxerus kahari* Heller

Smithsonian Misc. Coll. 56 (17): 2, 28 Feb 1911.  
= *Paraxerus ochraceus kahari* Heller, 1911. See Hollister (1919:20).  
Holotype: 164203. [Skin and skull]. Adult female. Meru [SL and FC: Mweru] Boma, northeast of Mount Kenia (Kenya), British East Africa (Kenya). Collected 24 Sep 1909 by E. Heller. Original number 1174.

### Genus *Petaurista* Link, 1795

#### *Petaurista batuana* Miller

Smithsonian Misc. Coll. 45: 27, 6 Nov 1903a.  
= *Petaurista petaurista batuana* Miller, 1903. See Robinson and Kloss (1918a:173).  
Holotype: 121742. Skin and skull. Adult male. Tana Bala (Pulau Tanahbala), Batu Islands, [Sumatera Utara], Sumatra, [Indonesia]. Collected 5 Feb 1903 by W. L. Abbott. Original number 2233.

#### *Petaurista mimicus* Miller

Smithsonian Misc. Coll. 61(21): 27, 29 Dec 1913.  
= *Petaurista petaurista marchio* Thomas, 1908. See Corbet and Hill (1992:309).  
Holotype: 143341. Skin and skull. Adult female. Pulo Rupat, [Riau], eastern Sumatra, [Indonesia]. Collected 10 Mar 1906 by W. L. Abbott. Original number 4695.

#### *Petaurista petaurista nigrescens* Medway

Malaysian Br. Roy. Asiat. Soc. 36: 116, Dec 1965.

Holotype: 19177/34899. Skin and skull. Male. Near Sandakan [Sabah, Borneo, Malaysia]. Collected 21 Oct 1887 by C. F. Adams. Original number [SL: AXX-100].

#### *Petaurista rubicundus* A. B. Howell

J. Washington Acad. Sci. 17: 82, 19 Feb 1927.  
= *Petaurista philippensis yunanensis* (Anderson, 1875). See Corbet and Hill (1992:311).  
Holotype: 240857. Skin only. Adult female. Mapientung [SL: Mapienting near Mt. Omei], Szechwan (Sichuan), China. Collected fall [FC: 24 Jul] 1924 by [FC: native hunters and secured by] D. C. Graham. No original number.

#### *Petaurista terutaus* Lyon

Proc. Biol. Soc. Washington 20: 17, 23 Feb 1907d.  
= *Petaurista petaurista terutaus* Lyon, 1907. See Robinson and Kloss (1918b:224).  
Holotype: 123934. Skin and skull. Adult male. Pulo Terutau (Ko Taruto), [Satun, Thailand]. Collected 9 Apr 1904 by W. L. Abbott. Original number 3219.

### Genus *Petinomys* Thomas, 1908

#### *Sciuropterus crinitus* Hollister

Proc. Biol. Soc. Washington 24: 185, 23 Jun 1911b.  
= *Petinomys crinitus* (Hollister, 1911). See Corbet and Hill (1992:318).  
Holotype: 239217. Skin and skull. Adult male. Basilan Island, [Basilan Province], Philippines. Collected 12 Jan 1907 by R. C. McGregor and A. Celestino. No original number. Collection of the Philippine Bureau of Sciences number 101.

#### *Sciuropterus maerens* Miller

Smithsonian Misc. Coll. 45: 26, 6 Nov 1903a.  
= *Petinomys lugens* (Thomas, 1895). See Corbet and Hill (1992: 317).  
Holotype: 121531. Skin and skull. Adult female. North Pagi Island (Pulau Pagai Utara), [Sumatera Barat], Sumatra, [Indonesia]. Collected 14 Jan 1902 [FC: 1903, which is correct] by W. L. Abbott. Original number 2206.

### Genus *Prosciurillus* Ellerman, 1947

#### *Sciurus evidens* Miller and Hollister

Proc. Biol. Soc. Washington 34: 99, 30 Jun 1921.  
= *Prosciurillus murinus murinus* (Müller and Schlegel, 1844). See Corbet and Hill (1992:304).  
Holotype: 217814. Skin and skull. Adult female. Pulo Lembeh, [Sulawesi Utara], off the shore of northeastern Celebes, [Indonesia]. Collected 16 [SL and FC: Jun, not Jan, as in original description] 1916 by H. C. Raven. Original number 2525.

#### *Sciurus murinus necopinus* Miller and Hollister

Proc. Biol. Soc. Washington 34: 98, 30 Jun 1921.

= *Prosciurillus murinus necopinus* (Miller and Hollister, 1921).  
See Corbet and Hill (1992:304).

Holotype: 218712. Skin and skull. Adult female. Goenoeng Lehio (southwest from Lake Lindoe), [Sulawesi Tengah], Middle Celebes, [Indonesia]. Collected 20 Jan 1917 by H. C. Raven. Original number 3107.

### **Genus *Protoxerus* Forsyth Major, 1893**

#### *Protoxerus stangeri bea* Heller

Smithsonian Misc. Coll. 59(16): 2, 5 Jul 1912.

Holotype: 181786. [Skin and skull]. Adult male. Lukosa River, Kakumega (Kakamega) Forest, [Western Province], British East Africa (Kenya). Collected 8 Feb 1912 by E. Heller. Original number 5614.

### **Genus *Pteromys* G. Cuvier, 1800**

#### *Pteromys volans incanus* Miller

Proc. Biol. Soc. Washington 31: 3, 21 Feb 1918.

= *Pteromys volans volans* (Linnaeus, 1758). See Corbet (1978:86).

Holotype: 200613. Skin and skull. Adult female. [FC: sex was marked incorrectly and should be male]. Verkhne Kolymsk, [Sakha (Yakutiya)], East Siberia (Russia). Collected 24 Apr 1915 by C. Amory, Jr. Original number 374.

### **Genus *Ratufa* Gray, 1867**

#### *Ratufa anambae* Miller

Proc. Washington Acad. Sci. 2: 215, 20 Aug 1900a.

= *Ratufa bicolor melanopepla* Miller, 1900. See Thorington and Hoffmann (2005:756).

Holotype: 101725. Skin and skull. Adult female, not male as in original description. Pulo Jimaja (Djemadja Island), Anamba Islands, [Kepulauan Riau, Indonesia]. Collected 25 Sep 1899 by W. L. Abbott. No original number.

#### *Ratufa angusticeps* Miller

Proc. Washington Acad. Sci. 3: 130, 26 Mar 1901a.

= *Ratufa bicolor melanopepla* Miller, 1900. See Thorington and Hoffmann (2005:756).

Holotype: 104646. Skin and skull. Adult male. Pulo Lingung, off south coast of Bunguran [SL: Natuna Islands], [Kepulauan Riau, Indonesia]. Collected 17 Jun 1900 by W. L. Abbott. Original number 481.

#### *Ratufa arusinus* Lyon

Proc. U.S. Natl. Mus. 32: 442, 23 May 1907e.

= *Ratufa affinis hypoleucus* (Horsfield, 1823). See Thorington and Hoffmann (2005:756).

Holotype: 143351. Skin and skull. Adult male. Aru Bay, [Sumatra Utara], northeast coast of Sumatra, [Indonesia]. Collected 16 Jan 1906 by W. L. Abbott. Original number 4635.

#### *Ratufa balae* Miller

Smithsonian Misc. Coll. 45: 6, 6 Nov 1903a.

= *Ratufa affinis hypoleucus* (Horsfield, 1823). See Thorington and Hoffmann (2005:756).

Holotype: 121715. Skin and skull. Adult male. Tana Bala (Pulau Tanahbala), Batu Islands, [Sumatera Utara], Sumatra, [Indonesia]. Collected 5 Feb 1903 by W. L. Abbott. Original number 2224.

#### *Ratufa bicolor major* Miller

Proc. Biol. Soc. Washington 24: 28, 24 Feb 1911.

= *Ratufa bicolor bicolor* (Sparrman, 1778). See Thorington and Hoffmann (2005:756).

Holotype: 155666. Skin, skull, [and skeleton]. Adult female. Tjibodas, Mount Gede, altitude 4,500 ft (1,372 m), [Jawa Barat], Java, [Indonesia]. Collected 15 Aug 1909 by W. Palmer on the Bryant Expedition. Original number 505.

#### *Ratufa bulana* Lyon

Proc. U.S. Natl. Mus. 36: 482, 1 Jun 1909b.

= *Ratufa affinis insignis* Miller, 1903. See Thorington and Hoffmann (2005:756).

Holotype: 144412. Skin and skull. Adult female. Pulo Bulan, Rhio-Linga (Riau) Archipelago, [Kepulauan Riau, Sumatra, Indonesia]. Collected 23 Mar 1907 by W. L. Abbott. Original number 5130.

#### *Ratufa carimonensis* Miller

Proc. U.S. Natl. Mus. 31: 257, 11 Sep 1906b.

= *Ratufa affinis insignis* Miller, 1903. See Thorington and Hoffmann (2005:756).

Holotype: 122813. Skin and skull. Adult female. Great Karimon Island, Rhio-Linga (Riau) Archipelago [FC: Straits of Malacca], [Kepulauan Riau, Sumatra, Indonesia]. Collected 2 Jun 1903 by W. L. Abbott. Original number 2465.

#### *Ratufa catemana* Lyon

Proc. U.S. Natl. Mus. 32: 443, 23 May 1907e.

= *Ratufa affinis hypoleucus* (Horsfield, 1823). See Thorington and Hoffmann (2005:756).

Holotype: 123124. Skin and skull. Adult male. Kateman River, [Riau], southeastern Sumatra, [Indonesia]. Collected 27 Aug 1903 by W. L. Abbott. Original number 2759.

#### *Ratufa celaenopepla* Miller

Smithsonian Misc. Coll. 61 (21): 26, 29 Dec 1913.

= *Ratufa bicolor phaeopepla* Miller, 1913. See Moore and Tate (1965:52).

Holotype: 124149. Skin and Skull. Adult male. Domel Island, Mergui Archipelago, [Tandintharyi, Myanmar]. Collected 26 Jan 1904 by W. L. Abbott. Original number 3073.

#### *Ratufa condurensis* Miller

Proc. U.S. Natl. Mus. 31: 258, 11 Sep 1906b.

= *Ratufa affinis insignis* Miller, 1903. See Thorington and Hoffmann (2005:756).

Holotype: 122879. Skin and skull. Adult male. Pulo Kundur, Rhio-Linga (Riau) Archipelago, [Kepulauan Riau, Sumatra, Indonesia]. Collected 25 Jun 1903 by W. L. Abbott. Original number 2552.

#### *Ratufa confinis* Miller

Proc. U.S. Natl. Mus. 31: 259, 11 Sep 1906b.

= *Ratufa affinis bunguranensis* (Thomas and Hartert, 1894). See Thorington and Hoffmann (2005:756).

Holotype: 113134. Skin and skull. Adult female. [FC: Sakana Bay], Sinkep (Singkep) Island, Rhio-Linga (Lingga) Archipelago, [Kepulauan Riau, Sumatra, Indonesia]. Collected 3 Sep 1901 by W. L. Abbott. Original number 1265.

#### *Ratufa conspicua* Miller

Smithsonian Misc. Coll. 45: 5, 6 Nov 1903a.

= *Ratufa affinis insignis* Miller, 1903. See Thorington and Hoffmann (2005:756).

Holotype: 115528. Skin and skull. Adult male. Pulo Bintang, Rhio (Riau) Archipelago, [Kepulauan Riau, Sumatra, Indonesia]. Collected 19 Aug 1902 by W. L. Abbott. Original number 1900.

#### *Ratufa cothurnata* Lyon

Proc. U.S. Natl. Mus. 40: 93, 25 Apr 1911a.

= *Ratufa affinis cothurnata* Lyon, 1911. See Chasen and Kloss (1931:22).

Holotype: 145378. Skin and skull. Adult female. Foot of Mount Palung, near Sukadana, [Kalimantan Barat], western Borneo, [Indonesia]. Collected 2 Sep, not 9 Feb as in original description, 1907 by W. L. Abbott. Original number 5537.

#### *Ratufa femoralis* Miller

Proc. U.S. Natl. Mus. 26: 447, 3 Feb 1903b.

= *Ratufa affinis hypoleucus* (Horsfield, 1823). See Thorington and Hoffmann (2005:756)

Holotype: 114361. Skin and skull. Adult female. Pulo Tuangku, Banjak Islands, [Aceh, Sumatra, Indonesia]. Collected 27 Jan 1902 by W. L. Abbott. Original number 1479.

#### *Ratufa griseicollis* Lyon

Proc. U.S. Natl. Mus. 40: 94, 25 Apr 1911a.

= *Ratufa affinis cothurnata* Lyon, 1911. See Thorington and Hoffmann (2005:756).

Holotype: 145372. Skin and skull. Adult male. Panebangtan Island, [Kalimantan Barat], west coast of Borneo, [Indonesia]. Collected 24 May 1907 by W. L. Abbott. Original number 5315.

#### *Ratufa insignis* Miller

Smithsonian Misc. Coll. 45: 4, 6 Nov 1903a.

= *Ratufa affinis insignis* Miller, 1903. See Dammerman (1926:317).

Holotype: 115531. Skin and skull. Adult male. Pulo Sugi, Rhio (Riau) Archipelago, [Kepulauan Riau, Sumatra, Indonesia]. Collected 26 Aug 1902 by W. L. Abbott. Original number 1960.

#### *Ratufa laenata* Miller

Proc. U.S. Natl. Mus. 26: 449, 3 Feb 1903b.

= *Ratufa bicolor palliata* Miller, 1902. See Thorington and Hoffmann (2005:756).

Holotype: 114350. Skin and skull. Adult male. Pulo Tuangku, Banjak Islands, [Aceh, Sumatra, Indonesia]. Collected 27 Jan 1902 by W. L. Abbott. Original number 1478.

#### *Ratufa masae* Miller

Smithsonian Misc. Coll. 45: 7, 6 Nov 1903a.

= *Ratufa affinis hypoleucus* (Horsfield, 1823). See Thorington and Hoffmann (2005:756).

Holotype: 121818. Skin and skull. Adult male. Tana Masa (Pulau Tanahmasa), Batu Islands, [Sumatera Utara, Sumatra, Indonesia]. Collected 21 Feb 1903 by W. L. Abbott. Original number 2330.

#### *Ratufa melanopepla* Miller

Proc. Washington Acad. Sci. 2: 71, 25 Jul 1900d.

= *Ratufa bicolor melanopepla* Miller, 1900. See Thorington and Hoffmann (2005:756).

Holotype: 83230. Skin and skull. Adult male. [SL: Telibon Island], Trong (Trang), Lower Siam (Thailand). Collected 27 Feb 1896 By W. L. Abbott. No original number.

#### *Ratufa melanopepla peninsulae* Miller

Smithsonian Misc. Coll. 61 (21): 25, 29 Dec 1913.

= *Ratufa bicolor melanopepla* Miller, 1900. See Thorington and Hoffmann (2005:756).

Holotype: 83478/[49466]. Skin and skeleton. Adult male. Lay Song Hong, Trong (Trang), Lower Siam (Thailand). Collected 23 Sep 1896 by W. L. Abbott. No original number.

#### *Ratufa nigrescens* Miller

Proc. U.S. Natl. Mus. 26: 448, 3 Feb 1903b.

= *Ratufa affinis hypoleucus* (Horsfield, 1823). See Thorington and Hoffmann (2005:756).

Holotype: 114556. Skin and skull. Adult female. Pulo Mansalar (Pulau Musala), off Tapanuli Bay, [Sumatera Utara], [FC: west coast] Sumatra, [Indonesia]. Collected 11 Mar 1902 by W. L. Abbott. Original number 1641.

#### *Ratufa notabilis* Miller

Proc. Acad. Nat. Sci. Philadelphia 54: 150, 11 Jun 1902.

= *Ratufa affinis bunguranensis* (Thomas and Hartert, 1894). See Thorington and Hoffmann (2005:756).

Holotype: 113064. Skin and skull. Adult male. [FC: Mentuda Bay], west coast of Linga (Lingga) Island, [Lingga Archipelago, Kepulauan Riau, Sumatra, Indonesia]. Collected 24 Aug 1901 by W. L. Abbott. Original number 1210.

***Ratufa palliata* Miller**

Proc. Acad. Nat. Sci. Philadelphia 54: 147, 11 Jun 1902.  
 = *Ratufa bicolor palliata* Miller, 1902. See Robinson and Kloss (1918a:188).  
 Holotype: 113162. Skin and skull. Adult male. Indragiri River, [Riau], eastern Sumatra, [Indonesia]. Collected 23 Sep 1901 by W. L. Abbott. Original number 1327.

***Ratufa palliata batuana* Lyon**

Proc. U.S. Natl. Mus. 52: 445, 30 Dec 1916.  
 = *Ratufa bicolor palliata* Miller, 1902. See Thorington and Hoffmann (2005:756).  
 Holotype: 121707. Skin and skull. Adult male. Tana Bala (Pulau Tanahbala), off the Batu Islands, [Sumatera Utara, Sumatra, Indonesia]. Collected 11 Feb 1902 by W. L. Abbott. Original number 2263.

***Ratufa phaeopepla* Miller**

Smithsonian Misc. Coll. 61 (21): 25, 29 Dec 1913.  
 = *Ratufa bicolor phaeopepla* Miller, 1913. See Chasen and Kloss (1930:69).  
 Holotype: 124235. Skin and skull. Adult male. Sungai Balik, Tenasserim (Tanjintharyi), [Myanmar]. Collected 25 Feb 1904 by W. L. Abbott. Original number 3141.

***Ratufa piniensis* Miller**

Smithsonian Misc. Coll. 45: 8, 6 Nov 1903a.  
 = *Ratufa affinis hypoleucus* (Horsfield, 1823). See Thorington and Hoffmann (2005:756).  
 Holotype: 121840. Skin and skull. Adult male. Pulo Pinie (Pulau Pini), Batu Islands, [Sumatera Utara, Sumatra, Indonesia]. Collected 1 Mar 1903 by W. L. Abbott. Original number 2343.

***Ratufa polia* Lyon**

Proc. U.S. Natl. Mus. 31: 585, 18 Dec 1906a.  
 = *Ratufa affinis polia* Lyon, 1906. See Thorington and Hoffmann (2005:756).  
 Holotype: 125004. Skin and skull. Adult female. Bukit Menguru, Billiton Island, between Sumatra and Borneo, [Kepulauan Bangka Belitung, Sumatra, Indonesia]. Collected 9 Aug 1904 by W. L. Abbott. Original number 3551.

***Ratufa polia bancana* Lyon**

Proc. U.S. Natl. Mus. 31: 587, 18 Dec 1906a.  
 = *Ratufa affinis bancana* Lyon, 1906. See Thorington and Hoffmann (2005:756).  
 Holotype: 124680. Skin and skull. Adult male. Tanjung Rengsam, island of Banka (Bangka), [Kepulauan Bangka Belitung], east of Sumatra, [Indonesia]. Collected 27 May 1904 by W. L. Abbott. Original number 3277.

***Ratufa pyronota* Miller**

Proc. Washington Acad. Sci. 2: 75, 25 Jul 1900d.

= *Ratufa affinis affinis* (Raffles, 1821). See Thorington and Hoffmann (2005:756).

Holotype: 83483. Skin and skull. Adult male. [Poole and Schantz (1942:550): Lay Song Hong], Trong (Trang), Lower Siam (Thailand). Collected 29 Sep 1896 by W. L. Abbott. No original number.

***Ratufa tiomanensis* Miller**

Proc. Washington Acad. Sci. 2: 216, 20 Aug 1900a.  
 = *Ratufa bicolor melanopepla* Miller, 1900. See Thorington and Hoffmann (2005:756).  
 Holotype: 101751. Skin and skull. Adult male. Tioman Island, [Pahang, Malaysia]. Collected 4 Oct 1899 by W. L. Abbott. No original number.

***Ratufa vittata* Lyon**

Proc. U.S. Natl. Mus. 40: 94, 25 Apr 1911a.  
 = *Ratufa affinis ephippium* (Müller, 1838). See Thorington and Hoffmann (2005:756).  
 Holotype: 151758. Skin and skull. Adult female. Saratokon [FC: Saratok], Pulo Laut, [Kalimantan Selatan], off southeast coast of Borneo, [Indonesia]. Collected 19 Dec 1907 by W. L. Abbott. Original number 5632.

***Ratufa vittatula* Lyon**

Proc. U.S. Natl. Mus. 40: 95, 25 Apr 1911a.  
 = *Ratufa affinis ephippium* (Müller, 1838). See Thorington and Hoffmann (2005:756).  
 Holotype: 151762. Skin and skull. Adult male. Pulo Sebuku, [Kalimantan Selatan], southeastern Borneo, [Indonesia]. Collected 2 Jan 1908 by W. L. Abbott. Original number 5720.

**Genus *Sciurus* Linnaeus, 1758*****Sciurus aberti chuscensis* Goldman**

Proc. Biol. Soc. Washington 44: 133, 17 Oct 1931a.  
 Holotype: 158553. [Skin and skull]. Adult female. Chusca Mountains, altitude 9,000 ft (2,743 m), [McKinley County], northwestern New Mexico. Collected 5 Oct 1908 by V. Bailey. Original number 8997.

***Sciurus aberti concolor* True**

Proc. U.S. Natl. Mus. 17: 1, 24 Apr 1894a. Preprint of Proc. U.S. Natl. Mus. 17: 241, 15 Nov 1894b. Primary junior homonym of *Sciurus concolor* Blyth, 1855. Replaced with *Sciurus aberti ferreus* True (1900:183).  
 Holotype: 21423/36281. Skin and skull. Female. Loveland, Larimer County, Colorado. Collected by W. G. Smith. No original number or date collected [MC: cataloged 30 Oct 1893].

***Sciurus aberti minus* Merriam**

Proc. Biol. Soc. Washington 17: 130, 9 Jun 1904a.  
 = *Sciurus aberti ferreus* True, 1900. See Hoffmeister and Diersing (1978:412).

Holotype: 70908. [Skin and skull]. Adult female. Hall Peak, at south end of Cimarron Mountains, [Mora County], north-eastern New Mexico. Collected 16 Jan 1895 by C. M. Barber. Original number 61.

*Sciurus albipes colimensis* Nelson

Proc. Biol. Soc. Washington 12: 152, 3 Jun 1898a.

= *Sciurus aureogaster nigrescens* Bennett, 1833. See Musser (1970:15).

Holotype: 33197/45202. Skin and skull. Adult male. Hacienda Magdalena, Colima, Mexico. Collected 19 Mar 1892 by E. W. Nelson. Original number 2239.

*Sciurus albipes effugius* Nelson

Proc. Biol. Soc. Washington 12: 152, 3 Jun 1898a.

= *Sciurus aureogaster nigrescens* Bennett, 1833. See Musser (1970:15).

Holotype: 70288. [Skin and skull]. Adult female. Mountains near Chilpancingo, [FC: altitude 9,800 ft (2,987 m)], Guerrero, Mexico. Collected 24 Dec 1894 by E. W. Nelson and E. A. Goldman. Original number 7271.

*Sciurus albipes nemoralis* Nelson

Proc. Biol. Soc. Washington 12: 151, 3 Jun 1898a.

= *Sciurus aureogaster nigrescens* Bennett, 1833. See Musser (1970:15).

Holotype: 35358/47623. Skin and skull. Adult male. Patzcuaro, [FC: altitude about 7,000 ft (2,137 m)], Michoacan, Mexico. Collected 23 Jul 1892 by E. W. Nelson. Original number 2905.

*Sciurus albipes quercinus* Nelson

Proc. Biol. Soc. Washington 12: 150, 3 Jun 1898a. Primary junior homonym of *Sciurus querquinus* Erxleben, 1777. Replaced with *Sciurus albipes hernandezii* by Nelson (1898b:783).

= *Sciurus aureogaster nigrescens* Bennett, 1833. See Musser (1970:15).

Holotype: 68202. [Skin and skull]. Adult female. Mountains on west side of valley of Oaxaca, [SL and FC: 15 mi (24 km)W Oaxaca], [FC: altitude 9,500 ft (2,896 m)], Oaxaca, Mexico. Collected 15 Sep 1894 by E. W. Nelson and E. A. Goldman. Original number 6768.

*Sciurus allenii* Nelson

Proc. Biol. Soc. Washington 12: 147, 3 Jun 1898a.

Holotype: 25731/33131. Skin and skull. Adult male. Monterrey, Nuevo Leon, Mexico. Collected 22 Feb 1891 by C. P. Streater. Original number 563.

*Sciurus arizonensis* Coues

Amer. Nat. 1: 357, Sep 1867.

Holotype: [8475/37607]. Skin and skull. Female. Fort Whipple, [Yavapai County], Arizona. Collected 20 Dec 1865 by E. Coues. No original number.

There are several discrepancies in the data for this specimen and the original specimen label is missing. Coues (1867:357) did not designate a type by number but indicated that he took only one specimen. J. A. Allen (1877:741) lists 8475 as the type of *S. arizonensis*. Both give the date of collection as 20 Dec 1865, but both the USNM skin and bone catalogs give the date as 6 Dec 1864. Coues (1867:357) stated the specimen was female but no sex is entered in either catalog. Coues (1867:357) stated he shot the specimen but an entry in the skin catalog under "Remarks" that is dittoed for several specimens from Fort Whipple states "Taken from Indians in a fight." An unattributed comment in "Remarks" of the bone catalog, attributed to M. W. Lyon by Poole and Schantz (1942:553) states "Skull taken from mounted type, not naturally attached to skin, and it is very doubtful if it is the type skull. 31 Oct 98." The skin was cataloged 12 Apr 1866 and the skull 1 Nov 1898.

*Sciurus aureogaster frumentor* Nelson

Proc. Biol. Soc. Washington 12: 154, 3 Jun 1898a.

= *Sciurus aureogaster nigrescens* Bennett, 1833. See Musser (1970:15).

Holotype: 54259. [Skin and skull]. Adult male. Las Vigas, [FC: altitude 7,500 ft (2,286 m)], Veracruz, Mexico. Collected 18 Jun 1893 by E. W. Nelson. Original number 5073.

*Sciurus boothiae belti* Nelson

Proc. Washington Acad. Sci. 1: 78, 9 May 1899b.

= *Sciurus variegatoides belti* Nelson, 1899. See Harris (1937:13).

Holotype: 36477/48847. Skin and skull. Adult female. Escondido River, 50 mi (80 km) from Bluefields, [Atlantico Sur], Nicaragua. Collected 12 Oct, not 22 Nov as in original description, 1892 by C. W. Richmond. Original number [SL and FC: 124].

*Sciurus boothiae managuensis* Nelson

Proc. Biol. Soc. Washington 12: 150, 3 Jun 1898a.

= *Sciurus variegatoides managuensis* Nelson, 1898. See Harris (1937:17).

Holotype: 62476. [Skin and skull]. Adult male. Managua River, [Izabal], Guatemala. Collected 12 Feb 1895 by C. McElroy. Original number [SL: 4].

*Sciurus boothiae underwoodi* Goldman

J. Washington Acad. Sci. 22: 275, 19 May 1932a.

= *Sciurus variegatoides underwoodi* Goldman, 1932. See Harris (1937:9).

Holotype: 250219. [Skin and skull]. Adult male. Monte Redondo, altitude 5,100 ft (1,554 m), about 30 mi (48 km) northwest of Tegucigalpa, [Francisco Morazan], Honduras. Collected 8 Dec 1931 by C. F. Underwood. Original number 644 [SL: 26780-X].

*Sciurus carolinensis hypophaeus* Merriam

Science 7: 351, 16 Apr 1886b.

Lectotype: [193864. Skin and skull]. [SL: Adult female. Elk River], Sherbourne (Sherburne) County, Minnesota. [SL: Collected 20 Jan 1886 by V. Bailey. Original number 29]. Merriam Collection number 1949/2483. Lectotype selected by V. Schantz in 1938 but apparently not published until Poole and Schantz (1942:554).

#### *Sciurus carolinensis minutus* H. H. Bailey

Bull. Bailey Mus. Lib. Nat. Hist. 12: 4, 5 Jan 1937a. Primary junior homonym of *Sciurus minutus* du Chaillu, 1861. Replaced with *Sciurus carolinensis matecumbei* by H. H. Bailey (1937b:516).

= *Sciurus carolinensis extimus* Bangs, 1896. See Hubbard and Banks (1970:329).

Holotype: 347444. Skin and skull. Adult female. Lower Key Largo, Monroe County, Florida. Collected 13 June 1923 by H. H. Bailey. No original number. Bailey Collection of Natural History number 178.

#### *Sciurus carolinensis yucatanensis* J. A. Allen

Monogr. N. Amer. Rodentia. 11: 705, Aug 1877.

= *Sciurus yucatanensis yucatanensis* J. A. Allen, 1877. See Miller (1912:330).

Syntypes: 8503/37496. Skin and skull. Female. Merida, Yucatan, [Mexico]. Collected [SL: 3] Mar 1865 by A. Schott, [SL: Comision científica de Yucatan, Jose Salagar Llarregui.] Original number 229.

8504/37493. Skin and skull. No sex. Locality as above. Collected Mar 1865 by A. Schott. Original number 332. Considered a Paratype by previous authors, Lyon and Osgood (1909:197), Poole and Schantz (1942:554), and Helgen and McFadden (2001:106); J. A. Allen (1877:716) listed this specimen by number along with numbers 8502 and 8505, and all three are Syntypes. Number 8502 is in the collection of the Museum of Comparative Zoology, Harvard (MCZ 5398) (Helgen and McFadden, 2001:106). Number 8505 cannot be found.

#### *Sciurus castanonus* Baird

Proc. Acad. Nat. Sci. Philadelphia 7: 332, reported favorably for publication 24 Apr 1855b, receipt acknowledged 15 Jun 1855 by the American Philosophical Society. Original spelling of *castanonus* corrected by Baird (1857:266).

= *Sciurus aberti aberti* Woodhouse, 1853. See J. A. Allen (1877:735).

Lectotype: 121/1107. [Skin and skull]. [Lyon and Osgood (1909:183): Adult female]. On the Mimbres [SL: Coppermines, Gila]. In designating the Lectotype, Lyon and Osgood (1909:182) give the type locality as Coppermines, near the present site of Georgetown, Grant County, New Mexico. Baird (1857:707) in his list of localities says of Coppermines, "A former station of the United States-Mexican Boundary Survey, subsequently called Fort Webster. Not indicated clearly whether on a tributary of the Gila

or Mimbres. About Latitude 33°, Longitude 108°." Baird (1857:709) says of Fort Webster "See also Coppermines. Altitude 6,350 ft (1,935 m). Latitude 32°47', Longitude 108°04'." J. P. Hubbard, who has researched old New Mexico collecting localities for decades, indicates the proper locality designation should read "On the Mimbres [River=the copper mines=former Santa Rita del Cobre in present Grant County, New Mexico (approximately 32°47.560'N, 108°4.710'W)]" J. P. Hubbard (in litt., 26 October 2010 to A. L. Gardner). Collected [SL: 1851] by J. H. Clark. No original number.

#### *Sciurus chiricahuae* Goldman

Proc. Biol. Soc. Washington 46: 71, 27 Apr 1933a.

= *Sciurus nayaritensis chiricahuae* Goldman, 1933. See Lee and Hoffmeister (1963:189).

Holotype: 244124. Skin and skull. Adult female. Cave Creek, altitude 5,200 ft (1,585 m), Chiricahua Mountains, Cochise County, Arizona. Collected 16 Aug 1923 by E. A. Goldman. Original number 23527.

#### *Sciurus colliae* *nuchalis* Nelson

Proc. Washington Acad. Sci. 1: 59, 9 May 1899b.

Holotype: 32657/44580. Skin and skull. Adult male. Manzanillo, [FC: altitude 50 ft (15 m)], Colima, Mexico. Collected 2 Feb 1892 by E. W. Nelson. Original number [SL: 1828].

#### *Sciurus deppei vivax* Nelson

Proc. Biol. Soc. Washington 14: 131, 9 Aug 1901.

Holotype: 107932. Skin and skull. Adult female. Apazote, [SL and FC: near Yohaltun], Campeche, Mexico. Collected 8 Jan 1901 by E. W. Nelson and E. A. Goldman. Original number [SL: 14429].

#### *Sciurus dorsalis* Woodhouse

Proc. Acad. Nat. Sci. Philadelphia 6: 110, reported favorably for publication 29 Jun 1852, receipt acknowledged 20 Aug 1852 by the Smithsonian Institution. Primary junior homonym of *Sciurus dorsalis* Gray, 1848. Renamed *Sciurus aberti* by Woodhouse (1853a:220).

= *Sciurus aberti aberti* Woodhouse, 1853. See Miller (1912:333).

Holotype: 2430. Skin only. Sex unknown. San Francisco Mountain (Peaks), [Coconino County], New Mexico (Arizona), [Lyon and Osgood (1909:184): on the routes of Captains Sitgraves and Whipple, about latitude 35° and longitude 111°30']. Collected Oct 1851 by S. W. Woodhouse. No original number.

#### *Sciurus fossor* Peale

U.S. Explor. Exped. 8: 55, 1848.

= *Sciurus griseus griseus* Ord, 1818. See Miller (1912:332).

Holotype: No type specimen designated in original description. Southern Oregon is thought to be the type locality. Cassin (1858:50) states that "Specimen in Mus. Acad. Philadelphia

and Nat. Mus. Washington." There are currently no specimens in the collection that could possibly be a type of this taxon.

#### *Sciurus fossor anthonyi* Mearns

Proc. U.S. Natl. Mus. 20: 1, 5 Mar 1897a. Preprint of Proc. U.S.

Natl. Mus. 20: 501, 19 Jan 1898b.

= *Sciurus griseus anthonyi* Mearns, 1897. See Elliot (1901:57).

Holotype: 60928. Skin and skull. Adult female. Campbell's ranch at Laguna, San Diego County, California. Collected 10 Jun 1894 by E. A. Mearns. Original number 3642.

#### *Sciurus goldmani* Nelson

Proc. Biol. Soc. Washington 12: 149, 3 Jun 1898a.

= *Sciurus variegatoides goldmani* Nelson, 1898. See Dickey (1928:8).

Holotype: 77903. Skin and skull. Adult male. Huehuetan, Chiapas, Mexico. Collected 28 Feb 1896 by E. W. Nelson and E. A. Goldman. Original number 9435.

#### *Sciurus granatensis agricolae* Hershkovitz

Proc. U.S. Natl. Mus. 97: 16, 25 Aug 1947.

Holotype: 279775. Skin and skull. Adult male. Colonia Agricola de Caracolito, Rio Ariguani, on the southern slopes of the Sierra Nevada de Santa Marta, altitude 335 m [SL: 400 m], Department of Magdalena, Colombia. Collected 1 Mar 1942 by P. Hershkovitz. Original number 208.

#### *Sciurus granatensis norosiensis* Hershkovitz

Proc. U.S. Natl. Mus. 97: 21, 25 Aug 1947.

Holotype: 279949. Skin and skull. Adult male. Norosi, Mompos, altitude 120 m, Department of Bolivar, Colombia. Collected 26 Jun 1943 by P. Hershkovitz. Original number 2150.

#### *Sciurus granatensis perijae* Hershkovitz

Proc. U.S. Natl. Mus. 97: 23, 25 Aug 1947.

Holotype: 279892. Skin and skull. Adult male. Sierra Negra, above Villanueva, on the western slope of the Sierra de Perija, altitude 1,265 m, Valledupar, Department of Magdalena (Cesar), Colombia. Collected 25 Dec 1942 by P. Hershkovitz. Original number 1230.

#### *Sciurus granatensis tarrae* Hershkovitz

Proc. U.S. Natl. Mus. 97: 26, 25 Aug 1947.

Holotype: 279964. Skin and skull. Adult female. Rio Tarra, a small tributary of the Upper Catatumbo, San Calixto, altitude about 200 m, Department of Norte de Santander, Colombia. Collected 25 Jul 1943 by P. Hershkovitz. Original number 2260.

#### *Sciurus griseoflavus chiapensis* Nelson

Proc. Washington Acad. Sci. 1: 69, 9 May 1899b.

= *Sciurus aureogaster nigrescens* Bennett, 1833. See Musser (1970:15).

Holotype: 75957. Skin and skull. Adult male. San Cristobal, [FC: altitude 8,400 ft (2,560 m)], Chiapas, Mexico. Collected 22 Sep 1895 by E. W. Nelson and E. A. Goldman. Original number [SL: 8447].

#### *Sciurus infuscatus* Cabrera

Bol. Soc. Esp. Hist. Nat. 5: 227, Apr 1905.

= *Sciurus vulgaris infuscatus* Cabrera, 1905. See Hayman and Holt (1940:330). See Grill et al. (2009:2687) for current usage.

Holotype: [152266. Skin and skull]. Adult male. Navas del Marques, altitude 2,410 m, province of Avila, [Castilla y Leon], Spain. Collected 26 Oct 1904 by M. M. de la Escalera. No original number. The USNM number was not given in the original description as the specimen was in the collection of A. Cabrera at the time. On the back of the original label is written "Type of the species" (name given on front of label), and the measurements on the label match those in the original description.

#### *Sciurus kaibabensis* Merriam

Proc. Biol. Soc. Washington 17: 129, 9 Jun 1904a.

= *Sciurus aberti kaibabensis* Merriam, 1904. See Hoffmeister and Diersing (1978:410).

Holotype: 130982. [Skin and skull]. Adult male. Head of Bright Angel Creek, top of Kaibab Plateau, north side of Grand Canyon of Colorado, [Coconino County], Arizona. Collected 1 Dec 1903 by J. T. Stewart. No original number [SL: 4470-X].

#### *Sciurus limitis* Baird

Proc. Acad. Nat. Sci. Philadelphia 7: 331, reported favorably for publication 24 Apr 1855b, receipt acknowledged 15 Jun 1855 by the American Philosophical Society.

= *Sciurus niger limitis* Baird, 1855. See Osgood (1907a:45).

Holotype: [351/1265]. Skin and skull. Sex undetermined. Devils River, [Val Verde County], Texas. Collected by J. J. Clark, United States and Mexican Boundary Survey, under Major W. H. Emory. Cataloged 12 Dec 1854. No original number. No specimen number was given in the original description. Lyon and Osgood (1909:187) determined this specimen was the type.

#### *Sciurus negligens* Nelson

Proc. Biol. Soc. Washington 12: 147, 3 Jun 1898a.

= *Sciurus deppei negligens* Nelson, 1898. See Hooper (1953:4).

Holotype: 93028. [Skin and skull]. Adult female. Alta Mira, [FC: altitude about 75 ft (23 m)], Tamaulipas, Mexico. Collected 18 Apr 1898 by E. A. Goldman. Original number [FC: Nelson and Goldman] 12319.

#### *Sciurus nelsoni* Merriam

Proc. Biol. Soc. Washington 8: 144, 29 Dec 1893b.

= *Sciurus aureogaster nigrescens* Bennett, 1833. See Musser (1970:15).

Holotype: 51157. [Skin and skull]. Adult female. Huitzilac, [FC: altitude 8,500 ft (2,591 m)], Morelos, Mexico. Collected 1 Jan 1893 by E. W. Nelson. Original number 4144.

***Sciurus nelsoni hirtus* Nelson**

Proc. Biol. Soc. Washington 12: 153, 3 Jun 1898a.

= *Sciurus aureogaster nigrescens* Bennett, 1833. See Musser (1970:15).

Holotype: 55325. [Skin and skull]. Adult male. Tochimilco, [FC: altitude 7,000 ft (2,134 m)], Puebla, Mexico. Collected 7 Aug 1893 by E. W. Nelson and E. A. Goldman [SL: only Nelson]. Original number [FC: EWN] 5295.

***Sciurus niger avicennia* A. H. Howell**

J. Mamm. 1: 37, 28 Nov 1919.

Holotype: 231498. Skin and skull. Adult male. Everglades, Lee (Collier) County, Florida. Collected 14 Mar 1919 by A. H. Howell. Original number 2325.

***Sciurus niger bryanti* H. H. Bailey**

Bull. Bailey Mus. and Lib. Nat. Hist. 1: 1, 1 Aug 1920.

= *Sciurus niger cinereus* Linnaeus, 1758. See Barkalow (1954:23).

Holotype: 347443. Skin and skull. Adult female. Dorchester County, Maryland. Collected 21 Dec 1917 by a hunter for R. W. Jackson. Original number RWJ 2. Previously Bailey collection numbers 602 and 123.

***Sciurus oculatus tolucae* Nelson**

Proc. Biol. Soc. Washington 12: 148, 3 Jun 1898a.

Holotype: 55927. [Skin and skull]. Adult male. North slope Volcan Toluca, [FC: altitude 11,000 ft (3,353 m)], Mexico, Mexico. Collected 8 Sep 1893 by E. W. Nelson and E. A. Goldman [SL: only Nelson]. Original number [FC: EWN] 5419.

***Sciurus poliopus peregrinator* Nelson**

Proc. Biol. Soc. Washington 17: 149, 6 Oct 1904.

= *Sciurus aureogaster nigrescens* Bennett, 1833. See Musser (1970:15).

Holotype: 70279. [Skin and skull]. Adult female. Piaxtla, [FC: altitude 3,900 ft (1,189 m)], Puebla, Mexico. Collected 25 Nov 1894 by E. W. Nelson and E. A. Goldman. Original number 7104.

***Sciurus poliopus senex* Nelson**

Proc. Biol. Soc. Washington 17: 148, 6 Oct 1904.

= *Sciurus aureogaster nigrescens* Bennett, 1833. See Musser (1970:15).

Holotype: 126208. [Skin and skull]. Adult female. La Salada, 40 mi (64 km) south of Uruapan, southern Michoacan, Mexico. Collected 14 Mar 1903 by E. W. Nelson and E. A. Goldman. Original number 16127.

***Sciurus richmondi* Nelson**

Proc. Biol. Soc. Washington 12: 146, 3 Jun 1898a.

Holotype: 36481/48851. Skin and skull. Adult female. Escondido River, [SL: 50 mi (80 km) from] (emended to read above by Nelson, 1899b:100) Bluefields, [Atlantico Sur], Nicaragua. Collected 4 Oct 1892 by C. W. Richmond. Original number 118.

***Sciurus socialis cocos* Nelson**

Proc. Biol. Soc. Washington 12: 155, 3 Jun 1898a.

= *Sciurus aureogaster nigrescens* Bennett, 1833. See Musser (1970:15).

Holotype: 70644. [Skin and skull]. Adult male. Acapulco, [FC: near sea level], Guerrero, Mexico. Collected 11 Jan 1895 by E. W. Nelson and E. A. Goldman. Original number 7360.

***Sciurus socialis littoralis* Nelson**

Proc. Biol. Soc. Washington 20: 87, 11 Dec 1907.

= *Sciurus aureogaster nigrescens* Bennett, 1833. See Musser (1970:15).

Holotype: 71322. [Skin and skull]. Adult female. Puerto Angel, [FC: 100–300 ft (30–91 m)], Oaxaca, Mexico. Collected 11 Mar 1895 by E. W. Nelson and E. A. Goldman. Original number [SL: 7627].

***Sciurus thomasi* Nelson**

Proc. Washington Acad. Sci. 1: 71, 9 May 1899b.

= *Sciurus variegatoides thomasi* Nelson, 1899. See Harris (1937:24).

Holotype: 12044/23367. Skin and skull. Sex undetermined. Talamanca, Costa Rica. Collected [MC: 1874] by W. M. Gabb. Original number [MC: 45].

***Sciurus truei* Nelson**

Proc. Washington Acad. Sci. 1: 61, 9 May 1899b.

= *Sciurus colliae truei* Nelson, 1899. See Anderson (1962:12).

Holotype: 96229. [Skin and skull]. Adult male. Camoa, Rio Mayo, Sonora, Mexico. Collected 20 Jan 1899 by E. A. Goldman. Original number [FC: Nelson and Goldman] 13405.

***Sciurus variabilis choco* Goldman**

Smithsonian Misc. Coll. 60(22): 4, 28 Feb 1913.

= *Sciurus granatensis morulus* Bangs, 1900. See Cabrera (1961:366).

Holotype: 179561. [Skin and skull]. Adult male. Cana, altitude 3,500 ft (1,067 m), [Poole and Schantz (1942:559): Pirri Mountains], [Darien], eastern Panama. Collected 28 May 1912 by E. A. Goldman. Original number 21752.

***Sciurus variegatoides helveolus* Goldman**

Smithsonian Misc. Coll. 56(36): 3, 19 Feb 1912a.

Holotype: 171540. [Skin and skull]. Adult male. Corozal, Canal Zone (Panama), Panama. Collected 15 Jun 1911 by E. A. Goldman. Original number [FC: Nelson and Goldman] 21166.

***Sciurus vulgaris chiliensis* Sowerby**

Ann. Mag. Nat. Hist. (ser. 9) 7: 253, Mar 1921.

Holotype: 219185. Skin and skull. Adult female. Wu-ling-shan, Tung Ling area, altitude 3,500 ft (1,067 m), 75 mi (121 km) northeast of Peking (Beijing), Chihli (Hebei), China. Collected 25 Aug 1917 by A. de C. Sowerby. Original number 1033.

***Sciurus yucatanensis baliolus* Nelson**

Proc. Biol. Soc. Washington 14: 131, 9 Aug 1901.

Holotype: 107939. [Skin and skull]. Adult male. Apazote, [FC: near Yohaltun], Campeche, Mexico. Collected 8 Jan 1901 by E. A. Goldman. Original number [FC: Nelson and Goldman] 14428.

**Genus *Sundasciurus* Moore, 1958**

***Sciurus balae* Miller**

Smithsonian Misc. Coll. 45: 14, 6 Nov 1903a.

= *Sundasciurus lowii balae* (Miller, 1903). See Thorington and Hoffmann (2005:787).

Holotype: 121799. Skin and skull. Adult male. Tana Bala (Pulau Tanahbala), Batu Islands, [Sumatera Utara, Sumatra, Indonesia]. Collected 12 Feb 1903 by W. L. Abbott. Original number 2282.

***Sciurus bancarus* Miller**

Proc. U.S. Natl. Mus. 26: 451, 3 Feb 1903b.

= *Sundasciurus tenuis bancarus* (Miller, 1903). See Thorington and Hoffmann (2005:788).

Holotype: 114311. Skin and skull. Adult male. Pulo Bangkaru, Banjak Island, [Aceh, Sumatra, Indonesia]. Collected 17 Jan 1902 by W. L. Abbott. Original number 1422.

***Sciurus hippocellus* Lyon**

Smithsonian Misc. Coll. 50: 27, 8 Apr 1907f.

= *Sundasciurus hippocurus borneensis* (Gray, 1867). See Thorington and Hoffmann (2005:786).

Holotype: 142274. Skin and skull. Adult female. Batu Ampar, on the Landak River, [Kalimantan Barat], western Borneo, [Indonesia]. Collected 11 Jul 1905 by W. L. Abbott. Original number 4260.

***Sciurus hippurus* Lyon**

Smithsonian Misc. Coll. 50: 26, 8 Apr 1907f.

= *Sundasciurus hippocurus hippurus* (Lyon, 1907). See Thorington and Hoffmann (2005: 786).

Holotype: 141031. Skin and skull. Adult female. Tarussan (Tarusan) Bay, [Sumatera Barat], west coast of Sumatra, [Indonesia]. Collected 18 Dec 1904 by W. L. Abbott. Original number 3826.

***Sciurus humilis* Miller**

Smithsonian Misc. Coll. 61 (21): 24, 29 Dec 1913.

= *Sundasciurus lowii humilis* (Miller, 1913). See Thorington and Hoffmann (2005:787).

Holotype: 123116. [Skin and skull]. Immature female, M3 in place, permanent premolars just appearing. Kateman River, [Riau], East Sumatra, [Indonesia]. Collected 20 Aug 1903 by W. L. Abbott. Original number 2751.

***Sciurus lingungensis* Miller**

Proc. Washington Acad. Sci. 3: 123, 26 Mar 1901a.

= *Sundasciurus lowii natuensis* (Thomas, 1895). See Corbet and Hill (1992:296).

Holotype: 104693. Skin and skull. Adult male. Pulo Lingung, off southern extremity of Bungurun, North Natuna Islands, [Kepulauan Riau, Indonesia]. Collected 19 Jun 1900 by W. L. Abbott. Original number 494.

***Sciurus mansalaris* Miller**

Proc. U.S. Natl. Mus. 26: 451, 3 Feb 1903b.

= *Sundasciurus tenuis* (Horsfield, 1824). Unassigned to subspecies by Thorington and Hoffmann (2005:788).

Holotype: 114633. Skin and skull. Adult male. Pulo Mansalar (Pulau Musala), off Tapanuli Bay, [Sumatera Utara], [FC: west coast of] Sumatra, [Indonesia]. Collected 2 Mar 1902 by W. L. Abbott. Original number 1583.

***Sciurus mansalaris batus* Lyon**

Proc. U.S. Natl. Mus. 52: 443, 30 Dec 1916.

= *Sundasciurus tenuis* (Horsfield, 1824). Unassigned to subspecies by Thorington and Hoffmann (2005:788).

Holotype: 121732. Skin and skull. Adult male. Tana Bala (Pulau Tanahbala), Batu Island[s], [Sumatera Utara, Sumatra, Indonesia]. Collected 4 Feb 1903 by W. L. Abbott. Original number 2217.

***Sciurus parvus* Miller**

Proc. Biol. Soc. Washington 14: 33, 5 Apr 1901b.

= *Sundasciurus tenuis parvus* (Miller, 1901). See Thorington and Hoffmann (2005:788).

Holotype: 84509. Skin and skull. Adult male. Nulu, altitude 1,000 ft (305 m), Sarawak, Borneo, [Malaysia]. Collected Oct 1894 by C. Hose. No original number.

***Sciurus piniensis* Miller**

Smithsonian Misc. Coll. 45: 14, 6 Nov 1903a.

= *Sundasciurus lowii balae* (Miller, 1903). See Thorington and Hoffmann (2005:787).

Holotype: 121800. Skin and skull. Adult female. Pulo Pinie (Pulau Pini), Batu Islands, [Sumatera Utara], Sumatra, [Indonesia]. Collected 1 Mar 1903 by W. L. Abbott. Original number 2344.

***Sciurus procerus* Miller**

Proc. Washington Acad. Sci. 3: 122, 26 Mar 1901a.

= *Sundasciurus tenuis procerus* (Miller, 1901). See Thorington and Hoffmann (2005:788).

Holotype: 104698. Skin and skull. Adult male. Bunguran Island, Natunas (North Natuna Islands), [Kepulauan Riau,

Indonesia]. Collected 18 Jul 1900 by W. L. Abbott. Original number 574.

#### *Sciurus pumilus* Miller

Smithsonian Misc. Coll. 45: 15, 6 Nov 1903a.

= *Sundasciurus fraterculus* (Thomas, 1895). See Thorington and Hoffmann (2005:786).

Holotype: 121627. Skin and skull. Adult male, not female as in original description. South Pagi Island (Pulau Pagai Selatan), [Sumatera Barat], Sumatra, [Indonesia]. Collected 27 Nov 1902 by W. L. Abbott. Original number 2098.

#### *Sciurus tenuis surdus* Miller

Proc. Washington Acad. Sci. 2: 80, 25 Jul 1900b.

= *Sundasciurus tenuis tenuis* (Horsfield, 1824). See Thorington and Hoffmann (2005:788).

Holotype: 84412. Skin and skull. Adult male. Trong (Trang), Lower Siam (Thailand). Collected 3 Feb 1897 by [SL: W. L. Abbott]. No original number.

#### *Sundasciurus rabori* Heaney

Proc. Biol. Soc. Washington 92: 281, 16 Aug 1979.

Holotype: 477989. Skin and skull. Adult male. Magtaguimbong, altitude 3,600–4,350 ft (1,097–1,326 m), approximately 8°48'N, 117°40'E, Mt. Mantalingajan, [Palawan Province], Palawan Island, Republic of the Philippines. Collected 16 Apr 1962 by D. S. Rabor. Original number [SL: 1444].

### Genus *Tamias* Illiger, 1811

#### *Eutamias amoenus albiventris* Booth

The Murrelet 28: 7, 30 Apr 1947.

= *Tamias amoenus albiventris* (Booth, 1947). See Sutton (1992:2).

Holotype: 275175. Skin and skull. Adult female. Wickiup Spring, 23 mi (37 km) west of Anatone, on the Asotin-Garfield County boundary, Washington. Collected 23 Jul 1943 by E. S. Booth. Original number 910 [SL: 32541-X].

#### *Eutamias amoenus ochraceus* A. H. Howell

J. Mamm. 6: 54, 9 Feb 1925.

= *Tamias amoenus ochraceus* (A. H. Howell, 1925). See Hayman and Holt (1940:432).

Holotype: 161049. Skin and skull. Adult male. [FC: Head of] Studhorse Canyon, [FC: altitude 6,500 ft (1,981 m)], Siskiyou Mountains, [Siskiyou County], California. Collected 27 Sep 1909 by N. Hollister. Original number 3511.

#### *Eutamias amoenus operarius* Merriam

Proc. Biol. Soc. Washington 18: 164, 29 Jun 1905.

= *Tamias minimus operarius* (Merriam, 1905). See Hayman and Holt (1940:431).

Holotype: 129808. [Skin and skull]. Young adult female. Gold Hill, [FC: in canyon near Rowena], 7,400 ft (2,256 m), [Boulder County], Colorado. Collected 8 Oct 1903 by V. Bailey. Original number 8160.

#### *Eutamias amoenus vallicola* A. H. Howell

J. Mamm. 3: 179, 4 Aug 1922.

= *Tamias amoenus vallicola* (A. H. Howell, 1922). See Hayman and Holt (1940:432).

Holotype: 168027. Skin and skull. Adult female. Bass Creek, near [SL: NW] Stevensville, altitude 3,725 ft (1,135 m), [Ravalli County], Montana. Collected 23 Mar 1910 by C. Birdseye. Original number 1052.

#### *Eutamias asiaticus altaicus* Hollister

Proc. Biol. Soc. Washington 25: 183, 24 Dec 1912b.

= *Tamias sibiricus sibiricus* (Laxmann, 1769). See Ognev (1966:421).

Holotype: 175501. Skin and skull. Adult male. Tapucha [SL: Dapucha], altitude 6,900 ft (2,103 m), Altai Mountains, [Altayaskiy], Siberia (Russia). Collected 8 Aug 1912 by N. Hollister. Original number 4474.

#### *Eutamias asiaticus umbrosus* A. B. Howell

J. Washington Acad. Sci. 17: 80, 19 Feb 1927.

= *Tamias sibiricus umbrosus* (A. B. Howell, 1927). See Hayman and Holt (1940:436).

Holotype: 240744. Skin and skeleton. Adult male. [FC: Archuan], 140 mi (225 km) south of Lanchowfu (Lanzhou), Kansu (Gansu), China. Collected 21 Aug 1923 by F. R. Wulsin. Original number 1118.

#### *Eutamias atristriatus* V. Bailey

Proc. Biol. Soc. Washington 26: 129, 21 May 1913a.

= *Tamias minimus atristriatus* (V. Bailey, 1913). See Hayman and Holt (1940:431).

Holotype: 119028. [Skin and skull]. Adult female. On Penasco Creek, altitude 7,400 ft (2,256 m), 12 mi (19 km) east of Cloudcroft, Sacramento Mountains, New Mexico. Restricted by Frey et al. (2009:269) to "Sacramento Mountains, [Otaro County], New Mexico, on Penasco Creek [=James Canyon], 12 mi (19 km) east of Cloudcroft [by road], altitude 7,400 ft (2,256 m)." Collected 6 Sep 1902 by V. Bailey. Original number 7953.

#### *Eutamias bulleri solivagus* A. H. Howell

J. Mamm. 3: 179, 4 Aug 1922.

= *Tamias durangae* (J. A. Allen, 1903). See Levensen et al. (1985:242).

Holotype: 116882. Skin and skull. Adult female. Sierra Gualdupe, [FC: altitude about 9,500 ft (2,896 m)], Coahuila, Mexico. Collected 1 May 1902 by E. W. Nelson and E. A. Goldman. Original number 15169.

#### *Eutamias canicaudus* Merriam

Proc. Biol. Soc. Washington 16: 77, 29 May 1903b.

= *Tamias amoenus canicaudus* (Merriam, 1903). See Hayman and Holt (1940:432).

Holotype: 27007/34428. Skin and skull. Adult female. Spokane [SL and FC: Falls], [FC: altitude 1,700 ft (518 m)],

[Spokane County], Washington. Collected 11 Apr 1891 by C. P. Streator. Original number 639.

*Eutamias caniceps* Osgood

N. Amer. Fauna 19: 28, 6 Oct 1900a.

= *Tamias minimus caniceps* (Osgood, 1900). See Hayman and Holt (1940:431).

Holotype: 99200. [Skin and skull]. Adult female. Lake Labarge, [SL: Yukon River], Northwest Territory (Yukon), Canada. Collected 13 Jul 1899 by W. H. Osgood. Original number 603.

*Eutamias caurinus* Merriam

Proc. Acad. Nat. Sci. Philadelphia 50: 352, 4 Oct 1898c.

= *Tamias amoenus caurinus* (Merriam, 1898). See Hayman and Holt (1940:432).

Holotype: 90636. Skin and skull. Adult male. Timberline near head of Soleduck River, Olympic Mountains, [Clallam County], Washington. Collected 27 Aug 1897 by C. H. Merriam. Original number [FC: V. Bailey] 6211.

*Eutamias cinereicollis canipes* V. Bailey

Proc. Biol. Soc. Washington 15: 117, 2 Jun 1902.

= *Tamias canipes canipes* (V. Bailey, 1902). See Levenson et al. (1985:222).

Holotype: 109229. [Skin and skull]. Adult female. [FC: Head of Dog Canyon], altitude 7,000 ft (2,134 m), Guadalupe Mountains, [Culberson County], Texas. Collected 24 Aug 1901 by V. Bailey. Original number 7827.

*Eutamias cinereicollis cinereus* V. Bailey

Proc. Biol. Soc. Washington 26: 130, 21 May 1913a.

= *Tamias cinereicollis cinereus* (V. Bailey, 1913). See Hayman and Holt (1940:434).

Holotype: 167029. [Skin and skull]. Adult male. Copper Canyon, Magdalena Mountains, altitude 8,200 ft (2,499 m), [Socorro County], New Mexico. Collected 1 Sep 1909 by E. A. Goldman. Original number [FC: Nelson and Goldman] 20435.

*Eutamias consobrinus clarus* V. Bailey

Proc. Biol. Soc. Washington 31: 31, 16 May 1918.

= *Tamias minimus consobrinus* J. A. Allen, 1890. See Hayman and Holt (1940:431).

Holotype: 227313. [Skin and skull]. Adult male. Swan Lake Valley, Yellowstone National Park, [SL: Wyoming]. Collected 13 Sep 1917 by V. Bailey. Original number 9945.

*Eutamias dorsalis carminis* Goldman

Proc. Biol. Soc. Washington 51: 56, 18 Mar 1938a.

= *Tamias dorsalis carminis* (Goldman, 1938). See Levenson et al. (1985:222).

Holotype: 263378. Skin and skull. Young male. Carmen Mountains, altitude 7,400 ft (2,256 m), Coahuila, Mexico. Collected 20 Sep 1937 by R. S. Sturgis [XC: shot by W. H. Hazlette]. Original number 73. [SL: 28066-X].

*Eutamias dorsalis sonoriensis* Callahan and Davis

Southwestern Nat. 22: 71, 1 Mar 1977.

= *Tamias dorsalis sonoriensis* (Callahan and Davis, 1977). See Hart (1992:1).

Holotype: [398643]. Skin, skull, and stained baculum. Adult male. Twenty-four kilometers NE Guaymas [SL: 1 mi (1.6 km) SW Maytorena], altitude 100 m [SL: about 300 ft (91 m)], Sonora, Mexico. Collected 13 Nov 1973 by J. Callahan. Original number 123. University of Arizona number 22788.

*Eutamias dorsalis utahensis* Merriam

Proc. Biol. Soc. Washington 11: 210, 1 Jul 1897b.

= *Tamias dorsalis utahensis* (Merriam, 1897). See Elliot (1901:69).

Holotype: 186457. Skin and skull. Adult male. Ogden [MCC: foothills of Wasatch Mountains], [Weber County], Utah. Collected 9 Oct 1888 by V. Bailey. Original number 289. Merriam collection number 4788/5448.

*Eutamias hopiensis* Merriam

Proc. Biol. Soc. Washington 18: 165, 29 Jun 1905.

= *Tamias sp.* Illiger, 1811. See Thorington and Hoffmann (2005:816) and Patterson (1984:452).

Holotype: 67768. [Skin and skull]. Adult female. Keam Canyon [FC: 80 mi (129 km) N of Holbrook], Painted Desert, [Navajo County], Arizona. Collected 27 Jul 1894 by A. K. Fisher. Original number 1688.

*Eutamias ludibundus* Hollister

Smithsonian Misc. Coll. 56 (26): 1, 5 Dec 1911a.

= *Tamias amoenus ludibundus* (Hollister, 1911). See Hayman and Holt (1940:432).

Holotype: 174225. Skin and skull. Adult female. Yellowhead Lake, altitude 3,700 ft (1,128 m) [SL and FC: 3,614 ft (1,102 m)], British Columbia, Canada. Footnote states "This is the Cowdung Lake of many maps. It lies about six miles (9.7 km) west of the Alberta-British Columbian line, in Yellowhead Pass." Collected 29 Aug 1911 by N. Hollister. Original number 3987.

*Eutamias merriami meridionalis* Nelson and Goldman

Proc. Biol. Soc. Washington 22: 23, 10 Mar 1909.

= *Tamias obscurus meridionalis* (Nelson and Goldman, 1909). See Best and Granai (1994:1).

Holotype: 139597. [Skin and skull]. Adult female. Aguaje de San Estaban, about 25 mi (40 km) northwest of San Ignacio, altitude about 1,200 ft (366 m), Lower California (Baja California Sur), Mexico. Collected 5 Oct 1905 by E. W. Nelson and E. A. Goldman. Original number 18268.

*Eutamias minimus arizonensis* A. H. Howell

J. Mamm. 3: 178, 4 Aug 1922.

= *Tamias minimus operarius* (Merriam, 1905). See Thorington and Hoffmann (2005:815) and Conley (1970:700).

Holotype: 205869. Skin and skull. Adult male. Prieto Plateau at south end of Blue Range, [SL and FC: altitude 9,000 ft (2,743 m)], Greenlee County, Arizona. Collected 7 Sep 1914 by E. G. Holt. Original number 384.

*Eutamias minimus caryi* Merriam

Proc. Biol. Soc. Washington 21: 143, 9 Jun 1908a.

= *Tamias minimus caryi* (Merriam, 1908). See Hayman and Holt (1940: 431).

Holotype: 150740. [Skin and skull]. Young adult male. Medano Ranch, [SL: 15 mi (24 km) NE of Mosca], [FC: altitude 7,600 ft (2,316 m)], San Luis Valley, [Costilla County], Colorado. Collected 24 Oct 1907 by M. Cary. Original number 1176.

*Eutamias minimus confinis* A. H. Howell

J. Mamm. 6: 52, 9 Feb 1925.

= *Tamias minimus confinis* (A. H. Howell, 1925). See Hayman and Holt (1940:431).

Holotype: 168957. Skin and skull. Adult female. Head of Trapper's Creek, altitude 8,500 ft (2,591 m), west slope of Big-horn Mountains, [Big Horn County], Wyoming. Collected 7 Jun 1910 by M. Cary. Original number 1956.

*Eutamias minimus griseescens* A. H. Howell

J. Mamm. 6: 52, 9 Feb 1925.

= *Tamias minimus griseescens* (A. H. Howell, 1925). See Hayman and Holt (1940:431).

Holotype: 89701. Skin and skull. Sub-adult male. Farmer, Douglas County, Washington. Collected 31 Jul 1897 by J. A. Loring. Original number 4539.

*Eutamias minimus jacksoni* A. H. Howell

J. Mamm. 6: 53, 9 Feb 1925.

= *Tamias minimus neglectus* J. A. Allen, 1890. See Levenson et al. (1985:222).

Holotype: 227423. Skin and skull. Adult male. Crescent Lake, Oneida County, Wisconsin. Collected 7 Sep 1917 by H. H. T. Jackson. Original number 927.

*Eutamias obscurus davisi* Callahan

J. Mamm. 58: 193, 31 May 1977.

= *Tamias obscurus davisi* (Callahan, 1977). See Best and Granai (1994:1).

Holotype: 398642. Skin, skull, and stained baubellum. Adult female [SL: lactating]. Barker's Reservoir, altitude 1,300 m, 16 km SW Twentynine Palms, San Bernardino County, California. Collected 5 Aug 1974 by J. Callahan. Original number 143 [SL: University of Arizona number 22761].

*Eutamias oreocetes* Merriam

Proc. Biol. Soc. Washington 11: 207, 1 Jul 1897b.

= *Tamias minimus oreocetes* (Merriam, 1897). See Hayman and Holt (1940:431).

Holotype: 72468. [Skin and skull]. Nursing adult female. Timberline near Summit, [FC: altitude 7,500 ft (2,286 m)], Teton Mountains [Poole and Schantz (1942:529): on Great Northern Railroad, Flathead County], Montana. Collected 14 Jun 1895 by V. Bailey. Original number 5024.

*Eutamias pallidus cacodemus* Cary

Proc. Biol. Soc. Washington 19: 89, 4 Jun 1906.

= *Tamias minimus cacodemus* (Cary, 1906). See Hayman and Holt (1940:431).

Holotype: 138737, not 138137 as in original description. [Skin and skull]. Adult female. [FC: Head of Corral Draw, 40 mi (64 km) east of Hermosa], Sheep Mountain, Big Badlands, [Pennington County], South Dakota. Collected 2 Sep 1905 by M. Cary. Original number 682.

*Eutamias palmeri* Merriam

Proc. Biol. Soc. Washington 11: 208, 1 Jul 1897b.

= *Tamias palmeri* (Merriam, 1897). See Elliot (1901:69).

Holotype: 26075/33481. Skin and skull. Adult male. Charleston Peak, altitude about 2,450 m or 8,000 ft, [Clark County], Nevada. Collected 13 Feb 1891 by T. S. Palmer and E. W. Nelson. Original number [FC: EWN] 432.

*Eutamias quadrivittatus animosus* Warren

Proc. Biol. Soc. Washington 22: 105, 25 Jun 1909.

= *Tamias quadrivittatus* (Say, 1823). See Bachman (1839:74).

Holotype: [154163. Skin and skull]. Adult female. Irwin Ranch, T29S, R52W, altitude 5,000 ft (1,524 m), Las Animas County, Colorado. Collected 29 Apr 1909 by E. R. Warren. Original number 3428.

*Eutamias quadrivittatus australis* Patterson

J. Mamm. 61: 460, 20 Aug 1980.

= *Tamias quadrivittatus* (Say, 1823). See Bachman (1839:74).

Holotype: 530290. Skin, skull, and baculum. Adult male. Three and one-half miles (5.6 km) south, 1.5 mi (2.4 km) east Organ, 6,800 ft (2,073 m), North Fork Pine Tree Trail, Aguirre Springs, T22S R4E Sec. 30, Dona Ana County, New Mexico. Collected 12 Sep 1978 by B. D. Patterson. Original number 169 [SL: New Mexico State University Department of Biology number 7893].

*Eutamias ruficaudus* A. H. Howell

Proc. Biol. Soc. Washington 33: 91, 30 Dec 1920.

= *Tamias ruficaudus ruficaudus* (A. H. Howell, 1920). See Hayman and Holt (1940:434).

Holotype: 72294. Skin and skull. Adult male [SL and FC: female]. Upper St. Mary's Lake, [Glacier County], Montana. Collected 30 May 1895 by A. H. Howell. Original number 27.

*Eutamias ruficaudus simulans* A. H. Howell

J. Mamm. 3: 179, 4 Aug 1922.

= *Tamias ruficaudus simulans* (A. H. Howell, 1922). See Hayman and Holt (1940:434).

Holotype: 28487/40591. Skin and skull. Adult female. Coeur d'Alene, [Kootenai County], Idaho. Collected 1 Jun 1891 by C. P. Streator. Original number 881.

#### *Eutamias senescens* Miller

Proc. Acad. Nat. Sci. Philadelphia 50: 349, 4 Oct 1898.

= *Tamias sibiricus senescens* (Miller, 1898). See Hayman and Holt (1940:436).

Holotype: 83395. Skin and skull. Adult female. Low barren hills, 15 mi (24 km) west of Peking (Beijing), [SL: Western Hills], [Beijing], China. Collected 21 Aug 1896 by G. D. Wilder. No original number.

#### *Eutamias sibiricus barberi* Johnson and Jones

Proc. Biol. Soc. Washington 68: 175, 31 Dec 1955.

= *Tamias sibiricus barberi* (Johnson and Jones, 1955). See Koh et al. (2009:1).

Holotype: 298042. Skin and skull. Adult female. Central National Forest, near Puo' yong-ni, 37°44'N, 127°12'E, [South] Korea. Collected 26 Aug 1952 by W. H. Lawrence. Original number B12068.

#### *Eutamias speciosus inyoensis* Merriam

Proc. Biol. Soc. Washington 11: 208, 1 Jul 1897b.

= *Tamias umbrinus inyoensis* (Merriam, 1897). See Levenson et al. (1985:223).

Holotype: 29387/41462. Skin and skull. Young adult male. [FC: 4,600 ft (1,402 m) above Black Canyon = 8,238 ft (2,511 m), west slope] White Mountains, Inyo County, California. Collected 7 Jul 1891 by E. W. Nelson. Original number 1069.

#### *Eutamias speciosus sequoiensis* A. H. Howell

J. Mamm. 3: 180, 4 Aug 1922.

= *Tamias speciosus sequoiensis* (A. H. Howell, 1922). See Levenson et al. (1985:222).

Holotype: 30899/42799. Skin and skull. Adult female. Mineral King, east fork of Kaweah River, altitude 7,300 ft (2,225 m), [Tulare County], California. Collected 12 Sep 1891 by V. Bailey. Original number 3259.

#### *Eutamias townsendii allenii* A. H. Howell

J. Mamm. 3: 181, 4 Aug 1922.

= *Tamias sonomae allenii* (A. H. Howell, 1922). See Best (1993:1).

Holotype: 135177. Skin and skull. Adult male. Inverness, Marin County, California. Collected 16 Nov 1904 by N. Hollister. Original number 1378.

#### *Eutamias townsendii ochrogenys* Merriam

Proc. Biol. Soc. Washington 11: 195, 1 Jul 1897b.

= *Tamias ochrogenys* (Merriam, 1897). See Gannon et al. (1993:1).

Holotype: 67182. [Skin and skull]. Adult male. Mendocino, [Mendocino County], California. Collected 17 Jul 1894 by J. E. McLellan. Original number 1015.

#### *Eutamias townsendii siskiyou* A. H. Howell

J. Mamm. 3: 180, 4 Aug 1922.

= *Tamias siskiyou siskiyou* (A. H. Howell, 1922). See Gannon et al. (1993:1).

Holotype: 161033. Skin and skull. Adult female. Near summit of White Mountain, Siskiyou Mountains, altitude 6,000 ft (1,829 m), [FC: Siskiyou County], California. Collected 16 Sep 1909 by N. Hollister. Original number 3432.

#### *Eutamias umbrinus sedulus* White

Univ. Kansas Publ., Mus. Nat. Hist. 5: 573, 1 Dec 1953.

= *Tamias umbrinus sedulus* (White, 1953). See Bergstrom (1999:393). Holotype: 158181. Skin, skull, and baculum. Adult male. Mount Ellen, Henry Mountains, Garfield County, Utah. Collected 13 Oct 1908 by W. H. Osgood. Original number 3667.

#### *Tamias alpinus* Merriam

Proc. Biol. Soc. Washington 8: 137, 28 Dec 1893a.

Holotype: 30507/42491. Skin and skull. Young adult female. [FC: Head] Big Cottonwood Meadows, High Sierra, altitude 3,050 m or 10,000 ft, just south of Mount Whitney, [Inyo County], California. Collected 12 Aug 1891 by B. H. Dutcher. Original number 191.

#### *Tamias amoenus* J. A. Allen

Bull. Amer. Mus. Nat. Hist. 3: 90, Jun 1890.

= *Tamias amoenus amoenus* J. A. Allen, 1890. See Hayman and Holt (1940:432).

Holotype: 186460. Skin and skull. Adult female. Fort Klamath, [Klamath County], Oregon. Collected 16 May 1887 by J. C. Merrill. [MCC: Original number 5]. Merriam collection number 3469/[MCC: 4096].

#### *Tamias asiaticus borealis* J. A. Allen

Monog. N. Amer. Rodentia 793, Aug 1877.

= *Tamias minimus borealis* J. A. Allen, 1877. See Hayman and Holt (1940:431).

Lectotype: 6506. [Skin, broken skull inside]. Fort Laird, British America (Mackenzie District, Northwest Territories, Canada). Collected [Poole and Schantz (1942:524): about 1860] by W. S. Hardisty. Cataloged 1863. Original number [SL: 1086]. No type designated in original description. Lectotype selected by J. A. Allen (1890:109).

#### *Tamias callipeplus* Merriam

Proc. Biol. Soc. Washington 8: 136, 28 Dec 1893a.

= *Tamias speciosus callipeplus* Merriam, 1893. See Best et al. (1994:1).

Holotype: 31299/43164. Skin and skull. Young adult male. Summit of Mount Pinos [SL and FC: Mt. McGill], altitude [Lyon

and Osgood (1909:174): 9,000 ft (2,743 m)], or [Miller and Kellogg (1955:231): 8,800 ft (2,682 m)], Ventura County, California. Collected 20 October 1891 by E. W. Nelson. Original number 1344.

***Tamias cinereicollis* J. A. Allen**

Bull. Amer. Mus. Nat. Hist. 3: 94, Jun 1890.

= *Tamias cinereicollis cinereicollis* J. A. Allen, 1890. See Hayman and Holt (1940:434).

Holotype: 17597/[24533]. Skin and skull. Adult female. [FC: Little Spring], San Francisco Mountain (Peaks), [Coconino County], Arizona. Collected 2 Aug 1889 by C. H. Merriam and V. Bailey. Original number [FC: VB], [SL: 260].

***Tamias cooperi* Baird**

Proc. Acad. Nat. Sci. Philadelphia 7: 334, reported favorably for publication 24 Apr 1855a.

= *Tamias townsendii cooperi* Baird, 1855. See Baird (1857:300).

Syntypes: 212/1183. Skin and skull. On eastern side of the Cascade Mountains, Washington Territory. Emended by Cooper (1868:531) to read Clickitat (Klickitat) Pass, altitude 4,500 ft (1,372 m), Cascade Mountains, [Skamania County], Washington. Collected Jul 1853 by J. G. Cooper. No original number. 211/1182. Skin only. Other data as given above. This specimen is now number 4754, Museum of Comparative Zoology, Harvard University.

No type is designated in the original description, but Baird (1857:301) states that *Tamias cooperi* was based on the two specimens listed above.

***Tamias dorsalis* Baird**

Proc. Acad. Nat. Sci. Philadelphia 7: 332, reported favorably for publication 24 Apr 1855a, receipt acknowledged 15 Jun 1855 by the American Philosophical Society.

= *Tamias dorsalis dorsalis* Baird, 1855. See Hayman and Holt (1940:435).

Syntypes: 120. Mounted specimen with skull inside. On the Mimbres [MC: Coppermines, Gila]. Baird (1857:707) in his list of localities says of Coppermines, "A former station of the United States-Mexican Boundary Survey, subsequently called Fort Webster. Not indicated clearly whether on a tributary of the Gila or Mimbres. About Latitude 33°, Longitude 108°." Baird (1857:709) says of Fort Webster "See also Coppermines. Altitude 6,350 ft (1,935 m). Latitude 32°47', Longitude 108°04'." J. P. Hubbard, who has researched old New Mexico collecting localities for decades, indicates the proper locality designation should read "On the Mimbres [River = the copper mines = former Santa Rita del Cobre in present Grant County, New Mexico (approximately 32°47.560'N, 108°4.710'W)]" J. P. Hubbard (in litt., 26 October 2010 to A. L. Gardner). Collected 1851 by J. H. Clark. No original number.

119/3151. Skin and partial mandible. Other data as given above.

This specimen is now number 4759, Museum of Comparative Zoology, Harvard University.

No type is designated in the original description, but Baird (1857:300) listed these two specimens as those on which *Tamias dorsalis* was based.

***Tamias macrorhabdotes* Merriam**

Proc. Biol. Soc. Washington 3: 25, 27 Jan 1886c.

= *Tamias quadrimaculatus* Gray, 1867. See Hayman and Holt (1940:435).

Lectotype: [186458. Skin and skull.] Sierra Nevada Mountains of central California [SL: Blue Canon (Canyon)], [Placer County] California. Collected [SL: 6 Oct 1885] by C. A. Allen. Original number [MCC: 1] [SL: Merriam collection number 1488/2109].

No type is designated in the original description. Merriam (1897b:203) states that the type locality for his *macrorhabdotes* is Blue Canon (Canyon) but again does not indicate a type and we have not found a published specimen number associated with this name prior to Poole and Shantz (1942:527). There is compelling reason to believe that Merriam selected this specimen because it was cataloged in a separate block in the USNM catalog along with the other type specimens from his personal collection upon donation in 1911. It is also delineated as a type in his private collection catalog. In order to remove ambiguity to the application of this name, we designate this specimen as the Lectotype.

***Tamias minimus consobrinus* J. A. Allen**

Bull. Amer. Mus. Nat. Hist. 3: 112, Jun 1890.

Holotype: [186456]. Skin and skull. Adult male. [Poole and Schantz (1942:528): Parley's Canyon], Wasatch foothills, 18 mi (29 km) east of Salt Lake City, [Salt Lake County], Utah. Collected 31 Oct 1888 by V. Bailey. Original number [SL: 361]. Merriam collection number 4883/[5630].

***Tamias minimus melanurus* Merriam**

N. Amer. Fauna 4: 22, 8 Oct 1890a.

= *Tamias minimus pictus* J. A. Allen, 1890. See Hayman and Holt (1940:431).

Holotype: 23048/30494. Skin and skull. Adult male [FC: immature male]. West side of Snake River, near Blackfoot, [Bingham County], Idaho. Collected 17 Jul 1890 by V. Bailey and B. H. Dutcher. Original number [FC: VB] 1451.

***Tamias minimus pictus* J. A. Allen**

Bull. Amer. Mus. Nat. Hist. 3: 115, Jun 1890.

Holotype: [186459]. Skin and skull. Adult male. Kelton, [Box Elder County], Utah. Collected 25 Oct 1888 by V. Bailey. Original number [SL: 342]. Merriam collection number 4882/[SL: 5629].

***Tamias obscurus* J. A. Allen**

Bull. Amer. Mus. Nat. Hist. 3: 70, Jun 1890.

= *Tamias obscurus obscurus* J. A. Allen, 1890. See Best and Granai (1994:1).

Holotype: 18050/[24954]. Skin and skull. Adult female. San Pedro [Martir] Mountains, [Poole and Schantz (1942:529): near Vallecitos], Lower California (Baja California), Mexico. Collected 1 May 1889 by C. H. Townsend. Original number [SL: 7].

***Tamias panamintinus* Merriam**

Proc. Biol. Soc. Washington, 8: 134, 28 Dec 1893a.

= *Tamias panamintinus panamintinus* Merriam, 1893. See Hayman and Holt (1940:432).

Holotype: 27603/39702. Skin and skull. Adult male. Johnson Canyon, [FC: altitude about 6,000 ft (1,829 m)], between Death Valley and Panamint Valley, Panamint Mountains, [Inyo County], California. Restricted by Grinnell (1933:128) to vicinity of Hungry Bill's Ranch, about 5,000 ft (1,534 m). Collected 3 Apr 1891 by E. W. Nelson. Original number 723.

***Tamias quadrivittatus gracilis* J. A. Allen**

Bull. Amer. Mus. Nat. Hist. 3: 99, Jun 1890.

= *Tamias quadrivittatus* (Say, 1823). See Bachman (1839:74).

Holotype: 17144/[24077]. Skin and skull. [SL: Hardly adult; FC: young of year] female. San Pedro, [Socorro County], New Mexico. Collected 4 Jul 1889 by V. Bailey. Original number [SL: 166].

***Tamias quadrivittatus luteiventris* J. A. Allen**

Bull. Amer. Mus. Nat. Hist. 3: 101, Jun 1890.

= *Tamias amoenus luteiventris* J. A. Allen, 1890. See Elliot (1901:76).

Holotype: 11991/[37996]. Skin and skull. Adult male. Chief Mountain (Waterton) Lake, [Poole and Schantz (1942:531): 3.5 mi (5.6 km) north of the United States–Canada boundary, Alberta, Canada]. Collected 24 Aug 1874 by E. Coues. Original number [SL: 4596].

***Tamias quadrivittatus pallidus* J. A. Allen**

Proc. Boston Soc. Nat. Hist. 16: 289, 1874.

= *Tamias minimus pallidus* J. A. Allen, 1874. See Hayman and Holt (1940:431).

Lectotype: 11656/[38311]. Skin and skull. [Lyon and Osgood (1909:177): Nearly adult]. Camp Thorne, near present town of Glendive, Yellowstone River, [Dawson County], Montana. Collected 18 Jul 1873 by J. A. Allen. Original number [SL: 200]. No type designated in original description. Lectotype designated by Cary (1906:88).

***Tamias senex* J. A. Allen**

Bull. Amer. Mus. Nat. Hist. 3: 83, Jun 1890.

= *Tamias senex senex* J. A. Allen, 1890. See Sutton and Patterson (2000:307).

Holotype: [186461]. Skin and skull. Adult, sex undetermined. Summit of Donner Pass, Placer County, California. Collected 1 Jul 1885 by L. Belding. Original number [MCC: 3]. Merriam collection number 1133/[5882].

***Tamias speciosus* Merriam**

In J. A. Allen, Bull. Amer. Mus. Nat. Hist. 3: 86, Jun 1890.

= *Tamias speciosus speciosus* Merriam, 1890. See Best et al. (1994:1). Holotype: [186462]. Skin and skull. Adult [FC and MCC: immature] male. [Poole and Schantz (1942:532): Head of White-water Creek], altitude 7,500 ft (2,286 m), San Bernardino Mountains, [San Bernardino County], California. Collected 22 Jun 1885 by F. Stephens. Original number [MCC: 108]. Merriam collection number 1148/1804.

***Tamias striatus doorsiensis* Long**

Proc. Biol. Soc. Washington 84: 201, 4 Nov 1971.

Holotype: [565665]. Skin and skull. Adult male. Peninsula State Park, Door County, Wisconsin. Collected 28 Sep 1969 by J. Small. Original number 15. Wisconsin State University Museum of Natural History number 1633.

***Tamias striatus fisheri* A. H. Howell**

J. Mamm. 6: 51, 9 Feb 1925.

Holotype: 193370. Skin and skull. Sub-adult female. Merritts' Corners, 4 mi (6.4 km) west [SL: east] of Sing Sing (Ossining), [Westchester County], New York. Type locality restricted by Paradiso (1963:580) to Merritts Corners, approximately 3.75 mi (6 km) east and 1.75 mi (3 km) north of Ossining, Westchester County, New York, 41°11'27"N latitude, 73°47'51"W longitude Collected 23 Aug 1884 by A. K. Fisher. No original number. Merriam collection number 801/1338.

***Tamias umbrinus* J. A. Allen**

Bull. Amer. Mus. Nat. Hist. 3: 96, Jun 1890.

= *Tamias umbrinus umbrinus* J. A. Allen, 1890. See Levenson et al. (1985:223).

Holotype: [186463]. Skin and skull. Male. Unita Mountains, south of Fort Bridger [SL and MCC: originally said Fort Bridger, Wyoming; Uinta Mountains, Utah, 30 mi (48 km) south of Fort Bridger was added later]. Type locality restricted by A. H. Howell (1929a:94) to Blacks Fork, altitude about 9,500 ft (2,896 m), [Summit County], Uinta Mountains, Utah. Collected 20 [SL and MCC: 19] Sep 1888 by V. Bailey. Original number [SL and MCC: 228]. Merriam collection number 4690/[5341].

**Genus *Tamiasciurus* Trouessart, 1880**

***Sciurus douglasii cascadensis* J. A. Allen**

Bull. Amer. Mus. Nat. Hist. 10: 277, 22 Jul 1898.

= *Tamiasciurus douglasii mollipilosus* (Audubon and Bachman, 1841). See Anderson (1947:121).

Holotype: 80229. Skin and skull. Adult male. Mount Hood, [FC: W. base below timberline, altitude 5,000 ft (1,524 m)], Oregon. Collected 9 Sep 1896 by V. Bailey. Original number [SL: 5874].

***Sciurus fremonti neomexicanus* J. A. Allen**

Bull. Amer. Mus. Nat. Hist. 10: 291, 22 Jul 1898.

= *Tamiasciurus hudsonicus mogollonensis* (Mearns, 1890). See Kelson (1951a:17).

Holotype: 71690. [Skin and skull]. Adult male. Rayado Canyon, Colfax County, New Mexico. Collected 1 Apr 1895 by C. M. Barber. Original number [SL: 89].

#### *Sciurus hudsonicus abieticola* A. H. Howell

J. Mamm. 10: 75, 11 Feb 1929b.

= *Tamiasciurus hudsonicus abieticola* (A. H. Howell, 1929). See Kellogg (1937:459).

Holotype: 193638. Skin and skull. Adult female. Highlands, [Macon County], North Carolina. Collected 9 Mar 1886 by C. L. Boynton. Original number 30. Merriam collection number 2296/2806.

#### *Sciurus hudsonicus baileyi* J. A. Allen

Bull. Amer. Mus. Nat. Hist. 10: 261, 22 Jul 1898.

= *Tamiasciurus hudsonicus baileyi* (J. A. Allen, 1898). See Hayman and Holt (1940:346).

Holotype: 56040. [Skin and skull]. Adult male. [FC: West slope] Bighorn Mountains, altitude 8,440 ft (2,560 m), [Washakie County], Wyoming. Collected 19 Sep 1893 by C. H. Merriam, not V. Bailey as in original description. Original number [SL: V. Bailey 4390].

#### *Sciurus hudsonicus mearnsi* Townsend

Proc. Biol. Soc. Washington 11: 146, 9 Jun 1897.

= *Tamiasciurus mearnsi* (Townsend, 1897). See Lindsay (1981:680).

Holotype: 8266/25170. Skin and skull. Age and sex undetermined. San Pedro Martir Mountains, at about 7,000 ft (2,134 m), Lower California (Baja California), [Mexico]. Collected May 1889 by C. H. Townsend. No original number.

#### *Sciurus hudsonicus petulans* Osgood

N. Amer. Fauna 19: 27, 6 Oct 1900a.

= *Tamiasciurus hudsonicus petulans* (Osgood, 1900). See A. H. Howell (1936:136).

Holotype: 97457. Skin and skull. Adult female. White Pass [FC: glacier or summit], altitude 1,870 ft (570 m), southern Alaska. Collected 4 Jun 1899 by W. H. Osgood. Original number 370.

#### *Sciurus hudsonicus ventorum* J. A. Allen

Bull. Amer. Mus. Nat. Hist. 10: 263, 22 Jul 1898.

= *Tamiasciurus hudsonicus ventorum* (J. A. Allen, 1898). See Davis (1939:229).

Holotype: 56030. Skin and skull. Adult [SL and FC: male], not female as given in original description. South Pass City, [FC: 6 mi (10 km) north, altitude 8,000 ft (2,438 m)], [Wind River Mountains, Fremont County], Wyoming. Collected 6 Sep 1893 by V. Bailey. Original number [SL: 4305].

#### *Sciurus suckleyi* Baird

Proc. Acad. Nat. Sci. Philadelphia 7: 333, reported favorably for publication 24 Apr 1855a, receipt acknowledged 15 Jun 1855 by the American Philosophical Society.

= *Tamiasciurus douglasii douglasii* (Bachman, 1839). See Hayman and Holt (1940:347).

Holotype: 272/[37606]. Skin and skull. Adult male. [SL and MC: Fort] Steilacoom, Puget Sound, [Pierce County], Washington. Collected [MC: 15 Jan 1854] by G. Suckley. Original number 1.

No type designated in the original description, but three measurements of a specimen were given. In a later publication, Baird (1857:276) gives further details about the taxon and in the table on page 278 only one specimen, number 272, has the same measurements as given in the original description that led Lyon and Osgood (1909:194) and subsequent authors to consider it the type.

#### *Tamiasciurus hudsonicus kenaiensis* A. H. Howell

Proc. Biol. Soc. Washington 49: 136, 22 Aug 1936.

Holotype: 107603. Skin and skull. Adult male. Hope [FC: City], Cook Inlet, Alaska. Collected 6 Sep 1900 by W. H. Osgood. Original number 1360.

#### *Tamiasciurus hudsonicus murii* A. H. Howell

Proc. Biol. Soc. Washington 56: 67, 16 Jun 1943.

= *Tamiasciurus hudsonicus minnesota* (J. A. Allen, 1899). See Anderson (1947:119).

Holotype: 234039. Skin and skull. Adult male. Moorhead, [Clay County], Minnesota. Collected 11 Feb 1918 by O. J. Murie. Original number 1174. 21595-X.

#### *Tamiasciurus hudsonicus pallescens* A. H. Howell

Proc. Biol. Soc. Washington 55: 13, 12 May 1942.

Holotype: 261625. Skin and skull. Adult female. Eight miles (13 km) east of Upham, McHenry County, North Dakota. Collected 8 Jan 1936 by C. J. Henry. Original number H-135. 27532-X.

#### *Tamiasciurus hudsonicus preblei* A. H. Howell

Proc. Biol. Soc. Washington 49: 133, 22 Aug 1936.

Holotype: 133862. Skin and skull. Adult [SL and FC: male], not female as given in original description. Fort Simpson, Mackenzie [District, Northwest Territories, Canada]. Collected 29 Feb 1904 by E. A. Preble. Original number 5141.

#### *Tamiasciurus hudsonicus wasatchensis* Hardy

Proc. Biol. Soc. Washington 63: 13, 26 Apr 1950.

= *Tamiasciurus hudsonicus fremonti* (Audubon and Bachman, 1853). See Durrant and Hansen (1954:91).

Holotype: 276398. Skin and skull. Adult male. About 10,000 ft (3,048 m) in spruce fir area along Skyline Drive east of Mount Nebo, Juab County, near Juab-Utah County line, Utah. Collected 19 Aug 1942 by R. Hardy. Original number 2431. 33443-X.

## Genus *Tamiops* J. A. Allen, 1906

#### *Sciurus novemlineatus* Miller

Proc. Biol. Soc. Washington 16: 147, 12 Nov 1903c.

= *Tamiops mcclellandi leucotis* (Temminck, 1853). See Moore and Tate (1965:242).

Holotype: 84403. Skin and skull. Adult male. In heavy forest among the hills of Trong (Trang), altitude 1,500 ft (457 m), Lower Siam (Thailand). Collected 19 Feb 1897 by W. L. Abbott. No original number.

#### *Tamiops mcclellandi liantis* Kloss

J. Nat. Hist. Soc. Siam 3: 370, 31 Dec 1919.

= *Tamiops rodolphii rodolphii* (Milne-Edwards, 1867). See Moore and Tate (1965:244).

Holotype: [221542]. Skin and skull. Adult female. Satahip (Satahip), near Cape Liant, [Poole and Schantz (1942:562): Shelter Bay], [Chon Buri], southeast Siam (Thailand). Collected 2 Nov 1916 by C. B. Kloss. Original number 2337.

#### *Tamiops rodolphii elbeli* Moore

Amer. Mus. Novitates 1879: 4, 28 Feb 1958.

Holotype: 294876. Skin and skull. Female. Ban Lad, Pookeio (Amphoe Phu Khieo) District, Chaiyaphum Province, Thailand, about latitude 16°40'N, longitude 101°45'E. Collected 18 Jan 1952 by R. E. Elbel. Original number RE 369.

#### *Tamiops vestitus* Miller

Proc. Biol. Soc. Washington 28: 115, 27 May 1915.

= *Tamiops swinhonis vestitus* Miller, 1915. See Moore and Tate (1965:250).

Holotype: 199561. Skin and skull. Adult male. Hsin-lung-shan, [SL: 3,000 ft (914 m)], south of Jehol and 65 mi (105 km) northeast of Peking [Beijing], Chi li (Hebei), China. Collected 15 Feb 1915 by A. de C. Sowerby. Original number 754.

### Genus *Urocitellus* Obolenskij, 1927

#### *Citellus columbianus ruficaudus* A. H. Howell

Proc. Biol. Soc. Washington 41: 212, 18 Dec 1928.

= *Urocitellus columbianus ruficaudus* (A. H. Howell, 1928). See Helgen et al. (2009:297).

Holotype: 231942. Skin and skull. Adult female. [FC: head of] Wallowa Lake, [SL: altitude 4,000 ft (1,219 m)], Wallowa County, Oregon. Collected 13 Apr 1919 by G. G. Cantwell. Original number 1093.

#### *Citellus canus vigilis* Merriam

Proc. Biol. Soc. Washington 26: 137, 21 May 1913.

= *Urocitellus canus* (Merriam, 1898). See Helgen et al. (2009:297).

Holotype: 168361. [Skin and skull]. Adult female. Vale, [Malheur County], eastern Oregon. Collected 29 Apr 1910 by S. G. Jewett. Original number 30.

#### *Citellus elegans nevadensis* A. H. Howell

Proc. Biol. Soc. Washington 41: 211, 18 Dec 1928.

= *Urocitellus elegans nevadensis* (A. H. Howell, 1928). See Helgen et al. (2009:297).

Holotype: 156788. Skin and skull. Adult female. Paradise, Humboldt County, Nevada. Collected 3 Mar 1908 by S. E. Piper. Original number 112.

#### *Citellus idahoensis* Merriam

Proc. Biol. Soc. Washington 26: 135, 21 May 1913.

= *Urocitellus mollis idahoensis* (Merriam, 1913). See Helgen et al. (2009:297).

Holotype: 168290. [Skin and skull]. Adult female. Payette, at junction of Payette and Snake River, [Payette County], Idaho. Collected 23 Apr 1910 by S. G. Jewett. Original number 17.

#### *Citellus leurodon* Merriam

Proc. Biol. Soc. Washington 26: 136, 21 May 1913.

= *Urocitellus mollis mollis* (Kennicott, 1863). See Helgen et al. (2009:297).

Holotype: 169031. [Skin and skull]. Young adult male. Murphy, [Owyhee County], in hills of southwestern Idaho west of Snake River. Collected 30 May 1910 by S. G. Jewett. Original number 112.

#### *Citellus mollis artemesiae* Merriam

Proc. Biol. Soc. Washington 26: 137, 21 May 1913.

= *Urocitellus mollis artemesiae* (Merriam, 1913). See Helgen et al. (2009:297).

Holotype: 23489/30907. Skin and skull. Adult male. Birch Creek, [A. H. Howell (1938:65): about 10 mi (16 km) south of Nicholia], [Clark County], Idaho. Collected 9 Aug 1890 by V. Bailey. Original number 1573.

#### *Citellus mollis* [sic] *pessimus* Merriam

Proc. Biol. Soc. Washington 26: 138, 21 May 1913.

= *Urocitellus mollis artemesiae* (Merriam, 1913). See Helgen et al. (2009:297).

Holotype: 23925/31330. Skin and skull. Adult male. Lower part of Big Lost River, [Butte County], east central Idaho. Collected 23 Jul 1890 by C. P. Streator. Original number 53.

#### *Citellus mollis washoensis* Merriam

Proc. Biol. Soc. Washington 26: 138, 21 May 1913.

= *Urocitellus mollis mollis* (Kennicott, 1863). See Helgen et al. (2009:277).

Holotype: 16946/23861. Skin and skull. Adult [FC: male]. Carson Valley [FC: Carson City], [Douglas County], western Nevada. Collected 23 May 1889 by C. A. Keeler. Original number 34.

#### *Citellus nebulicola* Osgood

Proc. Biol. Soc. Washington 16: 26, 19 Mar 1903.

= *Urocitellus parryii nebulicola* (Osgood, 1903). See Helgen et al. (2009:297).

Holotype: 59145. [Skin and skull]. Adult female. Nagai Island, Shumagin Islands, Alaska. Collected 24 Jun 1893 by C. H. Townsend. No original number.

***Citellus plesius ablusus* Osgood**

Proc. Biol. Soc. Washington 16: 25, 19 Mar 1903.

= *Urocitellus parryii ablusus* (Osgood, 1903). See Helgen et al. (2009:297).

Holotype: 119815. [Skin and skull]. Adult male. Nushagak, Alaska, Collected 16 Sep 1902 by W. H. Osgood and A. G. Maddren. Original number [FC: WHO] 2043.

***Citellus stejnegeri* J. A. Allen**

Bull. Amer. Mus. Nat. Hist. 19: 142, 31 Mar 1903.

= *Urocitellus parryii stejnegeri* (J. A. Allen, 1903). See Helgen et al. (2009:297).

Holotype: 63226. [Skin and skull]. Juvenile male? Near Petropavloski, southeastern Kamchatka, [Russia]. Collected [MC: 1895] by L. Stejneger. No original number.

***Citellus townsendii brunneus* A. H. Howell**

Proc. Biol. Soc. Washington 41: 211, 18 Dec 1928.

= *Urocitellus brunneus brunneus* (A. H. Howell, 1928). See Helgen et al. (2009:297).

Holotype: 201963. Skin and skull. Adult female. New Meadows, Adams County, Idaho. Collected 11 Jul 1913 by L. E. Wyman. Original number 178.

***Citellus washingtoni washingtoni* A. H. Howell**

N. Amer. Fauna 56: 69, 18 May 1938.

= *Urocitellus washingtoni* (A. H. Howell, 1938). See Helgen et al. (2009:298).

Holotype: 27948/40068. Skin and skull. Adult male. Touchet [FC: sage plain at mouth of Touchet River], Walla Walla County, Washington. Collected 18 May 1891 by C. P. Streator. Original number 817.

***Citellus washingtoni loringi* A. H. Howell**

N. Amer. Fauna 56: 71, 18 May 1938.

= *Urocitellus washingtoni* (A. H. Howell, 1938). See Helgen et al. (2009:298).

Holotype: 89805. Skin and skull. Adult male. Douglas, [Douglas County], Washington. Collected 1 Aug 1897 by J. A. Loring. Original number 4547.

***Spermophilus armatus* Kennicott**

Proc. Acad. Nat. Sci. Philadelphia 15: 158, ordered published 30 Jun 1863, receipt acknowledged 28 Nov 1863 by the Smithsonian Institution.

= *Urocitellus armatus* (Kennicott, 1863). See Helgen et al. (2009:297).

Syntypes: No numbers are mentioned in the original description. Kennicott briefly describes four new spermophiles in the collection of the Smithsonian Institution collected by C. Drexler at Fort Bridger, [Uinta County], Utah (Wyoming). Subsequently, Lyon and Osgood (1909:163) considered all specimens from Fort Bridger taken by Drexler and in the National Collection before 1863 to be Cotypes

(Syntypes) of the species. These specimens, listed below, all have *armatus* written on their labels, possibly by Kennicott, and they are entered in the museum catalog as *Spermophilus armatus*. The skins were all collected in April through June 1858 and the specimens in alcohol were probably taken at the same time.

3463/4890. Skin and skull. Female. Collected 26 May 1858. Original number 454. Skin cannot be found.

3464. Skin only. Female. Collected 25 Jun 1858. Original number 728. [SL: Camp Scott].

3466/4808. Skin and skull. Male. Collected 10 Jun 1858. Original number 610. Skin cannot be found.

3467. Skin only. Male. Collected 2 May 1858. Original number 261. Cannot be found.

3470. Skin only. Female. Collected 26 May 1858. Original number 455. Cannot be found.

3472/4799. Skin and skull. Male. Collected 11 Apr 1858. Original number 167. Cannot be found.

3474. Skin only. Male. Collected 14 Apr 1858. Original number 215. Cannot be found.

3475. Skin only. Female. Collected 14 Apr 1858. Original number 197. Cannot be found.

3476. Skin only with partial skull inside. Female. Collected 15 Apr 1858. Original number 229. [SL: Camp Scott].

3478. Skin only. Male. Collected 2 Apr 1858. Original number 140. Cannot be found.

3481. Skin only. Male. Collected 19 May 1858. Original number 375. Cannot be found.

4221/4794. Skin and skull. No information associated with specimen. Remarks in the catalog state "Died at S. I. after two years' confinement." It was probably collected at the time the others were taken, Lyon and Osgood (1909:164). Skin cannot be found.

5958. Alcoholic. Cannot be found.

5959. Alcoholic.

5960. Alcoholic.

5961. Skin only preserved in alcohol. Remainder cannot be found. No additional data is given for the alcohol-preserved specimens.

Lyon and Osgood (1909:164) indicate they were cataloged 5 Feb 1863, but according to the catalog it is possible that they were cataloged in 1862.

***Spermophilus barrowensis* Merriam**

Proc. Washington Acad. Sci. 2: 19, 14 Mar 1900b.

= *Urocitellus parryii kennicottii* (Ross, 1861). See Helgen et al. (2009:297).

Holotype: 14061/37824. Skin and skull. Adult male. Point Barrow, Alaska. [SL: Collected 30 May 1883 by P. L. Ray. Original number 1428].

***Spermophilus beldingi* Merriam**

Ann. New York Acad. Sci. 4: 317, 28 Dec 1888.

= *Urocitellus beldingi beldingi* (Merriam, 1888). See Helgen et al. (2009:297).

Holotype: [186467]. Skin and skull. Adult female. Donner, Placer County, California. Collected [SL: 22 Jun 1886 by C. A. Allen. Original number 103]. Merriam collection number 2712/3342.

***Spermophilus beringensis* Merriam**

Proc. Washington Acad. Sci. 2: 20, 14 Mar 1900b.

= *Urocitellus parryii kennicottii* (Ross, 1861). See Helgen et al. (2009:297).

Holotype: 15253. Skin only. Adult male. Cape Lisbourne, Coal Veins, Alaska. Collected May 1885 by H. D. Woolfe. No original number.

***Spermophilus brunneus endemicus* Yensen**

J. Mamm. 72: 596, 16 Aug 1991.

= *Urocitellus brunneus endemicus* (Yensen, 1991). See Helgen et al. (2009:297).

Holotype: 565927. Skin and skull. Female. Sand Hollow, 1 km east, up canyon from OX Ranch headquarters, T9N, R4W, Sec 7, NE ¼; 5.6 km north, 5 km east Payette; elevation 750 m, Payette County, Idaho. Collected 30 Mar 1989 by E. Yensen. Original number 932.

***Spermophilus elegans* Kennicott**

Proc. Acad. Nat. Sci. Philadelphia 15: 158, ordered published 30 Jun 1863, receipt acknowledged 28 Nov 1863 by the Smithsonian Institution.

= *Urocitellus elegans elegans* (Kennicott, 1863). See Helgen et al. (2009:297).

Syntypes: No numbers are mentioned in the original description. Kennicott briefly describes four new spermophiles in the collection of the Smithsonian Institution collected by C. Drexler at Fort Bridger, [Uinta County], Utah (Wyoming). Subsequently, Lyon and Osgood (1909:165) considered all specimens from Fort Bridger taken by Drexler and in the National Collection before 1863 to be syntypes (syntypes) of the species. These specimens, listed below, all have *elegans* written on their labels, possibly by Kennicott, and they are entered in the museum catalog as *Spermophilus elegans*. The skins were collected in April and May 1858, and the specimens in alcohol were probably taken at the same time. Specimens without a date of collection were cataloged in late 1862 or early 1863.

3468/4796. Skin and skull. Female. Collected 11 Apr 1858. Original number 168. The skin and mandible cannot be found.

3469. Skin only. Female. Collected 11 Apr 1858. Original number 169. [SL: Camp Scott].

3473. Skin only. Male. Collected 11 Apr 1858. Original number 166. Cannot be found.

3479/4810. Skin and skull. Female. Collected 17 Apr 1858. Original number 233. [SL: Camp Scott].

3480. Skin with partial skull inside. Male. Collected 14 Apr 1858. Original number 216.

4003. Skin only with fragmentary skull inside, formerly mounted.

Female. Cataloged Jun 1860. Original number 3.

5950/4814. Skin and skull. Skin, without body, in alcohol.

5951. Alcoholic, abdominal viscera removed.

5952. Alcoholic, abdominal viscera removed.

5953. Alcoholic, abdominal viscera removed.

5954. Alcoholic, abdominal viscera removed. Young.

5955. Mounted skin with body in alcohol.

5956. Alcoholic, abdominal viscera removed.

5957. Body without feet or head in alcohol. Skin cannot be found.

***Spermophilus empetra plesius* Osgood**

N. Amer. Fauna 19: 29, 6 Oct 1900a.

= *Urocitellus parryii plesius* (Osgood, 1900). See Helgen et al. (2009:297).

Holotype: 98931. Skin and skull. Adult female. Bennett City, head of Lake Bennett, British Columbia, [Canada]. Collected 19 Jun 1899 by W. H. Osgood. Original number 465.

***Spermophilus mollis* Kennicott**

Proc. Acad. Nat. Sci. Philadelphia 15: 157, ordered published 30 Jun 1863, receipt acknowledged 28 Nov 1863 by the Smithsonian Institution.

= *Urocitellus mollis mollis* (Kennicott, 1863). See Helgen et al. (2009:297).

Lectotype: 3777/4798. Skin and skull. Age and sex undetermined. Camp Floyd, near Fairfield, Wasatch (Utah) County, Utah. Collected 18 Mar 1859 by C. S. McCarthy. Original number 164.

No type designated in the original description. Specimens upon which the description was based came from Camp Floyd and Rocky Mountains and were collected by C. Drexler and C. S. McCarthy. Miller and Rehn (1901:53) restricted the type locality to Camp Floyd. Subsequently, A. H. Howell (1938:63) selected the specimen given above as the Lectotype.

***Spermophilus mollis canus* Merriam**

Proc. Biol. Soc. Washington 12: 70, 24 Mar 1898b.

= *Urocitellus canus* (Merriam, 1898). See Helgen et al. (2009:297).

Holotype: 78681. [Skin and skull]. Adult female. [FC: 7 mi (11 km) east] Antelope, Wasco County, Oregon. Collected 21 Jun 1896 by V. Bailey. Original number 5561.

***Spermophilus mollis stephensi* Merriam**

Proc. Biol. Soc. Washington 12: 69, 24 Mar 1898b.

= *Urocitellus mollis mollis* (Kennicott, 1863). See Helgen et al. (2009:297).

Holotype: 29492/41567. Skin and skull. Adult male. Queen Station, near head of Owens Valley, altitude about 6,000 ft (1,829 m), [Esmeralda County], Nevada. Collected 12 Jul 1891 by F. Stephens. Original number 718.

***Spermophilus mollis yakimensis* Merriam**

Proc. Biol. Soc. Washington 12: 70, 24 Mar 1898b.

= *Urocitellus townsendii townsendii* (Bachman, 1839). See Helgen et al. (2009:298).

Holotype: 89331. [Skin and skull]. Adult male. Mabton, Yakima County, Washington. Collected 16 Jul 1897 by W. K. Fisher. Original number 323.

#### *Spermophilus oregonus* Merriam

Proc. Biol. Soc. Washington 12: 69, 24 Mar 1898b.

= *Urocitellus beldingi oregonus* (Merriam, 1898). See Helgen et al. (2009:297).

Holotype: 89177. [Skin and skull]. Adult female. Swan Lake Valley, Klamath Basin, [Klamath County], Oregon. Collected 12 Jun 1897 by V. Bailey. Original number 6005.

#### *Spermophilus osgoodi* Merriam

Proc. Washington Acad. Sci. 2: 18, 14 Mar 1900b.

= *Urocitellus parryii osgoodi* (Merriam, 1900). See Helgen et al. (2009:297).

Holotype: 12789/37822. Skin and skull. Adult male. Fort Yukon, Alaska. Collected 29 Apr 1877 by L. M. Turner. Original number 1635.

#### *Spermophilus parryii kodiacensis* J. A. Allen

Proc. Boston Soc. Nat. Hist. 16: 292, 1874.

= *Urocitellus parryii kodiacensis* (J. A. Allen, 1874). See Helgen et al. (2009:297).

Lectotype: 9242/38543. Skin and skull. Adult female. Kodiak Island, Alaska. Collected Jun 1868 by F. Bischoff. No original number. No type designated in original description. Lectotype designated by A. H. Howell (1938:103).

### Genus *Xerospermophilus* Merriam, 1892

#### *Citellus spilosoma pallescens* A. H. Howell

Proc. Biol. Soc. Washington 41: 212, 18 Dec 1928.

= *Xerospermophilus spilosoma pallescens* (A. H. Howell, 1928). See Helgen et al. (2009:295).

Holotype: 79535. Skin and skull. Adult male. La Ventura, [FC: altitude 5,650 ft (1,722 m)], Coahuila, Mexico. Collected 10 Aug 1896 by E. W. Nelson and E. A. Goldman. Original number 10016.

#### *Spermophilus canescens* Merriam

N. Amer. Fauna 4: 38, 8 Oct 1890d.

= *Xerospermophilus spilosoma canescens* (Merriam, 1890). See Helgen et al. (2009:295).

Holotype: 17873/24810. Skin and skull. Immature male. Willcox, [FC: on alkalie flats], Cochise County, Arizona. Collected 16 Nov 1889 by V. Bailey. Original number 676.

#### *Spermophilus cryptospilotus* Merriam

N. Amer. Fauna 3: 57, 11 Sep 1890b.

= *Xerospermophilus spilosoma cryptospilotus* (Merriam, 1890). See Helgen et al. (2009:295).

Holotype: 17676/24612. Skin and skull. Adult male. [FC: Near Tenebito (Dinnebito) Wash, [Merriam (1890b:57): about 40 km (25 mi) east of the Little Colorado], Painted Desert, [Coconino County], Arizona. Collected 17 Aug 1889 by C. H. Merriam. Original number [FC: V. Bailey] 374.

#### *Spermophilus mohavensis* Merriam

N. Amer. Fauna 2: 15, 30 Oct 1889c.

= *Xerospermophilus mohavensis* (Merriam, 1889). See Helgen et al. (2009:294).

Holotype: [186469]. Skin and skull. Adult male. Mohave River, California. Type locality restricted by Grinnell and Dickson (1919:667) to Near Rabbit Springs, about 15 mi (24 km) east of Mohave River at Hesperia, San Bernardino County, California. Collected 29 Jun 1886 by F. Stephens. Original number [MCC: 315]. Merriam Collection number 2594/3223.

#### *Spermophilus neglectus* Merriam

N. Amer. Fauna 2: 17, 30 Oct 1889d.

= *Xerospermophilus tereticaudus neglectus* (Merriam, 1889). See Helgen et al. (2009:295).

Holotype: [186470]. Skin and skull. [SL: Adult] male. The valley 1 mi (1.6 km) west of Dolan's Spring, altitude about 3,000 ft (914 m), Arizona. A. H. Howell (1938:187) interpreted this to be 12 mi (19 km) northwest of Chloride, Mohave County. Collected 9 Feb 1889 by V. Bailey. Original number [SL: 566]. Merriam collection number 5262/5952.

#### *Spermophilus obsoletus* Kennicott

Proc. Acad. Nat. Sci. Philadelphia 15: 157, ordered published 30 Jun 1863, receipt acknowledged 28 Nov 1863 by the Smithsonian Institution.

= *Xerospermophilus spilosoma obsoletus* (Kennicott, 1863). See Helgen et al. (2009:295).

Lectotype: 3222/37998. Skin and skull. Female. Fifty miles (80 km) west of Fort Kearney, Nebraska. Collected 9 Aug 1857 by J. G. Cooper. Original number 44. Lectotype designated by A. H. Howell (1938:131).

#### *Spermophilus perotensis* Merriam

Proc. Biol. Soc. Washington 8: 131, 28 Dec 1893a.

= *Xerospermophilus perotensis* (Merriam, 1893). See Helgen et al. (2009:294).

Holotype: 54274. [Skin and skull]. Adult female. Perote, [FC: 7,800 ft (2,377 m)], Veracruz, Mexico. Collected 8 Jun 1893 by E. W. Nelson. Original number 4976.

#### *Spermophilus spilosoma annexens* Merriam

Proc. Biol. Soc. Washington 8: 132, 28 Dec 1893a.

= *Xerospermophilus spilosoma annexens* (Merriam, 1893). See Helgen et al. (2009:294).

Holotype: 30410/42396. Skin and skull. Young adult male. [FC and amended by A. H. Howell (1938:128): The Tanks, 12 mi (19 km) from Point (Port) Isabel], Padre Island, [Cam-

eron County], Texas. Collected 24 Aug 1891 by W. Lloyd. Original number 694.

***Spermophilus spilosoma arenas* V. Bailey**

Proc. Biol. Soc. Washington 15: 118, 2 Jun 1902.

= *Xerospermophilus spilosoma canescens* (Merriam, 1890). See Helgen et al. (2009:295).

Holotype: 64977. Skin and skull. Adult male. El Paso, [El Paso County], Texas. Collected 10 May 1894 by A. K. Fisher. Original number 1446.

***Spermophilus spilosoma major* Merriam**

N. Amer. Fauna 4: 39, 8 Oct 1890d.

= *Xerospermophilus spilosoma major* (Merriam, 1890). New name combination

Holotype: 17116/24049. Skin and skull. Adult female. Albuquerque, [Bernalillo County], New Mexico. Collected 22 Jul 1889 by V. Bailey. Original number 225.

***Spermophilus spilosoma macropilotes* Merriam**

N. Amer. Fauna 4: 38, 8 Oct 1890d.

= *Xerospermophilus spilosoma canescens* (Merriam, 1890). See Helgen et al. (2009:295).

Holotype: 16750/23663. Skin and skull. Adult female. Oracle, Pinal County, Arizona. Collected 11 Jun 1889 by V. Bailey. Original number 129.

***Spermophilus spilosoma marginatus* V. Bailey**

Proc. Biol. Soc. Washington 15: 118, 2 Jun 1902.

= *Xerospermophilus spilosoma major* (Merriam, 1890). New name combination.

Holotype: 108927. [Skin and skull]. Adult male. [FC: 4 mi (6 km) E] Alpine, [Brewster County], Texas. Collected 5 Jul 1901 by V. Bailey. Original number 7702.

***Spermophilus spilosoma obsidianus* Merriam**

N. Amer. Fauna 3: 56, 11 Sep 1890b.

= *Xerospermophilus spilosoma pratensis* (Merriam, 1890). See Helgen et al. (2009:295).

Holotype: 17674/24610. Skin and skull. Adult male. Cedar belt northeast of San Francisco Mountain (Peaks), [FC: below Partridge Spring, altitude 7,250 ft (2,210 m)], [Coconino County, Arizona]. Collected 1 Oct 1889 by V. Bailey. Original number 557.

***Spermophilus spilosoma pratensis* Merriam**

N. Amer. Fauna 3: 55, 11 Sep 1890b.

= *Xerospermophilus spilosoma pratensis* (Merriam, 1890). See Helgen et al. (2009:295).

Holotype: 17659/24595. Skin and skull. Adult female. [FC: Little Spring], Pine plateau at north foot of San Francisco Mountain (Peaks), [Coconino County], Arizona. Collected 5 Aug 1889 by C. H. Merriam and V. Bailey. Original number [FC:] VB 285.

***Spermophilus tereticaudus* Baird**

Mammals in Rep. Expl. Surv. 8(1): 315, 1857.

= *Xerospermophilus tereticaudus tereticaudus* (Baird, 1857). See Helgen et al. (2009:295).

Syntypes: No type designated in the original description, which is apparently based equally upon these specimens, which are listed by number.

1584/2419. Skin and skull. Not fully adult male. Original number [SL: 236].

1585. Skin of the head and neck. The body is supposed to be in alcohol but cannot be found. [SL: Female].

2490. Alcoholic. Young female.

All specimens were collected at [Old] Fort Yuma, [Imperial County], California by G. H. Thomas. Skins cataloged 24 Jun 1856, the alcoholic 9 Apr 1857. Poole and Schantz (1942:519) add to the locality "on right bank of the Colorado River, opposite present town of Yuma, Arizona." Baird (1857:709) in his list of localities says of Fort Yuma: "at mouth of Gila River. Altitude 355 ft (108 m). Latitude 32°32', Longitude 114°36'."

## FAMILY GLIRIDAE MUIRHEAD, 1819

### Genus *Eliomys* Wagner, 1840

***Eliomys quercinus denticulatus* Ranck**

Bull. U.S. Natl. Mus. 275: 216, 2 Oct 1968.

= *Eliomys munbyanus* (Pomel, 1856). See Holden (2005:834).

Holotype: 322757. Skin, skull, [partial skeleton]. Adult female. El Gatrún, Fezzan Province, [Murzuq], Libya. Collected 11 Jan 1962 by G. L. Ranck. Original number 1289.

***Eliomys cincticauda* Miller**

Proc. Biol. Soc. Washington 14: 39, 25 Apr 1901c.

= *Eliomys queruginosus* (Linnaeus, 1766). See Holden (2005:835).

Holotype: 103030. Skin and skull. Adult male. Sorrento, near Naples, [Napoli Province, Campania], Italy. Collected 31 May 1900 by D. Coolidge. Original number 1118.

### Genus *Graphiurus* Smuts, 1832

***Eliomys parvus* True**

Proc. U.S. Natl. Mus. 16: 601, 25 Oct 1893.

= *Graphiurus kelleni* (Reuvens, 1890). See Holden (2005:824).

Holotype: 21005/[36056]. Skin and skull. Female. Along the Tana River, between the coast and Hameye, [Coast Province], East Africa (Kenya). Collected [MC: Nov 1892] by W. A. Chanler and L. von Hohnel. No original number.

***Graphiurus murinus isolatus* Heller**

Smithsonian Misc. Coll. 59: 3, 5 Jul 1912.

= *Graphiurus murinus* (Desmarest, 1822). See Holden (2005:826).

Holotype: 181788. Skin, skull cannot be found. Adult female. [SL: summit] Mount Umengo, altitude 5,000 ft (1,524 m),

Taita Mountains, [Coast Province], British East Africa (Kenya). Collected [SL: 11] Nov 1911 by E. Heller. Original number 4719.

#### *Graphiurus murinus johnstoni* Heller

Smithsonian Misc. Coll. 59 (16): 2, 5 Jul 1912.

= *Graphiurus murinus* (Desmarest, 1822). See Holden (2005:826).

Holotype: 181787. Skin and skull. Adult male. [SL: summit] Mount Gargues (Uaragess), Mathews Range, altitude 7,000 ft (2,134 m) [SL: 7,100 ft (2,164 m)], [Rift Valley], British East Africa (Kenya). Collected 26 Aug 1911 by E. Heller. Original number 4114.

#### *Graphiurus personatus* Heller

Smithsonian Misc. Coll. 56 (17): 2, 28 Feb 1911.

= *Graphiurus kelleni* (Reeves, 1890). See Holden (2005:824).

Holotype: 164827. [Skin and skull]. Adult female. Rhino Camp, Lado Enclave, [Uganda]. Collected 11 Jan 1910 by J. A. Loring. Original number 8644.

### Genus *Myomimus* Ognev, 1924

#### *Myomimus setzeri* Rossolimo

Vestn. Zool. 4: 51, 1976.

Holotype: 369888. Skin and skull. Adult male. Four kilometers West Branch, Kordistan Province, Iran. Collected 30 May 1965, not 9 Jun 1964 as in original description, by R. G. Tuck. Original number 1600.

### SUBORDER CASTORIMORPHA WOOD, 1955

#### FAMILY CASTORIDAE HEMPRICH, 1820

### Genus *Castor* Linnaeus, 1758

Subspecies of *Castor canadensis* are not recognized by Helgen (2005:842), but those listed below are recognized by Hall (1981:601–605) and Baker and Hill (2003:288).

#### *Castor canadensis acadicus* V. Bailey and Doutt

J. Mamm. 23: 87, 14 Feb 1942.

Holotype: 174525. [Skin and skull]. Adult male. Nepisiquit River, New Brunswick, Canada. Collected 25 Sep 1911 by K. Roosevelt. No original number.

#### *Castor canadensis baileyi* Nelson

Proc. Biol. Soc. Washington 40: 125, 26 Sep 1927.

Holotype: 228006. [Skin and skull]. Adult male. Humboldt River, 4 mi (6.4 km) above Winnemucca, [Humboldt County], Nevada. Collected 13 Oct 1917 by J. R. Bunch. Original number [SL: 5]. [SL: 19885-X].

#### *Castor canadensis frontator* Mearns

Proc. U.S. Natl. Mus. 20: 2, 5 Mar 1897a; Preprint of Proc. U.S. Natl. Mus. 20: 502, 19 Jan 1898b.

Holotype: 20750/35883. Skin and skull. Adult male. Near monument 98 of the Mexican Boundary line, San Pedro River, Sonora, Mexico. Collected 24 Oct 1892 by E. A. Mearns and F. X. Holzner. Original number 2151.

#### *Castor canadensis mexicanus* V. Bailey

Proc. Biol. Soc. Washington 26: 191, 23 Oct 1913b.

Holotype: 96522. [Skin and skull]. Adult female. [SL: Blackwell's Ranch], Ruidoso Creek, 6 mi (9.6 km) below Ruidoso, [Lincoln County], New Mexico. Collected 29 Sep 1898, not 1899 as in original description, by C. Barber. Original number 83. 1991-X.

#### *Castor canadensis michiganensis* V. Bailey

Proc. Biol. Soc. Washington 26: 192, 23 Oct 1913b.

Holotype: 170561. [Skin and skull]. Adult female. Tahquamenaw (Tahquamenon) River, 5 mi (8 km) above [Tahquamenon] falls, Luce County, Michigan. Collected 20 Sep [SL: 1910] by C. Birdseye. Original number 1270.

#### *Castor canadensis missouriensis* V. Bailey

J. Mamm. 1: 32, 28 Nov 1919.

Holotype: 205763. Skin and skull. Immature male. Apple Creek, 7 mi (11.3 km) east of Bismarck, [Burleigh County], North Dakota. Collected 1 Sep 1914 by V. Bailey. Original number 9703.

#### *Castor canadensis repentinus* Goldman

J. Mamm. 13: 266, 9 Aug 1932b.

Holotype: 161613. [Skin and skull]. Adult female. Bright Angel Creek, altitude 4,000 ft (1,219 m), Grand Canyon of the Colorado River, [Coconino County], Arizona. Collected 14 Sep 1909 by C. Birdseye. Original number 723.

#### *Castor canadensis texensis* V. Bailey

N. Amer. Fauna 25: 122, 24 Oct 1905.

Holotype: 135744. [Skin and skull]. Old, sex unknown. Cummings Creek, [XC: 9 mi (14 km) from New Ulm], Colorado County, Texas. Collected 25 Dec 1900 by F. Brune. Kept in captivity until 10 Jan 1901. No original number. 5139-X.

#### *Castor subauratus shastensis* Taylor

Univ. California Publ. Zool. 12: 433, 20 Mar 1916.

= *Castor canadensis shastensis* Taylor, 1916. See Grinnell (1933:166).

Holotype: 50978. Skull only. Adult male. Cassel (Hat Creek), Pit River, Shasta County, California. Collected 3 Jan 1893 by H. E. Williams. No original number.

### FAMILY HETEROMYIDAE GRAY, 1868

### Genus *Chaetodipus* Merriam, 1889

*Chaetodipus intermedius beardi* Weckerly, Gennaro, and Best. Southwestern Nat. 33: 100, 30 Mar 1988.

Holotype: [564498]. Skin and cranium (skull). Adult female. Twenty-six miles (42 km) north, 15.5 mi (25 km) east Engle, Socorro County, New Mexico. Collected 23 Aug 1982 by F. W. Weckerly. Original number 236. Eastern New Mexico University (ENMU) Natural History Museum number 8918.

#### *Perognathus anthonyi* Osgood

N. Amer. Fauna 18: 56, 20 Sep 1900b.

= *Chaetodipus fallax anthonyi* (Osgood, 1900). See Williams et al. (1993:137).

Holotype: 81058. [Skin and skull]. Adult female. South Bay, Cerros (Cedros) Island, Lower California (Baja California), Mexico. Collected 29 Jul 1896 by A. W. Anthony. Original number 71.

#### *Perognathus arenarius ambiguus* Nelson and Goldman

Proc. Biol. Soc. Washington 42: 108, 25 Mar 1929b.

= *Chaetodipus arenarius ambiguus* (Nelson and Goldman, 1929). See Lackey (1991a:1).

Holotype: 140011. [Skin and skull]. Young adult male, molars slightly worn. Yubay, altitude 2,000 ft (610 m), 30 mi (48 km) southeast of Calamahue, Lower California (Baja California), Mexico. Collected 18 Sep 1905 by E. W. Nelson and E. A. Goldman. Original number 18141.

#### *Perognathus arenarius sublucidus* Nelson and Goldman

Proc. Biol. Soc. Washington 42: 109, 25 Mar 1929b.

= *Chaetodipus arenarius sublucidus* (Nelson and Goldman, 1929). See Lackey (1991a:1).

Holotype: 146896. [Skin and skull]. Adult male. La Paz, Lower California (Baja California Sur), Mexico. Collected 16 Feb 1906 by E. W. Nelson and E. A. Goldman. Original number 19146.

#### *Perognathus armatus* Merriam

N. Amer. Fauna 1: 27, 25 Oct 1889e.

= *Chaetodipus californicus californicus* (Merriam, 1889). See Williams et al. (1993:135).

Holotype: [186505]. Skin and skull. Adult female. Mount Diablo, [Contra Costa County], California. Collected 28 Mar 1882 by W. E. Bryant. No original number. [Merriam collection number] 672/6321.

#### *Perognathus artus* Osgood

N. Amer. Fauna 18: 55, 20 Sep 1900b.

= *Chaetodipus artus* (Osgood, 1900). See Hafner and Hafner (1983:25).

Holotype: 96298. [Skin and skull]. Adult female. Batopilas, [FC: about 2,500 ft (762 m)], Chihuahua, Mexico. Collected 6 Oct 1898 by E. A. Goldman. Original number [FC: Nelson and Goldman] 13090.

#### *Perognathus baileyi* Merriam

Proc. Acad. Nat. Sci. Philadelphia 46: 262, 27 Sep 1894a. Preprint of Proc. Acad. Nat. Sci. Philadelphia 46: 262, 23 Oct 1894a.

= *Chaetodipus baileyi baileyi* (Merriam, 1894). See Paulson (1988a:1).

Holotype: 17838/24775. Skin and skull. Adult female. Magdalena, Sonora, Mexico. Collected 3 Nov 1889 by V. Bailey. Original number 633.

#### *Perognathus baileyi domensis* Goldman

Proc. Biol. Soc. Washington 41: 204, 18 Dec 1928a.

= *Chaetodipus baileyi baileyi* (Merriam, 1894). See Paulson (1988a:1).

Holotype: 248002. Skin and skull. Adult female. Castle Dome, at base of Castle Dome Peak, altitude 1,400 ft (427 m), [FC: Yuma County], Arizona. Collected 13 Apr 1927 by G. G. Cantwell. Original number 2882.

#### *Perognathus baileyi extimus* Nelson and Goldman

J. Washington Acad. Sci. 20: 223, 19 Jun 1930a.

= *Chaetodipus rudinoris extimus* (Nelson and Goldman, 1930). See Riddle et al. (2000:167).

Holotype: 146672. Skin and skull. Adult female. Tres Pachitas, altitude 700 ft (213 m), [FC about] 36 mi (58 km) south of La Paz, Lower California (Baja California Sur), Mexico. Collected 25 Dec 1905 by [E. W.] Nelson and [E. A.] Goldman. Original number 18785.

#### *Perognathus baileyi insularis* Townsend

Bull. Amer. Mus. Nat. Hist. 31: 122, 14 Jun 1912.

= *Chaetodipus baileyi insularis* (Townsend, 1912). See Paulson (1988a:1).

Holotype: [198410]. Skin and skull. Male. Tiburon Island, [Gulf of California, Sonora, Mexico]. Collected 13 Apr 1911 by [SL: H. E. Anthony. Original number 153]. Specimen described as American Museum of Natural History number 31846.

#### *Perognathus californicus* Merriam

N. Amer. Fauna 1: 26, 25 Oct 1889e.

= *Chaetodipus californicus californicus* (Merriam, 1889). See Williams et al. (1993:135).

Holotype: [186506]. Skin and skull. [MCC: Adult] female. Berkeley, [Alameda County], California. Collected 8 Nov 1888 by T. S. Palmer and C. A. Keeler. No original number. [Merriam collection number] 5132/5827.

#### *Perognathus californicus dispar* Osgood

N. Amer. Fauna 18: 58, 20 Sep 1900b.

= *Chaetodipus californicus dispar* (Osgood, 1900). See Williams et al. (1993:135).

Holotype: 32116/43928. Skin and skull. Adult male. Carpenteria, [FC: 250 ft (76 m)], Santa Barbara County, California. Collected 19 Dec 1891 by E. W. Nelson. Original number 1655.

#### *Perognathus californicus ochrus* Osgood

Proc. Biol. Soc. Washington 17: 128, 9 Jun 1904.

= *Chaetodipus californicus ochrus* (Osgood, 1904). See Williams et al. (1993:136).

Holotype: 130348. [Skin and skull]. Young adult female. Santiago Springs, 16 mi (26 km) southwest of McKittrick, Kern County, California. Collected 30 Jul 1903 by L. J. Goldman. Original number [SL: 728].

***Perognathus dalquesti* Roth**

J. Mamm. 57: 562, 27 Aug 1976.

= *Chaetodipus dalquesti* (Roth, 1976). See Hafner and Hafner (1983:25).

Holotype: 510851. Skin, skull, [and baculum]. Adult male. Four miles (6.4 km) southeast Migrino (32 km south southeast Todos Santos), elevation near sea level, Baja California Sur, Mexico, 23°10'N, 110°07'W. Collected 7 Jan 1973 by E. L. Roth. Original number 1974. University of Arizona number UA 20108.

***Perognathus (Chaetodipus) eremicus* Mearns**

Bull. Amer. Mus. Nat. Hist. 10: 300, 31 Aug 1898c.

= *Chaetodipus eremicus eremicus* (Mearns, 1898). See Patton (2005a:854).

Holotype: 21052/36094. Skin and skull. Adult female. Fort Hancock, El Paso (Hudspeth) County, Texas. Collected 27 Jun 1893 by E. A. Mearns. Original number 2380.

***Perognathus fallax* Merriam**

N. Amer. Fauna 1: 19, 25 Oct 1889e.

= *Chaetodipus fallax fallax* (Merriam, 1889). See Williams et al. (1993:137).

Holotype: 15889/22684. Skin and skull. Adult male. San Bernardino, California. Type locality restricted to "Reche Canyon, 3 mi (4.8 km) southeast of Colton, San Bernardino County, California" by Osgood (1900b:55). Grinnell (1933:153) gives 1,250 ft (381 m) as the altitude. Collected 21 Apr 1887 by F. Stephens. Original number [SL: 424].

***Perognathus fallax inopinus* Nelson and Goldman**

Proc. Biol. Soc. Washington 42: 110, 25 Mar 1929b.

= *Chaetodipus fallax inopinus* (Nelson and Goldman, 1929). See Williams et al. (1993:138).

Holotype: 81059. [Skin and skull]. Adult male. Turtle (also known as Bartolome) Bay (Bahia Tortugas), Lower California (Baja California Sur), Mexico. Collected 1 Aug 1896 by A. W. Anthony. Original number 82.

***Perognathus fallax pallidus* Mearns**

Proc. Biol. Soc. Washington 14: 135, 9 Aug 1901.

= *Chaetodipus fallax pallidus* (Mearns, 1901). See Williams et al. (1993:138).

Holotype: 61007. Skin and skull. Adult female. Mountain Spring, halfway up the east slope of the Coast Range Mountains on the Mexican Boundary Line, San Diego (Imperial) County, California. Collected 16 May 1894 by E. A. Mearns. Original number 3520.

***Perognathus formosus* Merriam**

N. Amer. Fauna 1: 17, 25 Oct 1889e.

= *Chaetodipus formosus formosus* (Merriam, 1889). See Williams et al. (1993:140).

Holotype: [186508]. Skin and skull. Adult male. [FC: 1 mi (1.6 km) west] St. George, [FC: 3,000 ft (914 m)], [Washington County], Utah. Collected 2 Jan 1889 by V. Bailey. Original number [SL: 469]. [Merriam collection number] 5213/5908.

***Perognathus formosus domisaxensis* Cockrum**

J. Washington Acad. Sci. 46: 131, 7 May 1956.

= *Chaetodipus formosus formosus* (Merriam, 1889). See Williams et al. (1993:140).

Holotype: 249006. Skin and skull. Adult female. Houserock Valley, 15 mi (24 km) west of the Navajo Bridge, Coconino County, Arizona. Collected 6 Aug 1929 by V. Bailey. Original number 10758.

***Perognathus formosus melanocaudus* Cockrum**

J. Washington Acad. Sci. 46: 132, 7 May 1956.

= *Chaetodipus formosus formosus* (Merriam, 1889). See Williams et al. (1993:140).

Holotype: 262918. Skin and skull. Adult female. [FC: Interior of lava beds], Lower end of Toroweap Valley, rim of Grand Canyon, Mojave County, Arizona. Collected 30 Jul 1937 by L. C. Goldman. Original number 341.

***Perognathus goldmani* Osgood**

N. Amer. Fauna 18: 54, 20 Sep 1900b.

= *Chaetodipus goldmani* (Osgood, 1900). See Hafner and Hafner (1983:25).

Holotype: 96673. [Skin and skull]. Adult female. Sinaloa, Sinaloa, Mexico. Collected 15 Feb 1899 by E. A. Goldman. Original number [FC: Nelson and Goldman] 13428.

***Perognathus hispidus* Baird**

Mammals in Rep. Expl. Surv. 8(1): 421, 1857.

= *Chaetodipus hispidus hispidus* (Baird, 1857). See Paulson (1988b:1).

Lectotype: 577/1696. Skin and skull. Adult female. Charco Escondido, [Tamaulipas], Mexico. Collected in 1853 by D. N. Couch. No original number. No type designated in original description. Lectotype designated by Merriam (1889e:23–24). Osgood (1900b:43) states that the skull of this specimen is composite.

***Perognathus hispidus zacatecae* Osgood**

N. Amer. Fauna 18: 45, 20 Sep 1900b.

= *Chaetodipus hispidus zacatecae* (Osgood, 1900). See Paulson (1988b:1).

Holotype: 91877. [Skin and skull]. Young adult female. Valparaíso, [FC: 6,200 ft (1890 m)], Zacatecas, Mexico. Collected 16 Dec 1897 by E. A. Goldman. Original number [FC: Nelson and Goldman] 11968.

*Perognathus intermedius* Merriam

N. Amer. Fauna 1: 18, 25 Oct 1889e.

= *Chaetodipus intermedius intermedius* (Merriam, 1889). See Williams et al. (1993:144).

Holotype: [186509]. Skin and skull. Adult male. Mud Spring, [Mohave County], Arizona. Collected 26 Feb 1889 by V. Bailey. Original number [SL: 616]. [Merriam collection number] 5309/6000.

*Perognathus (Chaetodipus) intermedius canescens* Merriam

Proc. Acad. Nat. Sci. Philadelphia 46: 267, 27 Sep 1894a. Preprint of Proc. Acad. Nat. Sci. Philadelphia 46: 267, 23 Oct 1894a.

= *Chaetodipus nelsoni canescens* (Merriam, 1894). See Williams et al. (1993:147).

Holotype: 51016. [Skin and skull]. Young adult male. Jaral, [FC: 4,000 ft (1,219 m)], Coahuila, Mexico. Collected 14 Jan 1893 by C. P. Streator. Original number 2557.

*Perognathus intermedius phasma* Goldman

Proc. Biol. Soc. Washington 31: 22, 16 May 1918.

= *Chaetodipus intermedius phasma* (Goldman, 1918). See Williams et al. (1993:145).

Holotype: 203003. [Skin and skull]. Adult female. Tinajas Altas, [Hoffmeister (1986:286): Gila Mountains], altitude about 1,400 ft (427 m), Yuma County, Arizona. Collected 23 Nov 1913 by E. A. Goldman. Original number 22309.

*Perognathus (Chaetodipus) nelsoni* Merriam

Proc. Acad. Nat. Sci. Philadelphia 46: 266, 27 Sep 1894a. Preprint of Proc. Acad. Nat. Sci. Philadelphia 46: 266, 23 Oct 1894a.

= *Chaetodipus nelsoni nelsoni* (Merriam, 1894). See Williams et al. (1993:148).

Holotype: 50214. [Skin and skull]. Old female. Hacienda La Parada, [FC: Altitude about 6,000 ft (1,829 m)], [Miller (1924:284): about 25 mi (40 km) northwest of the city of San Luis Potosi], San Luis Potosi, Mexico. Collected 19 Aug 1892 by E. W. Nelson. Original number 3207.

*Perognathus obscurus* Merriam

N. Amer. Fauna 1: 20, 25 Oct 1889e.

= *Chaetodipus intermedius intermedius* (Merriam, 1889). See Williams et al. (1993:144).

Holotype: [186510]. Skin and skull. Adult female. Camp Apache, Grant (Hidalgo) County, New Mexico. Collected 30 Apr 1886 by A. W. Anthony. Original number [MCC: 62]. [Merriam collection number] 2340/2848.

*Perognathus paradoxus* Merriam

N. Amer. Fauna 1: 24, 25 Oct 1889e.

= *Chaetodipus hispidus paradoxus* (Merriam, 1889). See Paulson (1988b:1).

Holotype: [186513]. Skin and skull. [MCC: Adult] female. [MC: Banner], Trego County, Kansas. Collected [SL: 14], not 17

as in original description, Apr 1884 by A. B. Baker. No original number. [Merriam collection number] 940/1544.

*Perognathus paradoxus spilotus* Merriam

N. Amer. Fauna 1: 25, 25 Oct 1889e.

= *Chaetodipus hispidus spilotus* (Merriam, 1889). See Paulson (1988b:1).

Holotype: [186514]. Skin only. Adult female. Gainesville, Cook (Cooke) County, Texas. Collected 8 Oct 1886 by G. H. Ragsdale. No original number. [Merriam collection number] 5293. Merriam (1889e:25) based his description of the skull on USNM 23096, a young adult female from the type locality.

*Perognathus penecillatus* [sic] Woodhouse

Proc. Acad. Nat. Sci. Philadelphia 6: 200, presented at meeting of 28 Dec 1852b. Receipt acknowledged 7 Feb 1853 by the Smithsonian Institution.

= *Chaetodipus penicillatus penicillatus* (Woodhouse, 1852). See Williams et al. (1993:150).

Holotype: [2676/37437]. Skin, skull, [and baculum]. [Lyon and Osgood (1909:54): Adult] male. San Francisco Mountain (Peaks), New Mexico (Arizona). Type locality restricted by Hoffmeister and Lee (1967: 368) to 1 mi (1.6 km) southwest of Parker, Yuma County, Arizona. Collected [Poole and Schantz (1942:435): October] [Baird (1857:419): 1851 by S. W. Woodhouse]. Type not designated by number in original description but was based on a single specimen from the type locality. Reference to Baird (1857:419) indicates that 2676 is the specimen on which the description is based.

*Perognathus penicillatus albulus* Nelson and Goldman

Proc. Biol. Soc. Washington 36: 159, 1 May 1923.

= *Chaetodipus arenarius albulus* (Nelson and Goldman, 1923). See Williams et al. (1993:127).

Holotype: 146864. [Skin and skull]. Adult male. Magdalena Island, [FC: 20 ft (6 m)], Lower California (Baja California Sur), Mexico. Collected 3 Dec 1905, not 1906 as in original publication, by E. W. Nelson and E. A. Goldman. Original number 18733.

*Perognathus penicillatus ammophilus* Osgood

Proc. Biol. Soc. Washington 20: 20, 23 Feb 1907b.

= *Chaetodipus arenarius ammophilus* (Osgood, 1907). See Williams et al. (1993:128).

Holotype: 146859. [Skin and skull]. Adult male. Margarita (Santa Margarita) Island, [FC: 25 ft (7.6 m)], Lower California (Baja California Sur), Mexico. Collected 29 Nov 1905 by E. W. Nelson and E. A. Goldman. Original number [SL: 18655].

*Perognathus penicillatus angustirostris* Osgood

N. Amer. Fauna 18: 47, 20 Sep 1900b.

= *Chaetodipus penicillatus angustirostris* (Osgood, 1900). See Williams et al. (1993:149).

Holotype: 73881. [Skin and skull]. Adult male. Carrizo Creek, Colorado Desert, [Imperial County], California. Collected 31 Mar 1895 by A. W. Anthony. Original number 22.

***Perognathus penicillatus goldmani* Townsend**

Bull. Amer. Mus. Nat. Hist. 31: 122, 14 Jun 1912. Primary junior homonym of *Perognathus goldmani* Osgood (1900b:54). Replaced with *Perognathus penicillatus seri* by Nelson (1912:116).

= *Chaetodipus penicillatus seri* (Nelson, 1912). See Williams et al. (1993:151).

Holotype: [198411. Skin and skull]. Male. Tiburon Island, [Gulf of California, Sonora, Mexico]. Collected 13 Apr 1911 by [SL: H. E.. Anthony. Original number 155]. Specimen described as American Museum of Natural History number 31845.

***Perognathus penicillatus serosus* Goldman**

Proc. Biol. Soc. Washington 52: 34, 11 Mar 1939a. Primary junior homonym of *Perognathus spinatus serosus* Burt (1932:167). Replaced with *Perognathus penicillatus sobrinus* by Goldman (1939b:257).

= *Chaetodipus penicillatus sobrinus* (Goldman, 1939). See Williams et al. (1993:151).

Holotype: 27598/39697. Skin and skull. Adult male. Sand flat along Virgin River, 7 mi (11 km) above Bunkerville, Clark County, Nevada. Note: This locality is on the Arizona-Nevada border. Hardy (1949:435) placed it in Arizona; Hoffmeister and Nader (1963:92) concluded it was in Nevada. Collected 9 May 1891 by V. Bailey. Original number 2743.

***Perognathus penicillatus siccus* Osgood**

Proc. Biol. Soc. Washington 20: 20, 23 Feb 1907b.

= *Chaetodipus arenarius siccus* (Osgood, 1907). See Williams et al. (1993:130).

Holotype: 146890. [Skin and skull]. Adult male. Ceralbo (Cerbalvo/Jacque Cousteau) Island, Lower California (Baja California Sur), Mexico. Collected 13 Feb 1906 by E. W. Nelson and E. A. Goldman. Original number [SL: 19131].

***Perognathus pernix rostratus* Osgood**

N. Amer. Fauna 18: 51, 20 Sep 1900b.

= *Chaetodipus pernix rostratus* (Osgood, 1900). See Williams et al. (1993:152).

Holotype: 95818. [Skin and skull]. Young adult male. Camoa, [FC: about 800 ft (244 m)], Rio Mayo, Sonora, Mexico. Collected 28 Oct 1898 by E. A. Goldman. Original number [FC: Nelson and Goldman] 13167.

***Perognathus spinatus* Merriam**

N. Amer. Fauna 1: 21, 25 Oct 1889e.

= *Chaetodipus spinatus spinatus* (Merriam, 1889). See Lackey (1991b:1).

Holotype: [186516]. Skin, skull, [and baculum]. Adult male. Twenty-five miles (40 km) below [SL: south of] The Needles, Lower Colorado River, [San Bernardino County], California. Collected 23 Mar 1889 by V. Bailey. Original number [SL: 683]. [Merriam collection number] 5449/6137.

***Perognathus spinatus magdalena* Osgood**

Proc. Biol. Soc. Washington 20: 21, 23 Feb 1907b.

= *Chaetodipus spinatus magdalena* (Osgood, 1907). See Lackey (1991b:1).

Holotype: 146102. [Skin and skull]. Adult female. Magdalena Island, [FC: 20–50 ft (6–15 m)], Lower California (Baja California Sur), Mexico. Collected 25 Nov 1905 by E. W. Nelson and E. A. Goldman. Original number [SL: 18633].

***Perognathus spinatus nelsoni* Townsend**

Bull. Amer. Mus. Nat. Hist. 31: 122, 14 Jun 1912. Primary junior homonym of *Perognathus nelsoni* Merriam (1894a:266).

Replaced with *Perognathus spinatus occultus* by Nelson (1912:116)

= *Chaetodipus spinatus occultus* (Nelson, 1912). See Lackey (1991b:1).

Holotype: [198409. Skin and skull]. Male. Carmen Island, [Gulf of California, Baja California Sur, Mexico]. Collected 3 Apr 1911 by [SL: H. E. Anthony. Original number 99]. Specimen described as American Museum of Natural History number 31855.

***Perognathus (Chaetodipus) stephensi* Merriam**

Proc. Acad. Nat. Sci. Philadelphia 46: 267, 27 Sep 1894a. Preprint of Proc. Acad. Nat. Sci. Philadelphia 46: 267, 23 Oct 1894a.

= *Chaetodipus penicillatus stephensi* (Merriam, 1894). See Williams et al. (1993:151).

Holotype: 27774/39873. Skin and skull. Adult male. [Grinnell (1933:153): Edge of a little mesa near Triangle spring], Mesquite Valley, northwest arm of Death Valley, [Inyo County], California. Collected 6 Apr 1891 by F. Stephens. Original number 258.

## Genus *Dipodomys* Gray, 1841

***Dipodomys ambiguus* Merriam**

N. Amer. Fauna 4: 42, 8 Oct 1890e.

= *Dipodomys merriami ambiguus* Merriam, 1890. See Merriam (1898d:31).

Holotype: 18147/25045. Skin and skull. Adult male. El Paso, [El Paso County], Texas. Collected 13 Dec 1889 by V. Bailey. Original number 782.

***Dipodomys californicus* Merriam**

N. Amer. Fauna 4: 29, 8 Oct 1890e.

= *Dipodomys californicus californicus* Merriam, 1890. See Kellogg (1916:366).

Holotype: 16618/23544. Skin and skull. Adult male. Ukiah, restricted to the west edge of the main road running south from Ukiah and about a mile (1.6 km) south of the then center of town by Grinnell (1933:156), Mendocino County, California. Collected 4 May 1889 by T. S. Palmer. Original number 46.

***Dipodomys compactus* True**

Proc. U.S. Natl. Mus. 11: 160, 5 Jan 1889.

= *Dipodomys compactus compactus* True, 1889. See Schmidly and Hendricks (1976:235).

Holotype: 19665/35227. Skin only, skull lost. Adult female. Padre Island, Cameron County, Texas. Collected 3 Apr 1888. Collector unknown. No original number. Received from C. K. Worthen. No type designated in original description. The description was based on a single specimen and the data, including three measurements, match that of the specimen listed above.

***Dipodomys deserti* Stephens**

Amer. Nat. 21: 42, Jan 1887.

= *Dipodomys deserti deserti* Stephens, 1887. See Goldman (1923:139).

Holotype: [15629/22522]. Skin and skull. [Lyon and Osgood (1909:57): Adult] female. Mohave River, restricted to Mohave River bottom at upper crossing on old road from Cajon Pass to Rabbit Springs, 3 mi (4.8 km) or 4 mi (6.4 km) from, and opposite Hesperia, by Grinnell (1933:165), [San Bernardino County], California. Collected 29 Jun 1886 by [SL: F. Stephens]. Original number, under which it was published, 314.

***Dipodomys deserti sonoriensis* Goldman**

Proc. Biol. Soc. Washington 36: 139, 1 May 1923.

Holotype: 242306. [Skin and skull]. Adult male, La Libertad Ranch, 30 mi (48 km) east of Sierra Seri, Sonora, Mexico. Collected 3 Jan 1922 by C. Sheldon. No original number. [SL: 22611-X].

***Dipodomys elator* Merriam**

Proc. Biol. Soc. Washington 9: 109, 21 Jun 1894b.

Holotype: 64802. [Skin and skull]. Adult male. Henrietta, Clay County, Texas. Collected 13 Apr 1894 by J. A. Loring. Original number 1804.

***Dipodomys heermanni gabrielsoni* Goldman**

Proc. Biol. Soc. Washington 38: 33, 12 Mar 1925.

= *Dipodomys californicus californicus* Merriam, 1890. See Patton et al. (1976:162).

Holotype: 244514. [Skin and skull]. Adult male. Brownsboro, Jackson County, Oregon. Collected 21 Jun 1924 by I. N. Gabrielson. Original number [SL: M 8. 23625-X].

***Dipodomys insularis* Merriam**

Proc. Biol. Soc. Washington 20: 77, 22 Jul 1907.

= *Dipodomys merriami insularis* Merriam, 1907. See Best and Janecek (1992:5).

Holotype: 79053. [Skin and skull]. Adult female. San Jose Island, Gulf of California, Lower California (Baja California Sur), Mexico. Collected 6 Aug 1895 by J. E. McLellan. Original Number 1457.

***Dipodomys margaritae* Merriam**

Proc. Biol. Soc. Washington 20: 76, 22 Jul 1907.

= *Dipodomys merriami margaritae* Merriam, 1907. See Lidicker (1960:204).

Holotype: 146058. [Skin and skull]. Young adult male. Margarita Island, [FC: 20 ft (6 m)], Lower California (Baja California Sur), [SL: Mexico]. Collected 1 Dec 1905 by [E. W.] Nelson and [E. A.] Goldman. Original number 18711.

***Dipodomys merriami atronasus* Merriam**

Proc. Biol. Soc. Washington 9: 113, 21 Jun 1894b.

Holotype: 50276. [Skin and skull]. Adult male. Hacienda La Parada, [FC: about 6,000 ft (1,829 m)], [Miller (1924:291): about 25 mi (40 km) northwest of the city of San Luis Potosí], San Luis Potosí, Mexico. Collected 20 Aug 1892 by E. W. Nelson. Original number 3229.

***Dipodomys merriami exilis* Merriam**

Proc. Biol. Soc. Washington 9: 113, 21 Jun 1894b.

= *Dipodomys nitratoides exilis* Merriam, 1894. See Grinnell (1921:96).

Holotype: 34843/43823. Skin and skull. Young adult male. Fresno, [FC: 328 ft (100 m) on sand hills 3 mi (5 km) west of town], San Joaquin Valley, [Fresno County], California. Grinnell (1933:161) restricted the locality to 4 mi (6.4 km) north of railroad station, along Southern Pacific right of way. Collected 23 Sep 1891 by V. Bailey. Original number 3277.

***Dipodomys merriami kernensis* Merriam**

Proc. Biol. Soc. Washington 20: 77, 22 Jul 1907.

= *Dipodomys merriami merriami* Mearns, 1890. See Grinnell (1921:97).

Holotype: 108884. [Skin and skull]. Adult male. Onyx [FC: PO, south fork Kern River], west end of Walker Pass, Kern County, California. Collected 25 Jul 1901 by W. K. Fisher. Original number 2106.

***Dipodomys merriami mayensis* Goldman**

Proc. Biol. Soc. Washington 41: 141, 15 Oct 1928b.

Holotype: 96437. [Skin and skull]. Adult male. Alamos, [FC: about 1,200 ft (366 m)], Sonora, Mexico. Collected 19 Dec 1898 by E. A. Goldman. Original number [FC: Nelson and Goldman] 13302.

***Dipodomys merriami nevadensis* Merriam**

Proc. Biol. Soc. Washington 9: 111, 21 Jun 1894b.

= *Dipodomys merriami merriami* Mearns, 1890. See Grinnell (1921:97).

Holotype: 54552. [Skin and skull]. Adult female. Pyramid Lake, [FC: at Agency], [Washoe County], Nevada. Collected 26 Jun 1893 by V. Bailey. Original number 3990.

#### *Dipodomys merriami nitratoides* Merriam

Proc. Biol. Soc. Washington 9: 112, 21 Jun 1894b.

= *Dipodomys nitratoides nitratoides* Merriam, 1894. See Grinnell (1921:96).

Holotype: 54674. [Skin and skull]. Adult male. Tipton, San Joaquin Valley, [Tulare County], California. Collected 25 Jun 1893 by C. P. Streator. Original number 2978.

#### *Dipodomys merriami nitratus* Merriam

Proc. Biol. Soc. Washington 9: 112, 21 Jun 1894b.

= *Dipodomys merriami merriami* Mearns, 1890. See Grinnell (1921:97).

Holotype: 25359/32772. Skin and skull. Adult male. Keeler, east side of Owens Lake, [Inyo County], California. Collected 29 Dec 1890 by E. W. Nelson. Original number 160.

#### *Dipodomys merriami regillus* Goldman

Proc. Biol. Soc. Washington 50: 75, 22 Jun 1937a.

= *Dipodomys merriami merriami* Mearns, 1890. See Lidicker (1960:165).

Holotype: 203017. Skin and skull. Young adult male. Tule Well, Tule Desert between Cabeza Prieta Mountains and Tule Mountains, [Hoffmeister (1986:312): 35 mi (56 km) south of Mohawk], altitude 1,000 ft (305 m), Yuma County, Arizona. Collected 4 Dec 1913 by E. A. Goldman. Original number 22345.

#### *Dipodomys microps alfredi* Goldman

Proc. Biol. Soc. Washington 50: 221, 28 Dec 1937b.

Holotype: 262846. [Skin and skull]. Adult female. Gunnison Island, altitude about 4,300 ft (1,311 m), Great Salt Lake, [Box Elder County], Utah. Collected 1 Jun 1937 by A. M. Bailey and J. Niedrach. No original number. [SL: Colorado Museum of Natural History number 2994. 28020-X].

#### *Dipodomys microps bonnevillei* Goldman

Proc. Biol. Soc. Washington 50: 222, 28 Dec 1937b.

Holotype: 31894/43755. Skin and skull. Adult female. Kelton, altitude about 4,300 ft (1,311 m), Box Elder County, Utah. Collected 7 Nov 1891 by V. Bailey. Original number 3490.

#### *Dipodomys microps celsus* Goldman

J. Washington Acad. Sci. 14: 372, 19 Sep 1924.

Holotype: 243101. [Skin and skull]. Adult male. Six miles (9.6 km) north of Wolf Hole, altitude 3,500 ft (1,067 m), [Mohave County], Arizona. Collected 16 Oct 1922 by E. A. Goldman. Original number 23411.

#### *Dipodomys microps leucotis* Goldman

Proc. Biol. Soc. Washington 44: 135, 17 Oct 1931a.

Holotype: 250036. [Skin and skull]. Adult male. Six miles (9.6 km) west of Colorado River (Navajo) Bridge, altitude 3,700 ft (1,128 m), Houserock Valley, north side of Marble Canyon of Colorado River, [Coconino County], Arizona. Collected 8 Jun 1931 by E. A. Goldman. Original number 23570.

#### *Dipodomys microps russeolus* Goldman

J. Mamm. 20: 353, 14 Aug 1939c.

Holotype: 263895. Skin and skull. Adult male. Dolphin Island, altitude 4,250 ft (1,295 m), Great Salt Lake, [Box Elder County], Utah. Collected 5 Jun 1938 by W. H. Marshall. Original number 65.

#### *Dipodomys microps subtenuis* Goldman

J. Mamm. 20: 354, 14 Aug 1939c.

Holotype: 263917. Skin and skull. Adult female. Carrington Island, altitude 4,250 ft (1,295 m), Great Salt Lake, [Toole County], Utah. Collected 30 Jun 1938 by W. H. Marshall. Original number 182.

#### *Dipodomys mitchelli* Mearns

Proc. U.S. Natl. Mus. 19: 719, 30 Jul 1897b.

= *Dipodomys merriami mitchelli* Mearns, 1897. See Burt (1938:48).

Holotype: 63188. Skin and skull. Adult female. Tiburon Island, Gulf of California, Sonora, Mexico. Collected 23 Dec 1895 by J. W. Mitchell. Original number 3.

#### *Dipodomys montanus* Baird

Proc. Acad. Nat. Sci. Philadelphia 7: 334, reported favorably for publication 24 Apr 1855a.

= *Dipodomys ordii montanus* Baird, 1855. See Grinnell (1921:96).

Holotype: 490/1631. Skin and skull. Near Fort Massachusetts (Fort Garland), [SL: N. Rio Grande Valley], [Costilla County, Colorado]. Collected [Baird (1857:412): 1853] by F. Kreutzfeldt. No original number. Type not designated by number in original description, but a footnote to the list of specimens in Baird (1857:412) states that 490 is the type.

#### *Dipodomys nelsoni* Merriam

Proc. Biol. Soc. Washington 20: 75, 22 Jul 1907.

Holotype: 79439. [Skin and skull]. Adult male. La Ventura, [FC: 5,650 ft (1,722 m)], Coahuila, Mexico. Collected 10 Aug 1896 by [E. W.] Nelson and [E. A.] Goldman. Original number 9998.

#### *Dipodomys oklahomae* Trowbridge and Whitaker

J. Mamm. 21: 343, 13 Aug 1940.

= *Dipodomys ordii oklahomae* Trowbridge and Whitaker, 1940. See Davis (1942:332).

Holotype: 265454. Skin and skull. Young adult female. North bank of the South Canadian River, 2.25 mi (3.6 km) south

of Norman, Cleveland County, Oklahoma. Collected 16 Mar 1934 by H. L. Whitaker. No original number. University of Oklahoma Museum of Zoology number 14517. 29312-X.

***Dipodomys ordii* Woodhouse**

Proc. Acad. Nat. Sci. Philadelphia 6: 235, 13 Apr 1853b.

= *Dipodomys ordii ordii* Woodhouse, 1853. See Grinnell (1921:96).

No name-bearing status: 18135/25033. Skin and skull. Adult female. El Paso, [El Paso County], Texas. Collected 11 Dec 1889 by V. Bailey. Original number 769. Williams et al. (1993:78) designated this specimen as Neotype of this taxon following Merriam (1890e:45). However, Williams et al. (1993) overlooked Koopman (1976:14), who lists a specimen thought to be from the type series as a Cotype (Syntype). The Syntype has precedence and the specimen given here currently has no standing as a name bearer.

***Dipodomys ordii cineraceus* Goldman**

J. Mamm. 20: 352, 14 Aug 1939c.

Holotype: 263890. Skin and skull. Adult male. Dolphin Island, altitude 4,250 ft (1,295 m), Great Salt Lake, [Box Elder County], Utah. Collected 4 Jun 1938 by W. H. Marshall. Original number 57.

***Dipodomys ordii cleomophila* Goldman**

J. Washington Acad. Sci. 23: 469, 15 Oct 1933b.

= *Dipodomys ordii longipes* (Merriam, 1890). See Setzer (1949:556).

Holotype: 226348. Skin and skull. Adult female. Five miles (8 km) northeast of Winona, altitude 6,200 ft (1,890 m), Coconino County, Arizona. Collected 16 Jul 1917 by E. A. Goldman. Original number 23101.

***Dipodomys ordii cupidineus* Goldman**

J. Washington Acad. Sci. 14: 372, 19 Sep 1924.

Holotype: 243093. [Skin and skull]. Adult male. Kanab Wash, at [SL: near] southern boundary of Kaibab Indian Reservation, [Mohave County], Arizona. Collected 12 Oct 1922 by E. A. Goldman. Original number 23384.

***Dipodomys ordii evexus* Goldman**

J. Washington Acad. Sci. 23: 468, 15 Oct 1933b.

Holotype: 150990. Skin and skull. Adult male. Salida, altitude 7,000 ft (2,134 m), Chaffee County, Colorado. Collected 10 Nov 1907 by M. Cary. Original number 1245.

***Dipodomys ordii fuscus* Setzer**

Univ. Kansas. Publ., Mus. Nat. Hist. 1: 555, 27 Dec 1949. Primary junior homonym of *Dipodomys agilis fuscus* Boulware (1943:393).

= *Dipodomys ordii durranti* Setzer. J. Washington Acad. Sci. 42: 391, 17 Dec 1952. Replacement name for *Dipodomys ordii fuscus* Setzer.

Holotype: 93886. Skin and skull. Adult male. Juamave (Juamave), [FC: 2,000 ft (610 m)], Tamaulipas, Mexico. Collected 3 Jun 1898 by E. W. Nelson and E. A. Goldman. Original number 12437.

***Dipodomys ordii marshalli* Goldman**

Proc. Biol. Soc. Washington 50: 223, 28 Dec 1937b.

Holotype: 262655. [Skin and skull]. Adult female. Bird (Hat) Island, altitude 4,300 ft (1,310 m), Great Salt Lake, [Box Elder County], Utah. Collected 22 Jun 1937 by W. H. Marshall. Original number [SL: 39]. 27969-X.

***Dipodomys ordii medioides* Setzer**

Univ. Kansas. Publ., Mus. Nat. Hist. 1: 519, 27 Dec 1949.

Holotype: 118526. [Skin and skull]. Male. Santa Rosa, Guadalupe County, New Mexico. Collected 5 Oct 1902 by J. H. Gaut. Original number 565.

***Dipodomys ordii nexilis* Goldman**

J. Washington Acad. Sci. 23: 470, 15 Oct 1933b.

Holotype: 149938. Skin and skull. Adult male. [FC: Dry creek] 5 mi (8 km) west of Naturita, Montrose County, Colorado. Collected 20 Jul 1907 by M. Cary. Original number 1068.

***Dipodomys ornatus* Merriam**

Proc. Biol. Soc. Washington 9: 110, 21 Jun 1894b.

= *Dipodomys phillipsii ornatus* Merriam, 1894. See Genoways and Jones (1971:281).

Holotype: 57990. [Skin and skull]. Adult female. Berriozabal, [FC: 6,800 ft (2,073 m)], Zacatecas, Mexico. Collected 29 Dec 1893 by E. A. Goldman. Original number [FC: Nelson and Goldman] 5613.

***Dipodomys perotensis* Merriam**

Proc. Biol. Soc. Washington 9: 111, 21 Jun 1894b.

= *Dipodomys phillipsii perotensis* Merriam, 1894. See Davis (1944:391).

Holotype: 54285. [Skin and skull]. Adult female. Perote, [FC: 8,000 ft (2,438 m)], Veracruz, Mexico. Collected 21 May 1893 by E. W. Nelson. Original number 4840.

***Dipodomys platycephalus* Merriam**

Proc. Biol. Soc. Washington 20: 76, 22 Jul 1907.

= *Dipodomys merriami platycephalus* Merriam, 1907. See Huey (1927:66).

Holotype: 139882. [Skin and skull]. Adult male. Calmalli, [FC: 1,200 ft (366 m)], Lower California (Baja California), Mexico. Collected 1 Oct 1905 by E. W. Nelson and E. A. Goldman. Original number 18248.

***Dipodomys spectabilis* Merriam**

N. Amer. Fauna 4: 46, 8 Oct 1890e.

= *Dipodomys spectabilis spectabilis* Merriam, 1890. See Grinnell (1921:95).

Holotype: 17886/24823. Skin and skull. Adult male. Dos Cabezos (Cabezas), [FC: 5,300 ft (1,615 m)], Cochise County, Arizona. Collected 22 Nov 1889 by V. Bailey. Original number 695.

***Dipodomys spectabilis baileyi* Goldman**

Proc. Biol. Soc. Washington 36: 140, 1 May 1923.

Holotype: 97185. [Skin and skull]. Adult male. Forty miles (64 km) west of Roswell [FC: at Cedar Point ranch], [Lincoln County], New Mexico. Collected 13 Jun 1899 by V. Bailey. Original number 6961.

***Dipodomys spectabilis clarencei* Goldman**

J. Washington Acad. Sci. 23: 467, 15 Oct 1933b.

= *Dipodomys spectabilis baileyi* Goldman, 1923. See Nader (1978:41).

Holotype: 158824. Skin and skull. Adult male. Blanco, San Juan County, New Mexico. Collected 19 Nov 1908 by C. Birds-eye. Original number 443.

***Dipodomys spectabilis cratodon* Merriam**

Proc. Biol. Soc. Washington 20: 75, 22 Jul 1907.

Holotype: 78953. [Skin and skull]. Adult male. Chicalote, [FC: 6,180 ft (1,884 m)], Aguascalientes, Mexico. Collected 2 Jul 1896 by E. W. Nelson and E. A. Goldman. Original number 9734.

***Dipodomys spectabilis perblandus* Goldman**

J. Washington Acad. Sci. 23: 466, 15 Oct 1933b.

Holotype: 17748/24689. Skin and skull. Adult female. Calabasas, altitude about 3,500 ft (1,067 m), Santa Cruz County, Arizona. Collected 27 Oct 1889 by V. Bailey. Original number 611.

***Dipodomys spectabilis zygomaticus* Goldman**

Proc. Biol. Soc. Washington 36: 140, 1 May 1923.

Holotype: 96432. [Skin and skull]. Adult male. Parral, [FC: 6,000 ft (1,829 m)], southern Chihuahua, Mexico. Collected 17 Sep 1898 by E. A. Goldman. Original number [FC: Nelson and Goldman] 13030.

***Dipodops longipes* Merriam**

N. Amer. Fauna 3: 72, 11 Sep 1890b.

= *Dipodomys ordii longipes* (Merriam, 1890). See Grinnell (1921:96).

Holotype: 17703/24639. Skin and skull. Young adult male. Foot of Echo Cliffs, Painted Desert, [SL and FC: Moa Ave], [FC: Coconino County], Arizona. Collected 22 Sep 1889 by C. H. Merriam. Original number [FC: V. Bailey] 512.

***Perodipus agilis tularensis* Merriam**

Proc. Biol. Soc. Washington 17: 143, 14 Jul 1904b.

= *Dipodomys heermanni tularensis* (Merriam, 1904). See Grinnell (1921:95).

Holotype: 127158. [Skin and skull]. Adult female. Alila (Earlimart), Tulare County, California. Collected 23 Jun 1903 by L. J. Goldman. Original number 563.

***Perodipus cabazonae* Merriam**

Proc. Biol. Soc. Washington 17: 144, 14 Jul 1904b.

= *Dipodomys simulans simulans* (Merriam, 1904). See Williams et al. (1993:86).

Holotype: 54055. [Skin and skull]. Adult female. Cabazon, Colorado Desert, [Grinnell (1922:96): San Gorgonio Pass, Riverside County], California. Collected 31 May 1893 by C. P. Streator. Original number 2859.

***Perodipus goldmani* Merriam**

Proc. Biol. Soc. Washington 17: 143, 14 Jul 1904b.

= *Dipodomys heermanni goldmani* (Merriam, 1904). See Grinnell (1921:95).

Holotype: 118924. [Skin and skull]. Adult male. Salinas, mouth of Salinas Valley, Monterey County, California. Collected 4 Sep 1902 by L. J. Goldman. Original number 431.

***Perodipus ingens* Merriam**

Proc. Biol. Soc. Washington 17: 141, 14 Jul 1904b.

= *Dipodomys ingens* (Merriam, 1904). See Grinnell (1921:95).

Holotype: 128805. [Skin and skull]. Adult male. Painted Rock, 20 mi (32 km) [Grinnell (1922:69): 12 mi (19 km)] southeast of Simmler, Carrizo Plain, San Luis Obispo County, California. Collected 6 Aug 1903 by L. J. Goldman. Original number 777.

***Perodipus microps* Merriam**

Proc. Biol. Soc. Washington 17: 145, 14 Jul 1904b.

= *Dipodomys microps microps* (Merriam, 1904). See Grinnell (1921:96).

Holotype: 25288/32701. Skin and skull. Adult male. Lone Pine, Owens Valley, [FC: lower, or eastern base of Alabama Mountains], Inyo County, California. Collected 22 Dec 1890 by E. W. Nelson. Original number 138.

***Perodipus microps levipes* Merriam**

Proc. Biol. Soc. Washington 17: 145, 14 Jul 1904b.

= *Dipodomys microps levipes* (Merriam, 1904). See Hall (1931:5).

Holotype: 27176/34575. Skin and skull. Adult male. Perognathus Flat, altitude 5,200 ft (1,585 m), [FC: at head of] Emigrant Gap, Panamint Mountains, [Inyo County], California. Restricted to near Bench Mark 4899, 2 mi (3 km) northwest of Harrisburg, on U.S Geological Survey. Ballarat Quadrangle, edition of Mar 1913 by Grinnell (1922:105). Collected 16 Apr 1891 by V. Bailey. Original number 2668.

***Perodipus microps preblei* Goldman**

J. Mamm. 2: 233, 29 Nov 1921.

= *Dipodomys microps preblei* (Goldman, 1921). See Miller (1924:297).

Holotype: 79340. [Skin and skull]. Adult female. Narrows, Malheur Lake, Harney County, Oregon. Collected 23 Jul 1896 by E. A. Preble. Original number 1201.

***Perodipus montanus utahensis* Merriam**

Proc. Biol. Soc. Washington 17: 143, 14 Jul 1904b.

= *Dipodomys ordii utahensis* (Merriam, 1904). See Grinnell (1921:96).

Holotype: 55115. [Skin and skull]. Adult male. Odgen, [Weber County], Utah. Collected 15 Jul 1893 by V. Bailey. Original number 4085.

***Perodipus morroensis* Merriam**

Proc. Biol. Soc. Washington 20: 78, 22 Jul 1907.

= *Dipodomys heermanni morroensis* (Merriam, 1907). See Boulware (1943:393).

Holotype: 31626/43499. Skin and skull. Adult female. [Grinnell (1922:59): About 4 mi (6.4 km) south of] Morro, San Luis Obispo County, California. Collected 11 Nov 1891 by E. W. Nelson. Original number 1464.

***Perodipus ordii columbianus* Merriam**

Proc. Biol. Soc. Washington 9: 115, 21 Jun 1894b.

= *Dipodomys ordii columbianus* (Merriam, 1894). See Grinnell (1921:96).

Holotype: 24181/31594. Skin and skull. Adult female. Umatilla, [Miller (1924:298): at mouth of Umatilla River], Plains of Columbia, [Umatilla County], Oregon. Collected 18 Oct 1890 by C. P. Streator. Original number 386.

***Perodipus ordii luteolus* Goldman**

Proc. Biol. Soc. Washington 30: 112, 23 May 1917a.

= *Dipodomys ordii luteolus* (Goldman, 1917). See Grinnell (1921:96).

Holotype: 160408. [Skin and skull]. Adult male. Casper, [FC: north side of Platte River, 4,700 ft (1,433 m)], [Natrona County], Wyoming. Collected 2 Sep 1909 by M. Cary. Original number 1690.

***Perodipus panamintinus* Merriam**

Proc. Biol. Soc. Washington 9: 114, 21 Jun 1894b.

= *Dipodomys panamintinus panamintinus* (Merriam, 1894). See Hall (1946:409).

Holotype: 28566/40670. Skin and skull. Adult male. On head of Willow Creek, [FC: 5,040 ft (1,536 m)], Panamint Mountains, [Inyo County], California. Collected 12 May 1891 by E. W. Nelson. Original number 853.

***Perodipus perplexus* Merriam**

Proc. Biol. Soc. Washington 20: 79, 22 Jul 1907.

= *Dipodomys agilis perplexus* (Merriam, 1907). See Grinnell (1921:96).

Holotype: 29261/41328. Skin and skull. Adult male. Walker Basin, [Grinnell (1933:163): 3,400 ft (1,036 m)], Kern

County, California. Collected 15 Jul 1891 by V. Bailey. Original number 3053.

***Perodipus simulans peninsularis* Merriam**

Proc. Biol. Soc. Washington 20: 79, 22 Jul 1907.

= *Dipodomys simulans peninsularis* (Merriam, 1907). See Williams et al. (1993:85).

Holotype: 139872. [Skin and skull]. Young adult male. Santo Domingo [Huey (1951:246): (Santo Domingo Landing), latitude 28°51'N], [FC: 150 ft (46 m)], Lower California (Baja California), Mexico. Collected 27 Sep 1905 by [E. W.] Nelson and [E. A.] Goldman. Original number 18215.

***Perodipus stephensi* Merriam**

Proc. Biol. Soc. Washington 20: 78, 22 Jul 1907.

= *Dipodomys stephensi* (Merriam, 1907). See Grinnell (1921:95).

Holotype: [186503]. Skin and skull. Adult male. San Jacinto Valley, [Grinnell (1922:67): a little west of the present town of Winchester, toward Menifee], Riverside County, California. Collected 27 Nov 1885 by F. Stephens. Original number [MCC: 206]. Merriam collection number 1808/2340.

***Perodipus streator* Merriam**

Proc. Biol. Soc. Washington 9: 113, 21 Jun 1894b.

= *Dipodomys heermanni heermanni* (LeConte, 1853). See Grinnell (1921:97).

Holotype: 64310. [Skin and skull]. Adult female. Carbondale, at west foot of Sierra Nevada, Amador County, California. Collected 3 Apr 1894 by C. P. Streator. Original number 3673.

***Perodipus streator* *simulans* Merriam**

Proc. Biol. Soc. Washington 17: 144, 14 Jul 1904b.

= *Dipodomys simulans simulans* (Merriam, 1904). See Williams et al. (1993:86).

Holotype: 33105/45103. Skin and skull. Adult female. Dulzura, San Diego County, California. Collected 24 Nov 1891 by C. H. Marsh. Original number 255.

***Perodipus venustus* Merriam**

Proc. Biol. Soc. Washington 17: 142, 14 Jul 1904b.

= *Dipodomys venustus venustus* (Merriam, 1904). See Grinnell (1921:96).

Holotype: 51852. [Skin and skull]. Adult male. Santa Cruz, Santa Cruz County, California. Collected 12 Mar 1893 by G. B. Badger. Original number 46.

**Genus *Heteromys* Desmarest, 1817**

***Heteromys annectens* Merriam**

Proc. Biol. Soc. Washington 15: 43, 5 Mar 1902b.

= *Heteromys pictus annectens* Merriam, 1902. New name combination.

Holotype: 71510. [Skin and skull]. Adult male. Pluma, [FC: 3,000 ft (914 m)], Oaxaca, Mexico. Collected 18 Mar

1895 by E. W. Nelson and E. A. Goldman. Original number 7674.

***Heteromys australis conscius* Goldman**

Smithsonian Misc. Coll. 60 (22): 8, 28 Feb 1913.

Holotype: 178699. [Skin and skull]. Adult male. Cana, altitude 2,000 ft (610 m), [Darien], [Miller (1924:266): mountains of] eastern Panama. Collected 8 Mar 1912 by E. A. Goldman. Original number 21468.

***Heteromys catopterius* Anderson and Gutierrez**

Bull. Amer. Mus. Nat. Hist. 331: 40, 15 Dec 2009.

Holotype: 517536. Skin and skull. Adult male. Rancho Grande, 3,576 ft (1,090 m), near Biological Station, 13 km northwest Maracay, Aragua, Venezuela, 10°21'N, 67°40'W. Collected 20 Mar 1960 by C. O. Handley, Jr. and D. I. Rhymer. Original number COH, Jr. 7778.

***Heteromys crassirostris* Goldman**

Smithsonian Misc. Coll. 60 (2): 10, 20 Sep 1912b.

= *Heteromys desmarestianus crassirostris* Goldman, 1912. See Goldman (1920:117).

Holotype: 179016. [Skin and skull]. Adult male. Near head of Rio Limon, altitude 5,000 ft (1,524 m), Mount Pirri, [Darien], eastern Panama. Collected 26 Apr 1912 by E. A. Goldman. Original number 21649.

***Heteromys desmarestianus planifrons* Goldman**

J. Washington Acad. Sci. 27: 418, 15 Oct 1937c.

Holotype: 250348. Skin and skull. Adult female. San Gerónimo, Pirris, western Costa Rica. Collected 10 Apr, not 12 Apr as in original description, 1931 by C. F. Underwood. Original number [SL: 259]. 26913-X, not 26914-X as in original description.

***Heteromys desmarestianus subaffinis* Goldman**

J. Washington Acad. Sci. 27: 420, 15 Oct 1937c.

Holotype: 12904/38591. Skin and skull. Adult male. Angostura, altitude about 1,980 ft (604 m), southern side of Rio Reventazon, opposite Turrialba, Costa Rica. Collected May 1876 by J. C. Zeledón. Original number 98.

***Heteromys goldmani* Merriam**

Proc. Biol. Soc. Washington 15: 41, 5 Mar 1902b.

See Rogers and Gonzales (2010:914) for recognition of *goldmani* at the specific level.

Holotype: 77576. [Skin and skull]. Adult male. Chicharras, [FC: 3,200 ft (975 m)], Chiapas, Mexico. Collected 7 Feb 1896 by E. W. Nelson and E. A. Goldman. Original number 9244.

***Heteromys goldmani lepturus* Merriam**

Proc. Biol. Soc. Washington 15: 42, 5 Mar 1902b.

= *Heteromys desmarestianus desmarestianus* Gray, 1868. See Rogers and Schmidly (1982:375).

Holotype: 73382. [Skin and skull]. Adult male. Mountains near Santo Domingo, [FC: 1,600 ft (488 m)], [Goldman (1911:25): a few miles west of Guichicoví], Oaxaca, Mexico. Collected 20 Jun 1895 by E. W. Nelson and E. A. Goldman. Original number 8120.

***Heteromys griseus* Merriam**

Proc. Biol. Soc. Washington 15: 42, 5 Mar 1902b.

= *Heteromys desmarestianus desmarestianus* Gray, 1868. See Rogers and Schmidly (1982:383).

Holotype: 76062. [Skin and skull]. Adult male. Mountains near Tonala, [FC: 2,800 ft (853 m)], Chiapas, Mexico. Collected 15 Aug 1895 by E. W. Nelson and E. A. Goldman. Original number 8339.

***Heteromys (Xylomys) nelsoni* Merriam**

Proc. Biol. Soc. Washington 15: 43, 5 Mar 1902b.

= *Heteromys nelsoni* Merriam, 1902. See Goldman (1911:31).

Holotype: 77920. [Skin and skull]. Adult male. Pinabete, [FC: 8,200 ft (2,499 m)], Chiapas, Mexico. Collected 11 Feb 1896 by E. W. Nelson and E. A. Goldman. Original number 9281.

***Heteromys oasicus* Anderson**

Amer. Mus. Nov. 3396: 9, 27 Mar 2003.

Holotype: 456325. Skin and skull. Adult male. Cerro Santa Ana, 550 m, 49 km north, 32 km west of Coro [Handley (1976:47): Peninsula de Paraguana, 15 km SSW Pueblo Nuevo], Falcon, Venezuela. Collected 25 Jul 1968 by N. E. Peterson. Original number SVP (Smithsonian Venezuelan Project) 24036.

***Heteromys panamensis* Goldman**

Smithsonian Misc. Coll. 56 (36): 9, 19 Feb 1912a.

= *Heteromys desmarestianus panamensis* Goldman, 1912. See Goldman (1920:117).

Holotype: 171107. [Skin and skull]. Adult male. Cerro Azul, altitude 2,800 ft (853 m), near headwaters of the Chagres River, [Panama], Panama. Collected 23 Mar 1911 by E. A. Goldman. Original number [FC: Nelson and Goldman] 20999.

***Heteromys temporalis* Goldman**

N. Amer. Fauna 34: 26, 7 Sep 1911.

= *Heteromys desmarestianus temporalis* Goldman, 1911. See Rogers and Schmidly (1982:385).

Holotype: 63719. [Skin and skull]. Adult female. Motzorongo, Veracruz, Mexico. Collected 3 Mar 1894 by [E. W.] Nelson and [E. A.] Goldman. Original number 5915.

***Heteromys zonalis* Goldman**

Smithsonian Misc. Coll. 56 (36): 9, 19 Feb 1912a.

= *Heteromys desmarestianus zonalis* Goldman, 1912. See Goldman (1920:116).

Holotype: 170976. [Skin and skull]. Adult female. Rio Indio, near Gatun, Canal Zone (Colon), Panama. Collected 15 Feb 1911 by E. A. Goldman. Original number [FC: Nelson and Goldman] 20885.

#### *Liomys canus* Merriam

Proc. Biol. Soc. Washington 15: 44, 5 Mar 1902b.

= *Heteromys irroratus alleni* Coues, 1881. New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 96259. [Skin and skull], Adult male. [SL: Near] Parral, [FC: 6,200 ft (1,890 m)], Chihuahua, Mexico. Collected 21 Sep 1898 by E. W. Nelson and E. A. Goldman. Original number 13036.

#### *Liomys crispus* Merriam

Proc. Biol. Soc. Washington 15: 49, 5 Mar 1902b.

= *Heteromys salvini crispus* (Merriam, 1902). New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 75105. [Skin and skull]. Adult male, Tonala, [FC: 500 ft (152 m)], Chiapas, Mexico. Collected 7 Aug 1895 by E. W. Nelson and E. A. Goldman. Original number 8283.

#### *Liomys crispus setosus* Merriam

Proc. Biol. Soc. Washington 15: 49, 5 Mar 1902b.

= *Heteromys salvini crispus* (Merriam, 1902). New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 77588. [Skin and skull]. Adult female. Huehuetan, [FC: 500 ft (152 m)], Chiapas, Mexico. Collected 22 Feb 1896 by E. W. Nelson and E. A. Goldman. Original number 9364.

#### *Liomys guerrerensis* Goldman

N. Amer. Fauna 34: 62, 7 Sep 1911.

= *Heteromys irroratus guerrerensis* (Goldman, 1911). New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 127523. [Skin and skull]. Young female. Omilteme, Guerrero, Mexico. Collected 17 May 1903 by [E. W.] Nelson and [E.A.] Goldman. Original number 16435.

#### *Liomys heterothrix* Merriam

Proc. Biol. Soc. Washington 15: 50, 5 Mar 1902b.

= *Heteromys salvini salvini* Thomas, 1893. New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 90161. [Skin and skull]. Adult male. San Pedro Sula, [Cortes], Honduras. Collected 16 Jul 1897 by J. C. Ingersoll. Original number 20. 884-X.

#### *Liomys irroratus pretiosus* Goldman

N. Amer. Fauna. 34: 58, 7 Sep 1911.

= *Heteromys irroratus texensis* (Merriam, 1902). New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 93097. [Skin and skull]. Adult male. Metlaltoyuca, [FC: about 800 ft (244 m)], Puebla, Mexico. Collected 25

Jan 1898 by E. A. Goldman. Original number [FC: Nelson and Goldman] 12081.

#### *Liomys obscurus* Merriam

Proc. Biol. Soc. Washington 15: 48, 5 Mar 1902b.

= *Heteromys pictus pictus* Thomas, 1893. New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 108563. [Skin and skull]. Adult female. Carrizal, Veracruz, Mexico. Collected 12 May 1901 by E. W. Nelson and E. A. Goldman. Original number 14714.

#### *Liomys orbitalis* Merriam

Proc. Biol. Soc. Washington 15: 48, 5 Mar 1902b.

= *Heteromys pictus pictus* Thomas, 1893. New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 65452. [Skin and skull]. Adult female. Catemaco, [FC: 1,000 ft (305 m)], Veracruz, Mexico. Collected 29 Apr 1894 by E. W. Nelson and E. A. Goldman. Original number 6129.

#### *Liomys parviceps* Goldman

Proc. Biol. Soc. Washington 17: 82, 21 Mar 1904.

= *Heteromys pictus plantinarensis* (Merriam, 1902). New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 126477. [Skin and skull]. Adult female. La Salada, 40 mi (64 km) south of Uruapan, Michoacan, Mexico. Collected 19 Mar 1903 by E. W. Nelson and E. A. Goldman. Original number 16194.

#### *Liomys phaeura* Merriam

Proc. Biol. Soc. Washington 15: 48, 5 Mar 1902b.

= *Heteromys pictus pictus* Thomas, 1893. New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 71500. [Skin and skull]. Adult female, Pinotepa, [FC: 700 ft (213 m)], Oaxaca, Mexico. Collected 21 Feb 1895 by E. W. Nelson and E. A. Goldman. Original number 7553.

#### *Liomys pictus isthmicus* Merriam

Proc. Biol. Soc. Washington 15: 46, 5 Mar 1902b.

= *Heteromys pictus pictus* Thomas, 1893. New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 73367. [Skin and skull]. [Lyon and Osgood (1909:45): Adult] male. Tehuantepec, [FC: 150 ft (46 m)], [Oaxaca], Mexico. Collected 28 Apr 1895 by E. W. Nelson and E. A. Goldman. Original number 7796.

#### *Liomys pictus rostratus* Merriam

Proc. Biol. Soc. Washington 15: 46, 5 Mar 1902b.

= *Heteromys pictus pictus* Thomas, 1893. New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 71488. [Skin and skull]. Adult male. Near Ometepec, [FC: 200 ft (61 m)], Guerrero, Mexico. Collected 14 Feb 1895 by E. W. Nelson and E. A. Goldman. Original number 7447.

***Liomys plantinarensis* Merriam**

Proc. Biol. Soc. Washington 15: 46, 5 Mar 1902b.

= *Heteromys pictus plantinarensis* (Merriam, 1902). New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 33595/45630. Skin and skull. Adult female. Plantinar, [FC: about 4,000 ft (1,219 m)], Jalisco, Mexico. Collected 4 Apr 1892 by E. W. Nelson, not E. A. Goldman as in original description. Original number 2383.

***Liomys sonorana* Merriam**

Proc. Biol. Soc. Washington 15: 47, 5 Mar 1902b.

= *Heteromys pictus hispidus* (J. A. Allen, 1897). New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 96252. [Skin and skull]. Adult male. Alamos, [FC: about 1,200 ft (366 m)], Sonora, Mexico. Collected 19 Dec 1898 by E. A. Goldman. Original number [FC: Nelson and Goldman] 13299.

***Liomys texensis* Merriam**

Proc. Biol. Soc. Washington 15: 44, 5 Mar 1902b.

= *Heteromys irroratus texensis* (Merriam, 1902). New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 58670. [Skin and skull]. Adult female. Brownsville, [Cameron County], Texas. Collected 19 Feb 1894 by J. A. Loring. Original number 1672.

***Liomys torridus* Merriam**

Proc. Biol. Soc. Washington 15: 45, 5 Mar 1902b.

= *Heteromys irroratus torridus* (Merriam, 1902). New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 69645. [Skin and skull]. Adult female. Cuicatlan, [FC: 1,800 ft (549 m)], Oaxaca, Mexico. Collected 14 Oct 1894 by E. W. Nelson and E. A. Goldman. Original number 6904.

***Liomys torridus minor* Merriam**

Proc. Biol. Soc. Washington 15: 45, 5 Mar 1902b.

= *Heteromys irroratus torridus* (Merriam, 1902). New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 70301. [Skin and skull]. Adult female. Huajuapam, [FC: 5,500 ft (1,676 m)], Oaxaca, Mexico. Collected 18 Nov 1894 by E. W. Nelson and E. A. Goldman. Original number 7061.

***Liomys veraecrucis* Merriam**

Proc. Biol. Soc. Washington 15: 47, 5 Mar 1902b.

= *Heteromys pictus pictus* Thomas, 1893. New name combination. See Hafner et al. (2007:1140) for use of *Heteromys*.

Holotype: 65457. [Skin and skull]. Adult female. San Andres Tuxtla, [FC: 1,000 ft (305 m)], Veracruz, Mexico. Collected 7 May 1894 by E. W. Nelson and E. A. Goldman. Original number 6174.

**Genus *Microdipodops* Merriam, 1891*****Microdipodops californicus* Merriam**

Proc. Biol. Soc. Washington 14: 128, 19 Jul 1901c.

= *Microdipodops megacephalus californicus* Merriam, 1901. See Hall (1941:250).

Holotype: 101227. [Skin and skull]. Young adult male. Sierra Valley, near Vinton, [FC: pass, 5,100 ft (1,544 m)], Plumas County, California. Collected 7 Aug 1900 by W. K. Fisher. Original number 1596.

***Microdipodops megacephalus* Merriam**

N. Amer. Fauna 5: 116, 30 Jul 1891a.

= *Microdipodops megacephalus megacephalus* Merriam, 1891. See Miller (1912:280).

Holotype: 24417/31823. Skin and skull. Adult male. Halleck, [Miller and Rhen (1901:155): East Humboldt Valley, Elko County], Nevada. Collected 23 Oct 1890 by V. Bailey. Original number 2005.

***Microdipodops megacephalus lucidus* Goldman**

Proc. Biol. Soc. Washington 39: 127, 27 Dec 1926.

= *Microdipodops pallidus pallidus* Merriam, 1901. See Hall (1941:269).

Holotype: 210397. Skin and skull. Adult male. Clayton Valley, 8 mi (13 km) southeast of Blair, altitude about 4,500 ft (1,372 m) [SL and FC: 4,000 ft (1,219 m)], [Esmeralda County], Nevada. Collected 19 Oct 1915 by L. J. Goldman. Original number 2424.

***Microdipodops megacephalus oregonus* Merriam**

Proc. Biol. Soc. Washington 14: 127, 19 Jul 1901c.

Holotype: 80128. [Skin and skull]. Young adult male. Lake Alvord, Alvord Desert, [Harney County], eastern Oregon. Restricted to Wild Horse Creek, 4 mi (6 km) northwest of Alvord Lake by Hall (1941:248). Collected 18 Aug 1896 by C. P. Streator. Original number 5430.

***Microdipodops pallidus* Merriam**

Proc. Biol. Soc. Washington 14: 127, 19 Jul 1901c.

= *Microdipodops pallidus pallidus* Merriam, 1901. See Hall (1941:269).

Holotype: 93520. [Skin and skull]. Adult female. [SL and FC: Mountains] 10 mi (16 km) east of Stillwater [Hall (1941:269): Mountain Well], near Sink of the Humboldt and Carson, Churchill County, Nevada. Collected 11 May 1898 by H. C. Oberholser. Original number 101.

**Genus *Perognathus* Wied-Neuwied, 1839*****Cricetodipus parvus* Peale**

U.S. Explor. Exped. 8: 53, 1848.

= *Perognathus parvus parvus* (Peale, 1848). See Miller (1912:264).

Holotype: No number given in original description. [Cassin (1858:48): alcoholic]. Young female. Oregon. Osgood (1900b:34) assumed the locality to be The Dalles, Wasco County, Oregon. Date of collection and collector unknown. The Type specimen was part of the U.S. Exploring Expedition collection that was sent to Washington, D.C., and later became part of the USNM. No specimen currently in the collection meets any criteria of the type.

***Otognosis longimembris* Coues**

Proc. Acad. Nat. Sci. Philadelphia 27: 305, 31 Aug 1875a.

= *Perognathus longimembris longimembris* (Coues, 1875). See Miller (1924:276).

Holotype: 9858/37356. Alcoholic [Skull removed]. Female. Fort Tejon, [Osgood (1900b:33): Canada de las Uvas (Grapevine Canyon), Kern County], California. Collected [Poole and Schantz (1942:431): 1857–1858] by J. Xantus. No original number.

***Perognathus amplus* Osgood**

N. Amer. Fauna 18: 32, 20 Sep 1900b.

= *Perognathus amplus amplus* Osgood, 1900. See Miller and Kellogg (1955:363).

Holotype: 34626/46711. Skin and skull. Adult male. Fort [SL: Camp] Verde, [Yavapai County], Arizona. Collected 26 Jun 1892 by J. A. Loring. Original number 272.

***Perognathus amplus jacksoni* Goldman**

J. Washington Acad. Sci. 23: 465, 15 Oct 1933b.

= *Perognathus amplus amplus* Osgood, 1900. See Hoffmeister (1986: 267).

Holotype: 212780. Skin and skull. Adult male. Congress Junction, altitude 3,000 ft (914 m), Yavapai County, Arizona. Collected 21 Jun 1916 by H. H. T. Jackson. Original number 381.

***Perognathus amplus pergracilis* Goldman**

J. Washington Acad. Sci. 22: 387, 19 Jul 1932c.

= *Perognathus amplus amplus* Osgood, 1900. See McKnight (2005:830).

Holotype: 227528. [Skin and skull]. Young adult male. Hackberry, altitude 3,500 ft (1,067 m), Mohave County, Arizona. Collected 14 Sep 1917 by E. A. Goldman. Original number 23304.

***Perognathus amplus rotundus* Goldman**

J. Washington Acad. Sci. 22: 387, 19 Jul 1932c.

= *Perognathus amplus amplus* Osgood, 1900. See Hoffmeister (1986:267).

Holotype: 250470. [Skin and skull]. Adult male. Welton, Yuma County, Arizona. Collected 9 Nov 1931 by B. Bailey. Original number A4353. 27029-X.

***Perognathus amplus taylori* Goldman**

J. Washington Acad. Sci. 22: 488, 19 Oct 1932d.

Holotype: 250533. [Skin and skull]. Adult female. Santa Rita Range Reserve, altitude 4,000 ft (1,219 m), near Northeast Station, 35 mi (56 km) south of Tucson, Pima County, Arizona. Collected 3 Aug 1930 by W. P. Taylor. Original number 1899.

***Perognathus apache* Merriam**

N. Amer. Fauna 1: 14, 25 Oct 1889e.

= *Perognathus flavescens apache* Merriam, 1889. See Williams (1978:45).

Holotype: [186504]. Skin and skull. Adult male. [SL: Near Keam's Canyon], Navajo County, Arizona. Collected 22 May 1888 by [MCC: J. Sullivan]. Original number [MCC: 11]. Merriam collection number 4253/4984.

***Perognathus apache caryi* Goldman**

Proc. Biol. Soc. Washington 31: 24, 16 May 1918.

= *Perognathus flavescens caryi* Goldman, 1918. See Williams (1978:51).

Holotype: 148206. [Skin and skull]. Adult male. Eight miles (13 km) west of Rifle, Garfield County, Colorado. Collected 4 Oct 1906 by M. Cary. Original number 937.

***Perognathus apache cleomophila* Goldman**

Proc. Biol. Soc. Washington 31: 23, 16 May 1918.

= *Perognathus flavescens apache* Merriam, 1889. See Williams (1978:45).

Holotype: 226344. Skin and skull. Adult male. [SL: 3 mi (5 km) northwest] Winona, altitude 6,400 ft (1,951 m), Coconino County, Arizona. Collected 19 Jul 1917 by E. A. Goldman. Original number 23127.

***Perognathus apache melanotis* Osgood**

N. Amer. Fauna 18: 27, 20 Sep 1900b.

= *Perognathus flavescens melanotis* Osgood, 1900. See Williams (1978:54).

Holotype: 97416. [Skin and skull]. Adult female. Casas Grandes, [FC: 4,300 ft (1,311 m)], Chihuahua, Mexico. Collected 21 May 1899 by E. A. Goldman. Original number [FC: Nelson and Goldman] 13750.

***Perognathus apache relictus* Goldman**

J. Mamm. 19: 495, 14 Nov 1938b.

= *Perognathus flavescens relictus* Goldman, 1938. See Williams (1978:54).

Holotype: 150768. [Skin and skull]. Young adult male. Medano Springs Ranch, altitude 7,600 ft (2,316 m), 15 mi (24 km) northeast of Mosca, San Luis Valley, [Alamosa County], southern Colorado. Collected 2 Nov 1907 by M. Cary. Original number 1222.

***Perognathus bimaculatus* Merriam**

N. Amer. Fauna 1: 12, 25 Oct 1889e.

= *Perognathus flavus bimaculatus* Merriam, 1889. See Osgood (1900b:24).

Holotype: 8455/23789. Skin and skull. Adult male. Fort Whipple, [Yavapai County], Arizona. Collected 21 May 1865 by E. Coues. Original number [SL: 1499].

***Perognathus bombycinus* Osgood**

Proc. Biol. Soc. Washington 20: 19, 23 Feb 1907b.

= *Perognathus longimembris bombycinus* Osgood, 1907. See Nelson and Goldman (1929b:104).

Holotype: 136123. [Skin and skull]. Adult male. Yuma, [Yuma County], Arizona. Collected 18 Mar 1905 by E. A. Goldman. Original number [FC: Nelson and Goldman 16844].

***Perognathus callistus* Osgood**

N. Amer. Fauna 18: 28, 20 Sep 1900b.

= *Perognathus fasciatus callistus* Osgood, 1900. See Jones (1953:524).

Holotype: 88245. Skin and skull. Young adult male. Kinney Ranch, Green River Basin, near [Williams and Genoways (1979:99): about 22 mi (35 km) south] Bitter Creek, Sweetwater County, Wyoming. Collected 14 May 1897 by J. A. Loring. Original number 4122.

***Perognathus columbianus* Merriam**

Proc. Acad. Nat. Sci. Philadelphia 46: 263, 27 Sep 1894a. Preprint of Proc. Acad. Nat. Sci. Philadelphia 46: 263, 23 Oct 1894a.

= *Perognathus parvus columbianus* Merriam, 1894. See Dalquest (1948:299).

Holotype: 27351/39450. Skin and skull. Young adult male. Pasco, Plains of Columbia on east side of Columbia River, near mouth of Snake River, [Franklin County], Washington. Collected 9 May 1891 by C. P. Streator. Original number 768.

***Perognathus fasciatus* Wied-Neuwied**

Nova Acta Phys.-Med. Acad. Caes. Leop.-Carol. 19: 369, 1839.

= *Perognathus fasciatus fasciatus* Wied-Neuwied, 1839. See Miller (1924:272).

Neotype: 168599. Skin and skull. Adult male. Buford, Williams County, North Dakota. Collected 6 May 1910 by H. E. Anthony. Original number [SL: 9].

Neotype designated by Williams and Genoways (1979:95).

***Perognathus fasciatus flavescens* Merriam**

N. Amer. Fauna 1: 11, 25 Oct 1889e.

= *Perognathus flavescens flavescens* Merriam, 1889. See Osgood (1900b:20).

Holotype: [186507]. Skin and skull. Adult male. Kennedy, [Cherry County], Nebraska. Collected 11 Jun 1888 by V. Bailey. Original number [SL: 23]. Merriam collection number 4303/5027.

***Perognathus fasciatus litus* Cary**

Proc. Biol. Soc. Washington 24: 61, 22 Mar 1911.

= *Perognathus fasciatus fasciatus* Wied-Neuwied, 1839. See Williams and Genoways (1979:95).

Holotype: 160600. [Skin and skull]. Adult female. Sun, [FC: sand flat along Sweetwater River], Sweetwater Valley, [Natrona County], Wyoming. Collected 18 Sep 1909 by M. Cary. Original number 1778.

***Perognathus flavescens perniger* Osgood**

Proc. Biol. Soc. Washington 17: 127, 9 Jun 1904.

Holotype: 57725. [Skin and skull]. Young adult female. Vermillion [Clay County], South Dakota. Collected 22 Aug 1889 by G. S. Agersborg. No original number.

***Perognathus flavus* Baird**

Proc. Acad. Nat. Sci. Philadelphia 7: 332, reported favorably for publication 24 Apr 1855, receipt acknowledged 15 Jun 1855 by the American Philosophical Society.

= *Perognathus flavus flavus* Baird, 1855. See Miller (1912:261).

Holotype: [148/1130]. Fragment of skull, skin lost. Age and sex unknown. El Paso, [El Paso County], Texas. Collected [MC: 1851] by J. H. Clark. No original number.

Type not designated by number, but reference to Baird (1857:425) reveals this specimen to be the only one that fits Baird's description.

***Perognathus flavus hopiensis* Goldman**

Proc. Biol. Soc. Washington 45: 89, 21 Jun 1932e.

Holotype: 248014. [Skin and skull]. Adult female. Oraibi, altitude 6,000 ft (1,829 m), Hopi Indian Reservation, Navajo County, Arizona. Collected 5 Jun 1927 by G. G. Cantwell. Original number 3037, not 3027 as in original description.

***Perognathus flavus mexicanus* Merriam**

Proc. Acad. Nat. Sci. Philadelphia 46: 265, 27 Sep 1894a. Preprint of Proc. Acad. Nat. Sci. Philadelphia 46: 265, 23 Oct 1894a.

Holotype: 50714. [Skin and skull]. Young adult [SL: male]. Tlalpan, [FC: 7,600 ft (2,316 m)], Valley of Mexico, Federal District (Distrito Federal), [Mexico]. Collected 4 Dec 1892 by E. W. Nelson. Original number 3978.

***Perognathus flavus piperi* Goldman**

Proc. Biol. Soc. Washington 30: 148, 27 Jul 1917b.

Holotype: 168650. [Skin and skull]. Adult male. Twenty-three miles (37 km) southwest of Newcastle, [Weston County], Wyoming. Collected 25 May 1910 by S. E. Piper. Original number 283.

***Perognathus flavus sonoriensis* Nelson and Goldman**

J. Washington Acad. Sci. 24: 267, 15 Jun 1934a.

Holotype: 250885. Skin and skull. Adult female. Costa Rica Ranch, lower Sonora River, Sonora, Mexico. Collected 13 Dec 1932 by V. Bailey and F. Winthrop. Original number VB 11282.

***Perognathus fuliginosus* Merriam**

N. Amer. Fauna 3: 74, 11 Sep 1890b.

= *Perognathus flavus fuliginosus* Merriam, 1890. See Osgood (1900b:25).

Holotype: 17708/24644. Skin and skull. Immature male. Cedar belt, northeast of [SL: main peak] San Francisco Mountain (Peaks), altitude 7,000 ft (2,134 m), [FC: below Partridge Spring, 7,250 ft (2,210 m)], Coconino County, Arizona. Collected 4 Oct 1889 by V. Bailey. Original number 559.

***Perognathus inornatus* Merriam**

N. Amer. Fauna 1: 15, 25 Oct 1889e.

= *Perognathus inornatus inornatus* Merriam, 1889. See Miller (1924:277).

Holotype: 13394/23790. Alcoholic, skull removed. Young adult male. Fresno [Fresno County], California. Collected, date unknown, by [MC: G. Eisen]. Alcoholic cataloged 6 Feb 1882, skull 3 Jul 1889. No original number.

***Perognathus longimembris arizonensis* Goldman**

Proc. Biol. Soc. Washington 44: 134, 17 Oct 1931a.

Holotype: 250032. [Skin and skull]. Adult female. Ten miles (16 km) south of Jacobs Pools, altitude 4,000 ft (1,219 m), Houserock Valley, north side of Marble Canyon of Colorado River, [Coconino County], Arizona. Collected 17 Jun 1931 by E. A. Goldman. Original number 23589.

***Perognathus longimembris panamintinus* Merriam**

Proc. Acad. Nat. Sci. Philadelphia 46: 265, 27 Sep 1894a. Preprint of Proc. Acad. Nat. Sci. Philadelphia 46: 265, 23 Oct 1894a.

Holotype: 27767/39866. Skin and skull. Young adult male. Perognathus Flat [(Grinnell (1922:105): near Bench Mark 4899, 2 mi (3.2 km) northeast of Harrisburg, on U.S. Geological Survey Ballarat Quadrangle, edition of Mar 1913)], [SL: altitude 5,200 ft (1,585 m)], [FC: Emigrant Wash], Panamint Mountains, [Inyo County], California. Collected 16 Apr 1891 by V. Bailey. Original number 2675.

***Perognathus merriami gilvus* Osgood**

N. Amer. Fauna 18: 22, 20 Sep 1900b.

Holotype: 35939/48273. Skin and skull. Adult male. Eddy (Carlsbad), [FC: Eddy County], New Mexico. Collected 18 Sep 1892 by B. H. Dutcher. Original number 329.

***Perognathus mollipilosus* Coues**

Proc. Acad. Nat. Sci. Philadelphia 27: 296, 31 Aug 1875a.

= *Perognathus parvus mollipilosus* Coues, 1875. See Osgood (1900b:36).

Holotype: 7251. Alcoholic. Female, age unknown. Fort Crook, [Shasta County], California. Collected by J. Feilner, date unknown. No original number. The museum number is incorrect; in the Skin Catalog it is a *Scalopus aquaticus*, in the Bone Catalog a *Podiceps*. The catalog entry for USNM

7339 matches the published data for this type, but this specimen cannot be found.

***Perognathus monticola* Baird**

Mammals in Rep. Expl. Surv. 8(1): 422, 1857.

= *Perognathus parvus parvus* (Peale, 1848). See Miller (1924: 278).

Holotype: 451/1585. Skin and skull, formerly mounted. [Lyon and Osgood (1909:53): Adult] female. West of the Rocky Mountains, St Mary's ? In his list of localities, Baird (1857:713) expands the locality to "St. Mary's Mission, Rocky Mountains. A catholic missionary station among the Flatheads in Washington Territory, west of Rocky Mountains, on the St. Mary's Fork of the Bitterroot. Near 46°30' Latitude 112°00' Longitude." Osgood (1900b:36) considered the specimen more likely came from The Dalles, [Wasco County], Oregon. Collected in 1853 by G. Suckley. No original number.

***Perognathus nevadensis* Merriam**

Proc. Acad. Nat. Sci. Philadelphia 46: 264, 27 Sep 1894a. Preprint of Proc. Acad. Nat. Sci. Philadelphia 46: 264, 23 Oct 1894a.

= *Perognathus longimembris nevadensis* Merriam, 1894. See Grinnell (1933:147).

Holotype: 54828. [Skin and skull]. Adult male. Halleck, East Humboldt Valley, [Elko County], Nevada. Collected 4 Jul 1893 by V. Bailey. Original number 4070.

***Perognathus olivaceus* Merriam**

N. Amer. Fauna 1: 15, 25 Oct 1889e.

= *Perognathus parvus olivaceus* Merriam, 1889. See Osgood (1900b:37).

Holotype: [186511]. Skin and skull. [SL: Adult] male. Kelton, [FC: foothills 8 mi (13 km) north], [Miller and Rehn (1901:159): near north end of Great Salt Lake], [Box Elder County], Utah. Collected 24 Oct 1888 by V. Bailey. Original number [SL: 338]. Merriam collection number 4876/5623.

***Perognathus olivaceus amoenus* Merriam**

N. Amer. Fauna 1: 16, 25 Oct 1889e.

= *Perognathus parvus olivaceus* Merriam, 1889. See Osgood (1900b:37).

Holotype: [186512]. Skin, skull [and baculum]. [SL: Adult] male. Nephi, [FC: 5,200 ft (1,585 m)], [Juab County], Utah. Collected 23 Nov 1888, according to original description and SL even though FC and MCC say 24 Nov, by V. Bailey. Original number [SL: 404]. Merriam collection number 5103/5795.

***Perognathus pacificus* Mearns**

Bull. Amer. Mus. Nat. Hist. 10: 299, 31 Aug 1898c.

= *Perognathus longimembris pacificus* Mearns, 1898. See von Bloeker (1932:128).

Holotype: 61022. Skin and skull. Adult female. Edge of Pacific Ocean, at the last Mexican Boundary Monument, No. 258, [San Diego County, California]. Collected 12 Jul 1894 by E. A. Mearns. Original number [FC: Mearns and Holzner] 3787.

*Perognathus panamintinus arenicola* Stephens

Proc. Biol. Soc. Washington 13: 153, 13 Jun 1900.

= *Perognathus longimembris bangsi* Mearns, 1898. See Grinnell (1913:329).

Holotype: 99828. [Skin and skull]. [Lyon and Osgood (1909:48): Adult] male. San Felipe Narrows, San Diego County, California. Collected 11 Apr 1892 by F. Stephens. Original number 2056. [SL: 2622-X].

*Perognathus panamintinus brevinasus* Osgood

N. Amer. Fauna 18: 30, 20 Sep 1900b.

= *Perognathus longimembris brevinasus* Osgood, 1900. See Miller (1924:276).

Holotype: [186515]. Skin and skull. Adult female. San Bernardino, [San Bernardino County], California. Collected 2 May 1885 by F. Stephens. Original number [SL: 49]. Merriam collection number 1109/1661.

*Perognathus parvus clarus* Goldman

Proc. Biol. Soc. Washington 30: 147, 27 Jul 1917b.

Holotype: 178939. [Skin and skull]. Adult male. Cumberland, [Lincoln County], Wyoming. Collected 18 May 1912 by S. G. Jewett. Original number 976.

*Perognathus parvus idahoensis* Goldman

Proc. Biol. Soc. Washington 35: 105, 17 Oct 1922.

Holotype: 236394. [Skin and skull]. Adult male. Echo Crater, 20 mi (32 km) southwest of Arco, [SL: Snake River Desert], Blaine (Butte) County, Idaho. Collected 14 Jun 1921 by L. J. Goldman. Original number 2752.

*Perognathus parvus magruderensis* Osgood

N. Amer. Fauna 18: 38, 20 Sep 1900b.

= *Perognathus parvus olivaceus* Merriam, 1889. See Hall (1946:367).

Holotype: 28427/40531. Skin and skull. Adult male. Mount Magruder, altitude 8,000 ft (2,438 m) [FC: 7,900–8,000 ft (2,408–2,438 m)], [Esmeralda County], Nevada. Collected 6 Jun 1891 by V. Bailey. Original number 2899.

*Perognathus parvus plerus* Goldman

J. Mamm. 20: 352, 14 Aug 1939c.

= *Perognathus parvus olivaceus* Merriam, 1889. See Durrant (1952:241).

Holotype: 263971. [Skin and skull]. Old adult male. North end of Stansbury Island, altitude 4,250 ft (1,295 m), Great Salt Lake, [Tooele County], Utah. Collected 23 Jun 1938 by W. H. Marshall. Original number [SL: 117].

## FAMILY GEOMYIDAE BONAPARTE, 1845

### Genus *Cratogeomys* Merriam, 1895

*Cratogeomys castanops angusticeps* Nelson and Goldman

Proc. Biol. Soc. Washington 47: 139, 13 Jun 1934b.

= *Cratogeomys castanops castanops* (Baird, 1852). See Hafner et al. (2008:203).

Holotype: 24503/31908. Skin and skull. Adult male. Eagle Pass, [Miller and Kellogg (1955:342): 3,000 ft (914 m)], [Maverick County], Texas. Collected 11 Nov 1890 by C. P. Streator. Original number 434.

*Cratogeomys castanops consitus* Nelson and Goldman

Proc. Biol. Soc. Washington 47: 140, 13 Jun 1934b.

Holotype: 50924. Skin and skull. Young adult male. Gallego, altitude 5,500 ft (1,676 m), Chihuahua, Mexico. Collected 16 Dec 1892 by C. P. Streator. Original number 2416.

*Cratogeomys castanops convexus* Nelson and Goldman

Proc. Biol. Soc. Washington 47: 142, 13 Jun 1934b.

= *Cratogeomys castanops castanops* (Baird, 1852). See Hafner et al. (2008:203).

Holotype: 127356. Skin and skull. Adult female. Seven miles (11 km) east of Las Vacas, Rio Grande Valley, Coahuila, Mexico, opposite Del Rio, Texas. Collected 9 Jun 1903 by J. H. Gaut. Original number 1469.

*Cratogeomys castanops excelsus* Nelson and Goldman

Proc. Biol. Soc. Washington 47: 143, 13 Jun 1934b.

= *Cratogeomys castanops consitus* Nelson and Goldman, 1934. See Hafner et al. (2008:203).

Holotype: 246533. Skin and skull. Adult male. San Pedro, 10 mi (16 km) west of Laguna de Mayran, Coahuila, Mexico. Collected 28 Mar 1926 by E. A. Goldman. Original number 23561.

*Cratogeomys castanops goldmani* Merriam

N. Amer. Fauna 8: 160, 31 Jan 1895.

= *Cratogeomys goldmani goldmani* Merriam, 1895. See Hafner et al. (2008: 204).

Holotype: 57965. [Skin and skull]. Young adult female. Canitas, Zacatecas, Mexico. Collected 24 Dec 1893 by E. A. Goldman. Original number 286.

*Cratogeomys castanops hirtus* Nelson and Goldman

Proc. Biol. Soc. Washington 47: 138, 13 Jun 1934b.

Holotype: 58325. Skin and skull. Adult male. Albuquerque, altitude 5,000 ft (1,524 m), [Bernalillo County], New Mexico. Collected 17 Jan 1894 by J. A. Loring. Original number 1558.

*Cratogeomys castanops lacrimalis* Nelson and Goldman

Proc. Biol. Soc. Washington 47: 137, 13 Jun 1934b.

= *Cratogeomys castanops castanops* (Baird, 1852). See Hafner et al. (2008:203).

Holotype: 119071. Skin and skull. Adult male. Roswell, altitude 3,500 ft (1,069 m) [FC: altitude about 50 ft (15 m) above town altitude], Chaves County, New Mexico. Collected 13 Sep 1902 by J. H. Gaut. Original number 476.

***Cratogeomys castanops peridoneus* Nelson and Goldman**

Proc. Biol. Soc. Washington 47: 148, 13 Jun 1934b.

= *Cratogeomys goldmani subnubilus* Nelson and Goldman, 1934. See Hafner et al. (2008:204).

Holotype: 82049. Skin and skull. Adult male. Rio Verde, altitude [FC: about] 3,000 ft (914 m), San Luis Potosi, Mexico. Collected 10 Jan 1897 by [E. W.] Nelson and [E. A.] Goldman. Original number 10423.

***Cratogeomys castanops perplanus* Nelson and Goldman**

Proc. Biol. Soc. Washington 47: 136, 13 Jun 1934b.

= *Cratogeomys castanops castanops* (Baird, 1852). See Hafner et al. (2008:203).

Holotype: 97171. Skin and skull. Adult male. Tascosa, altitude 3,000 ft (914 m), Oldham County, Texas. Collected 5 Jun 1899 by V. Bailey. Original number 6941.

***Cratogeomys castanops planifrons* Nelson and Goldman**

Proc. Biol. Soc. Washington 47: 146, 13 Jun 1934b.

= *Cratogeomys goldmani subnubilus* Nelson and Goldman, 1934. See Hafner et al. (2008:204).

Holotype: 93942. Skin and skull. Adult male. Miquihuana, altitude 5,000 ft (1,524 m), southern Tamaulipas, not Nuevo Leon as in original description, Mexico. Collected 9 Jun 1898 by [E. W.] Nelson and [E. A.] Goldman. Original number 12527.

***Cratogeomys castanops subnubilus* Nelson and Goldman**

Proc. Biol. Soc. Washington 47: 145, 13 Jun 1934b.

= *Cratogeomys goldmani subnubilus* Nelson and Goldman, 1934. See Hafner et al. (2008:204).

Holotype: 79482. Skin and skull. Adult male. Carneros, altitude 6,800 ft (2,073 m), Coahuila, Mexico. Collected 12 Aug 1896 by [E. W.] Nelson and [E. A.] Goldman. Original number 10018.

***Cratogeomys castanops subsimus* Nelson and Goldman**

Proc. Biol. Soc. Washington 47: 144, 13 Jun 1934b.

= *Cratogeomys castanops consitus* Nelson and Goldman, 1934. See Hafner et al. (2008:203).

Holotype: 51048. Skin and skull. Adult male. Jaral (San Antonio de Jaral), southeastern Coahuila, Mexico. Collected 14 Jan 1893 by C. P. Streator. Original number 2555.

***Cratogeomys castanops tamaulipensis* Nelson and Goldman**

Proc. Biol. Soc. Washington 47: 141, 13 Jun 1934b.

Holotype: 116535. Skin and skull. Adult female. Matamoras, Tamaulipas, Mexico. Collected 8 Feb 1902 by [E. W.] Nelson and [E. A.] Goldman. Original number 14885.

***Cratogeomys estor* Merriam**

N. Amer. Fauna 8: 155, 31 Jan 1895.

= *Cratogeomys perotensis* Merriam, 1895. See Hafner et al. (2005:1103).

Holotype: 54308. [Skin and skull]. Adult male. Las Vigas, altitude 8,000 ft (2,438 m), Veracruz, [Mexico]. Collected 12 Jun 1893 by E. W. Nelson. Original number 5005.

***Cratogeomys fulvescens* Merriam**

N. Amer. Fauna 8: 161, 31 Jan 1895. See Hafner et al. (2005:1103) for current usage.

Holotype: 58168. [Skin and skull]. Adult male. Chalchicomula, [FC: 8,200 ft (2,499 m)], Puebla, Mexico. Collected 15 Jan 1894 by E. W. Nelson and E. A. Goldman. Original number 5651.

***Cratogeomys fulvescens subluteus* Nelson and Goldman**

Proc. Biol. Soc. Washington 47: 152, 13 Jun 1934b.

= *Cratogeomys fulvescens* Merriam, 1895. See Hafner et al. (2005:1103).

Holotype: 54300. Skin and skull. Adult female, not male as in original description. Perote, altitude 7,800 ft (2,377 m), Veracruz, Mexico. Collected 3 Jun 1893 by [E. W.] Nelson and [E. A.] Goldman. Original number [FC: EWN] 4929.

***Cratogeomys merriami irolonis* Nelson and Goldman**

Proc. Biol. Soc. Washington 47: 150, 13 Jun 1934b.

= *Cratogeomys perotensis* Merriam, 1895. See Hafner et al. (2005:1103).

Holotype: 53494. Skin and skull. Adult female. Irolo, altitude 7,600 ft (2,316 m), Hidalgo, Mexico. Collected 30 Mar 1893 by [E. W.] Nelson and [E. A.] Goldman. Original number [FC: EWN] 4520.

***Cratogeomys merriami saccharalis* Nelson and Goldman**

Proc. Biol. Soc. Washington 47: 149, 13 Jun 1934b.

= *Cratogeomys merriami* (Thomas, 1893). See Hafner et al. (2005:1103).

Holotype: 55347. Skin and skull. Adult male. Atlixco, altitude 5,400 ft (1,646 m), Puebla, Mexico. Collected 29 Jul 1893 by [E. W.] Nelson and [E. A.] Goldman. Original number 5279.

***Cratogeomys oreocetes* Merriam**

N. Amer. Fauna 8: 156, 31 Jan 1895.

= *Cratogeomys merriami* (Thomas, 1893). See Hafner et al. (2005:1103).

Holotype: 57963. [Skin and skull]. Young adult female. Mount Popocatepetl, altitude 11,000 ft (3,353 m), [Mexico], Mexico. Collected 7 Jan 1894 by E. W. Nelson and E. A. Goldman. Original number 5647, not 47 as in original description.

***Cratogeomys peregrinus* Merriam**

N. Amer. Fauna 8: 158, 31 Jan 1895.

= *Cratogeomys merriami* (Thomas, 1893). See Hafner et al. (2005:1103).

Holotype: 57964. [Skin and skull]. Old female. Mount Iztacihuatl, altitude 11,500 ft (3,505 m), [Mexico], Mexico. Collected 9 Jan 1894 by E. W. Nelson and E. A. Goldman. Original number 5650, not 50 as in original description.

#### *Cratogeomys perotensis* Merriam

N. Amer. Fauna 8: 154, 31 Jan 1895. See Hafner et al. (2005: 1103) for current usage.

Holotype: 54299. [Skin and skull]. Adult female. Cofre de Perote, altitude 9,500 ft (2,896 m), Veracruz, Mexico. Collected 28 May 1893 by E. W. Nelson. Original number 4889.

#### *Geomys clarkii* Baird

Proc. Acad. Nat. Sci. Philadelphia 7: 332, reported favorably for publication 24 Apr 1855b, receipt acknowledged 15 Jun 1855 by the American Philosophical Society.

= *Cratogeomys castanops castanops* (Baird, 1852). See Hafner et al. (2008:203).

Holotype: [6/1624. Skin, skull, and partial skeleton]. Presidio del Norte, on the Rio Grande, [Chihuahua, Mexico]. Nelson and Goldman (1934b:140) add "at or near the present town of Ojinaga." Collected by J. H. Clark; date unknown. Skin catalogued 12 Feb 1852; skull 15 Feb 1855. Type not designated by number in original description, but only one specimen, a skin and skull, is mentioned. Reference to Baird (1857:384) shows that he had two specimens from Presidio de Norte collected by Clark; a skull only and the one given above whose measurements match those in the original description.

#### *Geomys fumosus* Merriam

Proc. Biol. Soc. Washington 7: 165, 29 Sep 1892b.

= *Cratogeomys fumosus fumosus* (Merriam, 1892). See Hooper (1948:302).

Holotype: 33202/45207. Skin and skull. Adult male. Colima City, [Colima], Mexico. Restricted to 3 mi (4.8 km) west of Colima City, altitude 1,700 ft (518 m), Colima, Mexico by Miller and Kellogg (1955:346). Collected 27 Mar 1892 by E. W. Nelson. Original number 2338.

#### *Geomys gymnurus* Merriam

Proc. Biol. Soc. Washington 7: 166, 29 Sep 1892b.

= *Cratogeomys fumosus fumosus* (Merriam, 1892). See Hafner et al. (2004:1177).

Holotype: 33579/45614. Skin and skull. Adult female. Zapotlan, [FC: about 400 ft (122 m)], Jalisco, Mexico. Collected 16 Apr 1892 by E. W. Nelson. Original number 2460.

#### *Platygeomys gymnurus inclarus* Goldman

J. Mamm. 20: 88, 14 Feb 1939d.

= *Cratogeomys fumosus fumosus* (Merriam, 1892). See Hafner et al. (2004:1177).

Holotype: 33582/45617. Skin and skull. Young female. North slope Sierra Nevada de Colima, altitude 10,000 ft (3,048 m), Jalisco, Mexico. Collected 22 Apr 1892 by [E. W.] Nelson and [E. A.] Goldman. Original number [FC: EWN] 2532.

#### *Platygeomys gymnurus imparilis* Goldman

J. Mamm. 20: 89, 14 Feb 1939d.

= *Cratogeomys fumosus imparilis* (Goldman, 1939). See Hafner et al. (2004:1178).

Holotype: 34918/47183. Skin and skull. Adult male. Patzcuaro, altitude [FC: about] 7,000 ft (2,134 m), Michoacan, Mexico. Collected 23 Jul 1892 by [E. W.] Nelson and [E. A.] Goldman. Original number [FC: EWN] 2918.

#### *Platygeomys neglectus* Merriam

Proc. Biol. Soc. Washington 15: 68, 22 Mar 1902a.

= *Cratogeomys fumosus tylorhinus* (Merriam, 1895). See Hafner et al. (2004:1178).

Holotype: 81218. [Skin and skull]. Adult male. Cerro de la Calentura, altitude 9,000 ft (2,743 m) [FC: about 9,500 ft (2,896 m)], about 8 mi (13 km) northwest of Pinal de Amoles, Queretaro, Mexico. Collected 14, not 4 as in original description, Sep 1896 by E. A. Goldman. Original number [FC: Nelson and Goldman] 10142.

#### *Platygeomys planiceps* Merriam

N. Amer. Fauna 8: 168, 31 Jan 1895.

= *Cratogeomys planiceps* (Merriam, 1895). See Hafner et al. (2004:1178).

Holotype: 55906. Skin and skull. Adult male. North slope Volcan Toluca, [FC: 9,000 ft (2,743 m)], [Mexico, Mexico]. Collected 12 Sep 1893 by E. W. Nelson. Original number 5466.

#### *Platygeomys tylorhinus* Merriam

N. Amer. Fauna 8: 167, 31 Jan 1895.

= *Cratogeomys fumosus tylorhinus* (Merriam, 1895). See Hafner et al. (2004:1178).

Holotype: 51883. [Skin and skull]. Adult male. Tula, [FC: 6,800 ft (2,073 m)], Hidalgo, Mexico. Collected 13 Mar 1893 by E. W. Nelson. Original number 4442.

#### *Platygeomys tylorhinus angustirostris* Merriam

Proc. Biol. Soc. Washington 16: 81, 29 May 1903a.

= *Cratogeomys fumosus angustirostris* (Merriam, 1903). See Hafner et al. (2004:1177).

Holotype: 125688. [Skin and skull]. Adult female. Patamban, [FC: 10,000 ft (3,048 m)], Michoacan, Mexico. Collected 2 Feb 1903 by [E. W.] Nelson and [E. A.] Goldman. Original number 15850.

#### *Platygeomys varius* Goldman

J. Mamm. 20: 90, 14 Feb 1939d.

= *Cratogeomys fumosus angustirostris* (Merriam, 1903). See Hafner et al. (2004:1177).

Holotype: 126144. Skin and skull. Adult male. Uruapan, altitude about 6,000 ft (1,829 m), Michoacan, Mexico. Collected 8 Mar 1903 by [E. W.] Nelson and [E. A.] Goldman. Original number 16105.

#### *Platygeomys zinseri* Goldman

J. Mamm. 20: 91, 14 Feb 1939d.

= *Cratogeomys fumosus angustirostris* (Merriam, 1903). See Hafner et al. (2004:1177).

Holotype: 78971. Skin and skull. Adult male. Lagos, altitude 6,150 ft (1,875 m), Jalisco, Mexico. Collected 29 Jun 1896 by [E. W.] Nelson and [E. A.] Goldman. Original number 9718.

#### *Pseudostoma castanops* Baird

In Stansbury, Expl. Surv. Valley Great Salt Lake, Utah, App. C., Jun 1852: p. 313.

= *Cratogeomys castanops castanops* (Baird, 1852). See Miller (1912:247).

Holotype: 4007/3861. Skin and skull. Unknown age and sex. Along the prairie road to Bent's Fort. [Merriam (1895:159): on the Arkansas River near the present town of Las Animas, Bent County, Colorado]. Collected by [Baird (1857:385): J. W.] Abert, date unknown. [Cataloged 18 Jun 1860].

Type not designated by number, but Baird (1857:385) states there was only one specimen collected by Abert at this locality.

### Genus *Geomys* Rafinesque, 1817

#### *Geomys arenarius* Merriam

N. Amer. Fauna 8: 139, 31 Jan 1895.

= *Geomys arenarius arenarius* Merriam, 1895. See Davis (1940:22).

Holotype: 18117/25015. Skin and skull. Adult male. El Paso, [El Paso County], Texas. Collected 14, not 13 as in original description, Dec 1899 by V. Bailey. Original number 798.

#### *Geomys breviceps* Baird

Proc. Acad. Nat. Sci. Philadelphia 7: 335, reported favorably for publication 24 Apr 1855a, receipt acknowledged 15 Jun 1855 by the American Philosophical Society.

= *Geomys breviceps breviceps* Baird, 1855. See Davis (1938:488).

Holotype: 156/1138. Skin and skull. Adult female. [SL: Prairie Mer Rouge], Morehouse Parish, Louisiana. Collected [SL: 1852] by J. Fairie. No original number.

Type not designated by number in original description, but measurements therein can only be associated with those given for 156 in tables on pages 379 and 380 in Baird, 1857.

#### *Geomys breviceps ammophilus* Davis

Bull. Texas Agr. Exp. Stat. 590: 16, 23 Oct 1940.

= *Geomys attwateri ammophilus* Davis, 1940. See Patton (2005b:862).

Holotype: 97010. Skin and skull. Adult female. Cuero, De Witt County, Texas. Collected 26 Apr 1899 by V. Bailey. Original number 6841.

#### *Geomys breviceps attwateri* Merriam

N. Amer. Fauna 8: 135, 31 Jan 1895.

= *Geomys attwateri attwateri* Merriam, 1895. See Patton (2005b:862).

Holotype: 51382. [Skin and skull]. Adult male. Rockport, Aransas County, Texas. Collected 18 Nov 1892 by H. H. Keays. Original number 36.

#### *Geomys breviceps dutcheri* Davis

Bull. Texas Agr. Exp. Stat. 590: 12, 23 Oct 1940.

= *Geomys breviceps sagittalis* Merriam, 1895. See Heaney and Timm (1983:18).

Holotype: 64591. Skin and skull. Adult female. Fort Gibson, Muskogee County, Oklahoma. Collected 27 Apr 1894 by B. H. Dutcher. Original number 584.

#### *Geomys breviceps llanensis* V. Bailey

N. Amer. Fauna 25: 129, 24 Oct 1905.

= *Geomys texensis llanensis* V. Bailey, 1905. See Jolley et al. (2000:1026).

Holotype: 97086. [Skin and skull]. Adult male. Llano, [Llano County], Texas. Collected 15 May 1899 by V. Bailey. Original number 6912.

#### *Geomys breviceps sagittalis* Merriam

N. Amer. Fauna 8: 134, 31 Jan 1895.

Holotype: 32936/44957. Skin and skull. Adult male. Clear Creek, Galveston Bay, [SL: Galveston County], Texas. Collected 28 Mar 1892 by W. Lloyd. Original number 1181.

#### *Geomys bursarius lutescens* Merriam

N. Amer. Fauna 4: 51, 8 Oct 1890f.

= *Geomys lutescens* Merriam, 1890. For specific status of *G. lutescens* see Sudman et al. (2006:668) and Chambers et al. (2009:537).

Holotype: 16677/23595. Skin and skull. Adult male, not female as in original description. Sandhills on Birdwood Creek, Lincoln County, Nebraska. Collected 27 May 1889 by A. B. Baker. Original number [SL: 11].

#### *Geomys bursarius wisconsinensis* Jackson

Proc. Biol. Soc. Washington 70: 33, 28 Jun 1957.

Holotype: 243005. Skin and skull. Adult female. Lone Rock, Richland County, Wisconsin. Collected 13 Sep 1922 by H. H. T. Jackson. Original number 1604.

#### *Geomys personatus* True

Proc. U.S. Natl. Mus. 11: 159, 5 Jan 1889.

= *Geomys personatus personatus* True, 1889. See Davis (1940:26).

Syntypes: 19667/37999. Skin and skull. [Lyon and Osgood (1909: 71: Adult] male.

19668/38000. Skin and skull. [Lyon and Osgood (1909:71: Adult] female.

Padre Island, [Cameron County], Texas. Collected 11 Apr 1888, collector unknown. Purchased from C. K. Worthen. No type designated by number in original description. Measurements and sex are given for two specimens, and these are the only specimens in the collection that are from 11 Apr 1888. Their measurements match those in the original description as well.

#### *Geomys personatus fallax* Merriam

N. Amer. Fauna 8: 144, 31 Jan 1895.

Holotype: 32031/43845. Skin and skull. Adult male. South side of Nueces Bay, [Nueces County], Texas. Collected 30 Nov 1891 by W. Lloyd. Original number 949.

#### *Geomys personatus tropicalis* Goldman

Proc. Biol. Soc. Washington 28: 134, 29 Jun 1915.

= *Geomys tropicalis* Goldman, 1915. See Alvarez (1963:426).

Holotype: 92946. [Skin and skull]. Adult male. Alta Mira, [FC: about 75 ft (23 m)], Tamaulipas, Mexico. Collected 18 Apr 1898 by E. A. Goldman. Original number [FC: Nelson and Goldman] 12320.

#### *Geomys texensis* Merriam

N. Amer. Fauna 8: 137, 31 Jan 1895.

= *Geomys texensis texensis* Merriam, 1895. See Smolen et al. (1993:10).

Holotype: [186502]. Skin and skull. Adult female. Mason, Mason County, Texas. Collected 17 Dec 1885 by I. B. Henry. Original number [MCC: 27]. Merriam collection number 1690/2259.

#### *Geomys tuza mobilensis* Merriam

N. Amer. Fauna 8: 119, 31 Jan 1895.

= *Geomys pinetis mobilensis* Merriam, 1895. See Harper (1952:37). See Sudman et al. (2006:673) and Chambers et al. (2009:543) for use of *G. p. mobilensis*.

Holotype: 33988/46023. Skin and skull. Adult male. [FC: Point Clear], Mobile Bay, [Baldwin County], Alabama. Collected 26 Apr 1892 by R. J. Thompson. Original number 50.

### Genus *Orthogeomys* Merriam, 1895

#### *Heterogeomys hispidus chiapensis* Nelson and Goldman

Proc. Biol. Soc. Washington 42: 151, 30 Mar 1929c.

= *Orthogeomys hispidus chiapensis* (Nelson and Goldman, 1929). See Russell (1968:531).

Holotype: 76737. [Skin and skull]. Adult female. Tenejapa, altitude 7,800 ft (2,377 m), about 16 mi (26 km) northeast of San Cristobal, Chiapas, Mexico. Collected 28 Nov 1895 by E. W. Nelson and E. A. Goldman. Original number 8682.

#### *Heterogeomys hispidus concavus* Nelson and Goldman

Proc. Biol. Soc. Washington 42: 148, 30 Mar 1929c.

= *Orthogeomys hispidus concavus* (Nelson and Goldman, 1929). See Russell (1968:531).

Holotype: 81227. [Skin and skull]. Adult male. Pinal de Amoles, altitude [SL: about] 5,500 ft (1,676 m), Queretaro, Mexico. Collected 9 Sep 1896 by E. W. Nelson and E. A. Goldman. Original number 10130.

#### *Heterogeomys hispidus isthmicus* Nelson and Goldman

Proc. Biol. Soc. Washington 42: 149, 30 Mar 1929c.

= *Orthogeomys hispidus isthmicus* (Nelson and Goldman, 1929). See Hall (1981:511).

Holotype: 78062. [Skin and skull]. Adult male. Jaltipan, altitude 100 ft (30 m), Veracruz, Mexico. Collected 2 May 1896 by E. W. Nelson and E. A. Goldman. Original number 9574.

#### *Heterogeomys hispidus teapensis* Goldman

J. Washington Acad. Sci. 29: 176, 15 Apr 1939e.

= *Orthogeomys hispidus teapensis* (Goldman, 1939). See Hall (1981:511).

Holotype: 100035. Skin and skull. Adult female. Teapa, Tabasco, Mexico. Collected 23 Mar 1900 by [E. W.] Nelson and [E. A.] Goldman. Original number 14056.

#### *Heterogeomys hispidus tehuantepecus* Goldman

J. Washington Acad. Sci. 29: 175, 15 Apr 1939e.

= *Orthogeomys hispidus tehuantepecus* (Goldman, 1939). See Russell (1968:531).

Holotype: 73434. Skin and skull. Adult male. Mountains 12 mi (19 km) northwest of Santo Domingo and about 60 mi (97 km) north of Tehuantepec City, altitude 1,600 ft (488 m), Oaxaca, Mexico. Collected 18 Jun 1895 by [E. W.] Nelson and [E. A.] Goldman. Original number 8092.

#### *Heterogeomys hispidus yucatanensis* Nelson and Goldman

Proc. Biol. Soc. Washington 42: 150, 30 Mar 1929c.

= *Orthogeomys hispidus yucatanensis* (Nelson and Goldman, 1929). See Russell (1968:531).

Holotype: 100344. [Skin and skull]. Adult male. Campeche, altitude 50 ft (15 m), Campeche, Mexico. Collected 7 Jun 1900 by E. W. Nelson and E. A. Goldman. Original number 14233.

#### *Heterogeomys torridus* Merriam

N. Amer. Fauna 8: 183, 31 Jan 1895.

= *Orthogeomys hispidus torridus* (Merriam, 1895). See Russell (1968:531).

Holotype: 63629. [Skin and skull]. Adult female. Chichicaxtle, Veracruz, Mexico. Collected 15 Feb 1894 by E. W. Nelson [SL: and E. A. Goldman]. Original number [FC: Nelson and Goldman] 5850.

#### *Macrogeomys costaricensis* Merriam

N. Amer. Fauna 8: 192, 31 Jan 1895.

= *Orthogeomys cherriei costaricensis* (Merriam, 1895). See Russell (1968:532).  
 Holotype: 12911/22551. Skin and skull. Unsexed juvenile. Pacuare, [Limon], Costa Rica. Collected 1876 by J. Cooper. Original number 96.

#### *Macrogomys dariensis* Goldman

Smithsonian Misc. Coll. 60 (2): 8, 20 Sep 1912b.  
 = *Orthogeomys dariensis* (Goldman, 1912). See Russell (1968:532).  
 Holotype: 179587. [Skin and skull]. Adult male. Cana, altitude 2,000 ft (610 m), [Darien], in the mountains of eastern Panama. Collected 31 May 1912 by E. A. Goldman. Original number 21760.

#### *Macrogomys dolichocephalus* Merriam

N. Amer. Fauna 8: 189, 31 Jan 1895.  
 = *Orthogeomys heterodus dolichocephalus* (Merriam, 1895). See Russell (1968:532).  
 Holotype: 8627/36295. Skin and skull. Adult male. San Jose, [San Jose], Costa Rica. Collected Jan 1866 by J. C. Zelodon. No original number. Goodwin (1946:377) says the type probably came from Zarcero or Palmira.

#### *Orthogeomys grandis allenii* Nelson and Goldman

J. Mamm. 11: 156, 9 May 1930b.  
 Holotype: 70586. [Skin and skull]. Adult male. Near Acapulco, altitude 2,000 ft (610 m), Guerrero, Mexico. Collected 21 Jan 1895 by [E. W.] Nelson and [E. A.] Goldman. Original number 7409.

#### *Orthogeomys grandis annexus* Nelson and Goldman

Proc. Biol. Soc. Washington 46: 195, 26 Oct 1933.  
 Holotype: 75949. Skin and skull. Adult female. Tuxtla Gutierrez, altitude 2,600 ft (792 m), Chiapas, Mexico. Collected 11 Sep 1895 by [E. W.] Nelson and [E. A.] Goldman. Original number 8418.

#### *Orthogeomys grandis felipensis* Nelson and Goldman

J. Mamm. 11: 157, 9 May 1930b.  
 Holotype: 67030. [Skin and skull]. Adult male. Cerro San Felipe, altitude 10,000 ft (3,048 m), 10 mi (16 km) north of Oaxaca, Oaxaca, Mexico. Collected 28 Aug 1894 by [E. W.] Nelson and [E. A.] Goldman. Original number 6669.

#### *Orthogeomys grandis guerrerensis* Nelson and Goldman

J. Mamm. 11: 158, 9 May 1930b.  
 Holotype: 126536. [Skin and skull]. Adult female. El Limon, in the valley of the Rio de las Balsas, about 20 mi (32 km) northwest of La Union, Guerrero, [Mexico]. Collected 2 Apr 1903 by [E. W.] Nelson and [E. A.] Goldman. Original number 16286.

#### *Orthogeomys grandis vulcani* Nelson and Goldman

Proc. Biol. Soc. Washington 44: 105, 17 Oct 1931.

Holotype: 76745. [Skin and skull]. Adult male. Volcan Santa Maria, altitude 9,000 ft (2,743 m), Quezaltenango, Guatemala. Collected 28 Jan 1896 by [E. W.] Nelson and [E. A.] Goldman. Original number 9243.

#### *Orthogeomys latifrons* Merriam

N. Amer. Fauna 8: 178, 31 Jan 1895.  
 = *Orthogeomys grandis latifrons* Merriam, 1895. See Nelson and Goldman (1930b:156).  
 Holotype: [61239. Skin and skull. Adult, sex unknown]. Guatemala, exact locality unknown. [Nelson and Goldman (1930b:156); probably from the lowlands near the Pacific coast]. [Date collected and collector unknown; cataloged 19 Nov 1894]. Original number 2, World's Fair exhibit of Guatemala.

#### *Orthogeomys nelsoni* Merriam

N. Amer. Fauna 8: 176, 31 Jan 1895.  
 = *Orthogeomys grandis nelsoni* Merriam, 1895. See Nelson and Goldman (1930b:156).  
 Holotype: 66751. [Skin and skull]. Adult male. Mount Zemopaltepec, altitude 8,000 ft (2,438 m), Oaxaca, Mexico. Collected 8 Jul 1894 by E. W. Nelson and E. A. Goldman. Original number 6376.

### Genus *Pappogeomys* Merriam, 1895

#### *Geomys nelsoni* Merriam

Proc. Biol. Soc. Washington 7: 164, 29 Sep 1892b.  
 = *Pappogeomys bulleri bulleri* (Thomas, 1892). See Hall (1981:516).  
 Holotype: 33587/45622. Skin and skull. Old male. North slope Sierra Nevada de Colima, altitude 1,908 m or 6,500 ft, Jalisco, Mexico. Collected 11 Apr 1892 by E. W. Nelson. Original number 2436.

#### *Pappogeomys albinasus* Merriam

N. Amer. Fauna 8: 149, 31 Jan 1895.  
 = *Pappogeomys bulleri albinasus* Merriam, 1895. See Goldman (1939f:94).  
 Holotype: 34138/46215. Skin and skull. Adult male [originally processed as female]. Altemajac, [FC: about 4,500 ft (1,372 m)], a suburb of Guadalajara, Jalisco, Mexico. Collected 21 May 1892 by E. W. Nelson. Original number 2654.

#### *Pappogeomys bulleri amecensis* Goldman

J. Mamm. 20: 97, 14 Feb 1939f.  
 = *Pappogeomys bulleri bulleri* (Thomas, 1892). See Hafner et al. (2009:54).  
 Holotype: 82189. Skin and skull. Adult male. Mountains near Ameca, altitude 6,500 ft (1,981 m), Jalisco, Mexico. Collected 20 Feb 1897 by [E. W.] Nelson and [E. A.] Goldman. Original number 10554.

#### *Pappogeomys bulleri flammeus* Goldman

J. Mamm. 20: 95, 14 Feb 1939f.

= *Pappogeomys bulleri bulleri* (Thomas, 1892). See Hall (1981: 516).

Holotype: 88117. Skin and skull. Adult male. Milpillas, 5 mi (8 km) southwest of San Sebastian, altitude 3,800 ft (1,158 m), northwestern Jalisco, Mexico. Collected 15 Mar 1897 by [E. W.] Nelson and [E. A.] Goldman. Original number 10716.

#### *Pappogeomys bulleri lagunensis* Goldman

J. Mamm. 20: 96, 14 Feb 1939f.

= *Pappogeomys bulleri bulleri* (Thomas, 1892). See Hall (1981: 516).

Holotype: 88121. Skin and skull. Adult male. La Laguna, altitude 6,500 ft (1,981 m), Sierra de Juanacatlán, northwestern Jalisco, Mexico. Collected 24 Mar 1897 by [E. W.] Nelson and [E. A.] Goldman. Original number 10802.

#### *Pappogeomys bulleri nayaritensis* Goldman

J. Mamm. 20: 94, 14 Feb 1939f.

Holotype: 88124. Skin and skull. Adult male. Jalisco, about 10 mi (16 km) south of Tepic, altitude 5,000 ft (1,524 m), Nayarit, Mexico. Collected 10 Apr 1897 by [E. W.] Nelson and [E. A.] Goldman. Original number 10886.

### Genus *Thomomys* Wied-Neuwied, 1839

#### *Geomys fulvus* Woodhouse

Proc. Acad. Nat. Sci. Philadelphia 6: 201, presented at meeting of 28 Dec 1852c, receipt acknowledged 7 Feb 1853 by the Smithsonian Institution.

= *Thomomys bottae fulvus* (Woodhouse, 1852). See Goldman (1935a:156).

Holotype: [2674. Mounted skin, no skull. Sex and age unknown]. San Francisco Mountain (Peaks), [Coconino County], New Mexico (Arizona). Collected [Poole and Schantz (1942:306): October] [Baird (1857:403) 1851] by S. W. Woodhouse. No original number. Type not designated by number in original description. Woodhouse based his description on a single specimen, and comparing his data with that of Baird (1857:403) shows the above specimen to be the one.

#### *Thomomys alexandrae* Goldman

J. Washington Acad. Sci. 23: 464, 15 Oct 1933b.

= *Thomomys bottae alexandrae* Goldman, 1933. See Benson (1935:449).

Holotype: 250969. Skin and skull. Adult male. Plain 5 mi (8 km) southeast of Rainbow Lodge, altitude 6,200 ft (1,890 m), near Navajo Mountain, Coconino County, Arizona. Collected 16 Jun 1933 by E. A. Goldman. Original number 23613.

#### *Thomomys alpinus* Merriam

Proc. Biol. Soc. Washington 11: 216, 15 Jul 1897c.

= *Thomomys bottae alpinus* Merriam, 1897. See Goldman (1935a:154).

Holotype: 30528/42512. Skin and skull. Adult male. [FC: Head of] Big Cottonwood Meadows, 8 mi (13 km) southeast of Mount Whitney Peak, altitude 10,000 ft (3,048 m), [Inyo County], California. Collected 6 Aug 1891 by B. H. Dutcher. Original number 167.

#### *Thomomys alpinus awahnee* Merriam

Proc. Biol. Soc. Washington 21: 146, 9 Jun 1908b.

= *Thomomys bottae awahnee* Merriam, 1908. See Goldman (1935a:154).

Holotype: 133076. [Skin and skull]. Adult female. Yosemite Valley, [Miller and Kellogg (1955:278): 4,000 ft (1,219 m) near Old Sentinel Hotel], [Mariposa County], California. Collected 14 Jun 1904 by N. Hollister. Original number 870.

#### *Thomomys angularis* Merriam

Proc. Biol. Soc. Washington 11: 214, 15 Jul 1897c.

= *Thomomys bottae bottae* (Eydoux and Gervais, 1836). See Patton and Smith (1990:112).

Holotype: 58123. [Skin and skull]. Adult male. Los Banos, Merced County, California. Collected 1 Jan 1894 by J. E. McLellan. Original number 418.

#### *Thomomys angularis pascalis* Merriam

Proc. Biol. Soc. Washington 14: 111, 19 Jul 1901d.

= *Thomomys bottae pascalis* Merriam, 1901. See V. Bailey (1915:54).

Holotype: 32779/44702. Skin and skull. Adult male. Fresno, [FC: plain east of county hospital], San Joaquin Valley, [Fresno County], California. Collected 4 Mar, not May as in original description, 1892 by C. P. Streator. Original number 1634.

#### *Thomomys apache* V. Bailey

Proc. Biol. Soc. Washington 23: 79, 4 May 1910.

= *Thomomys bottae aureus* J. A. Allen, 1893. See Youngman (1958:370).

Holotype: 135366. [Skin and skull]. Adult male. Lake La Jara, altitude 7,500 ft (2,286 m), on the Jicarilla Apache Indian Reservation, [Rio Arriba County], New Mexico. Collected 19 Sep 1904 by J. H. Gaut. Original number 3289.

#### *Thomomys aureus lachuguilla* V. Bailey

Proc. Biol. Soc. Washington 15: 120, 2 Jun 1902.

= *Thomomys bottae lachuguilla* V. Bailey, 1902. See Goldman (1938a:55).

Holotype: 110336. [Skin, skull, and baculum]. Adult male. Arid foothills near El Paso, [FC: Franklin Mountains], [Miller and Kellogg (1955:305): dry wash, 1 mi (1.6 km) northeast] El Paso, [El Paso County], Texas. Collected 24 Sep 1901 by V. Bailey. Original number 7858.

#### *Thomomys aureus perpes* Merriam

Proc. Biol. Soc. Washington 14: 111, 19 Jul 1901d.

= *Thomomys bottae bottae* (Eydoux and Gervais, 1836). See Patton and Smith (1990:112).

Holotype: 25091/32503. Skin and skull. Adult male. Lone Pine, Owens Valley, [Inyo County], California. Collected 23 Dec 1890 by E. W. Nelson. Original number 145.

***Thomomys aureus pervagus* Merriam**

Proc. Biol. Soc. Washington 14: 110, 19 Jul 1901d.

= *Thomomys bottae pervagus* Merriam, 1901. See Goldman (1935a:157).

Holotype: 58293. [Skin and skull]. Adult male. Espanola, [Rio Arriba County], New Mexico. Collected 4 Jan 1894 by J. A. Loring. Original number 1548.

***Thomomys baileyi* Merriam**

Proc. Biol. Soc. Washington 14: 109, 19 Jul 1901d.

= *Thomomys bottae baileyi* Merriam, 1901. See Anderson (1966:195).

Holotype: 18256/25159. Skin and skull. Adult female. [FC: On plain east of] Sierra Blanca, [Miller and Kellogg (1955:309): railway station at junction of Texas Pacific and Southern Pacific Railroads], [Hudspeth County], Texas. Collected 28 Dec 1889 by V. Bailey. Original number 870.

***Thomomys baileyi spatiosus* Goldman**

Proc. Biol. Soc. Washington 51: 58, 18 Mar 1938a.

= *Thomomys bottae spatiosus* Goldman, 1938. See Anderson (1966:195).

Holotype: 100427. Skin and skull. Adult male. Alpine, altitude 4,500 ft (1,372 m), Brewster County, Texas. Collected 26 May 1900 by V. Bailey. Original number 7368.

***Thomomys bottae actuosus* Kelson**

Univ. Kansas Publ., Mus. Nat. Hist. 5: 67, 1 Oct 1951b.

Holotype: 119053. Skin and skull. Adult male. Corona, [FC: 6,666 ft (2,032 m)], Lincoln County, New Mexico. Collected 13 Oct 1902 by J. H. Gaut. Original number 591.

***Thomomys bottae alienus* Goldman**

J. Washington Acad. Sci. 28: 338, 15 Jul 1938c.

= *Thomomys bottae mearnsi* V. Bailey, 1914. See Hoffmeister (1986:233).

Holotype: 261926. Skin and skull. Adult male. Mammoth, altitude 2,400 ft (732 m), [SL: east side] San Pedro River, Pinal County, Arizona. Collected 4 Nov 1936 by E. A. Goldman. Original number 23746.

***Thomomys bottae birdseyei* Goldman**

Proc. Biol. Soc. Washington 50: 134, 10 Sep 1937d.

Holotype: 161654. Skin and skull. Adult male. Pine Valley Mountains, altitude 8,300 ft (2,530 m), 5 mi (8 km) [FC: 4 mi (6 km)] east of Pine Valley, Washington County, Utah. Collected 10 Oct 1909 by C. Birdseye. Original number 861.

***Thomomys bottae convergens* Nelson and Goldman**

J. Mamm. 15: 123, 15 May 1934c.

Holotype: 250894. Skin and skull. Adult male. Costa Rica Ranch, delta of Sonora River, [Miller and Kellogg (1955:308): about 40 mi (64 km) west] southwest of Hermosillo, Sonora, Mexico. Collected 13 Dec 1932 by V. Bailey and F. Winthrop. Original number [FC: VB] 11280.

***Thomomys bottae cultellus* Kelson**

Univ. Kansas Publ., Mus. Nat. Hist. 5: 64, 1 Oct 1951b.

Holotype: 70919. Skin and skull. Adult male. Halls Peak, Mora County, New Mexico. Obtained 13 Jan 1895 by G. Barber. Original number [SL: 56].

***Thomomys bottae desitus* Goldman**

J. Washington Acad. Sci. 26: 113, 15 Mar 1936b.

= *Thomomys bottae desertorum* Merriam, 1901. See Hoffmeister (1986:221).

Holotype: 227802. Skin and skull. Adult male. Big Sandy River, near Owen (Owens), [Miller and Kellogg (1955:294): about 4 mi (6 km) southeast of Wickieup], altitude 2,000 ft (610 m), Mohave County, Arizona. Collected 21 Sep 1917 by E. A. Goldman. Original number 23332.

***Thomomys bottae divergens* Nelson and Goldman**

J. Mamm. 15: 122, 15 May 1934c.

Holotype: 250892. Skin and skull. Adult male. Four miles (6 km) west of Huachinera, altitude 4,000 ft (1,219 m), Bavispe River, northeastern Sonora, Mexico. Collected 8 Nov 1932 by V. Bailey and F. Winthrop. Original number [FC: VB] 11098.

***Thomomys bottae extenuatus* Goldman**

Proc. Biol. Soc. Washington 48: 149, 31 Oct 1935b.

= *Thomomys bottae mearnsi* V. Bailey, 1914. See Hoffmeister (1986:233).

Holotype: 17872/24809. Skin and skull. Adult male. Willcox, altitude 4,000 ft (1,219 m), Cochise County, Arizona. Collected 27 Nov 1889 by V. Bailey. Original number 712.

***Thomomys bottae guadalupensis* Goldman**

J. Washington Acad. Sci. 26: 117, 15 Mar 1936b.

Holotype: 109225. Skin and skull. Adult male. [FC: Head of] McKittrick Canyon, Guadalupe Mountains, altitude 7,800 ft (2,377 m), [Culberson County], Texas. Collected 22 Aug 1901 by V. Bailey. Original number 7821.

***Thomomys bottae howelli* Goldman**

J. Washington Acad. Sci. 26: 116, 15 Mar 1936b.

Holotype: 75684. Skin and skull. Adult female. Grand Junction, altitude 4,600 ft (1,402 m), Mesa County, Colorado. Collected 7 Nov 1895 by A. H. Howell. Original number 493.

***Thomomys bottae hualpaiensis* Goldman**

J. Washington Acad. Sci. 26: 114, 15 Mar 1936b.

= *Thomomys bottae desertorum* Merriam, 1901. See Hoffmeister (1986:229).

Holotype: 227796. Skin and skull. Adult male. Hualpai Peak, Hualpai Mountains, altitude 7,000 ft (2,134 m), Mohave County, Arizona. Collected 6 Oct 1917 by E. A. Goldman. Original number 23351.

***Thomomys bottae imitabilis* Goldman**

Proc. Biol. Soc. Washington 52: 30, 11 Mar 1939g.

Holotype: 146839. Skin and skull. Adult male. La Paz, southern Lower California (Baja California Sur), Mexico. Collected 16 Feb 1906 by [E. W.] Nelson and [E. A.] Goldman. Original number 19163.

***Thomomys bottae incomptus* Goldman**

Proc. Biol. Soc. Washington 52: 29, 11 Mar 1939g.

Holotype: 140671. Skin and skull. Adult male. San Jorge, near Pacific coast west of Pozo Grande and about 25 mi (40 km) southwest of Comondu, altitude 50 ft (15 m), southern Lower California (Baja California Sur), Mexico. Collected 12 Nov 1905 by [E. W.] Nelson and [E. A.] Goldman. Original number 18546.

***Thomomys bottae internatus* Goldman**

J. Washington Acad. Sci. 26: 115, 15 Mar 1936b.

Holotype: 150997. Skin and skull. Adult male. Salida, [FC: east Arkansas Valley], altitude 7,000 ft (2,134 m), Chaffee County, Colorado. Collected 10 Nov 1907 by M. Cary. Original number 1247.

***Thomomys bottae levidensis* Goldman**

Proc. Biol. Soc. Washington 55: 76, 26 Jun 1942.

Holotype: 191962. Skin and skull. Adult male. Manti, [FC: in low valley near river], altitude about 5,500 ft (1,676 m), Sanpete County, Utah. Collected 6 Dec 1888 by V. Bailey. Original number 427. [SL: Merriam collection number 5137/5832].

***Thomomys bottae minimus* Durrant**

Proc. Biol. Soc. Washington 52: 161, 11 Oct 1939.

Holotype: 263942. Skin and skull. Adult male. [FC: north end] Stansbury Island, Great Salt Lake, Tooele County, Utah. Collected 25 Jun 1938 by W. H. Marshall. Original number 141.

***Thomomys bottae minor* V. Bailey**

Proc. Biol. Soc. Washington 27: 116, 10 Jul 1914.

= *Thomomys bottae laticeps* Baird, 1855. See Patton and Smith (1990:115).

Holotype: 146463. [Skin and skull]. Adult male. Fort Bragg, Mendocino County, California. Collected 30 Nov 1905 by J. H. Gaut. Original number 4187.

***Thomomys bottae nicholi* Goldman**

J. Washington Acad. Sci. 28: 337, 15 Jul 1938c.

= *Thomomys bottae planirostris* Burt, 1931. See Hoffmeister (1986:237).

Holotype: 262864. Skin, skull [and baculum]. Adult male. Twenty miles (32 km) south of Wolf Hole [FC: on] road to Parashonts, altitude 5,000 ft (1,524 m), Shivwits Plateau, Mohave County, Arizona. Collected 6 Aug 1937 by L. C. Goldman. Original number 363.

***Thomomys bottae operosus* Hatfield**

Bull. Chicago Acad. Sci. 6: 151, 12 Jan 1942.

= *Thomomys bottae fulvus* (Woodhouse, 1852). See Hoffmeister (1986:231).

Holotype: [287886]. Skin and skull. Adult female. Six miles (10 km) north of Yarnell, [Miller and Kellogg (1955:294): altitude 4,400 ft (1,341 m)], Peeples Valley, Yavapai County, Arizona. Collected 30 May 1937 by R. Komarek. No original number. Chicago Academy of Science number 4061.

***Thomomys bottae optabilis* Goldman**

J. Washington Acad. Sci. 26: 116, 15 Mar 1936b.

Holotype: 149962. Skin and skull. Adult male. Coventry, Naturita Creek Valley, altitude 6,500 ft (1,981 m), Montrose County, Colorado. Collected 31 Jul 1907 by M. Cary. Original number 1105.

***Thomomys bottae opulentus* Goldman**

Proc. Biol. Soc. Washington 48: 150, 31 Oct 1935b.

Holotype: 167318. Skin and skull. Adult female. Las Palomas, on the Rio Grande, [FC: 4,200 ft (1,280 m)], Sierra County, New Mexico. Collected 24 Oct 1909 by E. A. Goldman. Original number [FC: Nelson and Goldman] 20675.

***Thomomys bottae parvulus* Goldman**

J. Washington Acad. Sci. 28: 339, 15 Jul 1938c.

= *Thomomys bottae catalinae* Goldman, 1931. See Hoffmeister (1986:222).

Holotype: 262813. Skin and skull. Adult male. [SL: Along highway], [FC: Top of] pass between Santa Catalina and Rincon Mountains [FC: in lower edge of oaks], [Miller and Kellogg (1955:292): 25 mi (40 km) east-northeast of Tucson], altitude 4,500 ft (1,372 m), Pima County, Arizona. Collected 5 Jun 1937 by L. C. Goldman. Original number 213.

***Thomomys bottae patulus* Goldman**

J. Washington Acad. Sci. 28: 341, 15 Jul 1938c.

= *Thomomys bottae albatus* Grinnell, 1912. See Hoffmeister (1986:226).

Holotype: 262899. Skin and skull. Adult male. Bottomland along Hassayampa River, altitude 2,000 ft (610 m), 2 mi (3.2 km) below Wickenburg, Maricopa County, Arizona. Collected 16 Sep 1937 by L. C. Goldman. Original number 460.

***Thomomys bottae pervarius* Goldman**

Proc. Biol. Soc. Washington 51: 57, 18 Mar 1938a.

Holotype: 18201/25105. Skin and skull. Young adult male. Lloyd Ranch, 35 mi (56 km) south of Marfa, altitude 4,200

ft (1,280 m), Presidio County, Texas. Collected 20 Jan 1890 by V. Bailey. Original number 900.

#### *Thomomys bottae pinaleensis* Goldman

J. Washington Acad. Sci. 28: 342, 15 Jul 1938c.

Holotype: 245709. Skin and skull. Adult female. Oak Flat, [Miller and Kellogg (1955:293): altitude 3,900 ft (1,189 m)], 5 mi (8 km) east of Superior, Pinal Mountains, [Pinal County], Arizona. Collected 22 May 1924 by W. P. Taylor. Original number 1667.

#### *Thomomys bottae russeolus* Nelson and Goldman

Proc. Biol. Soc. Washington 22: 25, 10 Mar 1909.

Holotype: 139920. [Skin and skull]. Young adult male. San Angel, [FC: 100 ft (30 m)], 30 mi (48 km) west of [Miller and Kellogg (1955:289): 16 mi (26 km) west southwest of San Ignacio, Lower California (Baja California Sur), Mexico. Collected 15 Oct 1905 by E. W. Nelson and E. A. Goldman. Original number 18355.

#### *Thomomys bottae virginicus* Goldman

Proc. Biol. Soc. Washington 50: 133, 10 Sep 1937d.

= *Thomomys bottae planirostris* Burt, 1931. See Hoffmeister (1986:237).

Holotype: 262016. Skin and skull. Adult male. Beaverdam Creek, [FC: near mouth just above Littlefield], near confluence with Virgin River, at Littlefield, altitude 1,500 ft (457 m), [Mohave County], northwestern Arizona. Collected 16 Oct 1936 by L. C. Goldman. Original number 67.

#### *Thomomys bottae winthropi* Nelson and Goldman

J. Mamm. 15: 122, 15 May 1934c.

Holotype: 251028. Skin and skull. Adult male. Hermosillo, Sonora, Mexico. Collected 21 Dec 1932 by F. Winthrop and B. Bailey. Original number [SL: 32-202]. 27203-X.

#### *Thomomys bridgeri* Merriam

Proc. Biol. Soc. Washington 14: 113, 19 Jul 1901d.

= *Thomomys talpoides bridgeri* Merriam, 1901. See Goldman (1939h:234).

Holotype: 18858/25592. Skin, skull [and baculum]. Adult male. Fort Bridger, Wyoming. Restricted to Mountainview, Smiths Fork, 4 mi (6 km), airline, southeast of Fort Bridger, Uinta County, Wyoming by Hooper (1943:503). Collected 27 May 1890 by V. Bailey. Original number 1207.

#### *Thomomys cabezonae* Merriam

Proc. Biol. Soc. Washington 14: 110, 19 Jul 1901d.

= *Thomomys bottae nigricans* Rhoads, 1895. See Patton and Smith (1990:117).

Holotype: 53987. [Skin and skull]. Adult male. Cabezon, [Miller and Kellogg (1955:284): 1,791 ft (546 m)], San Gorgonio Pass, [Riverside County], California. Collected 3 Jun 1893 by C. P. Streator. Original number 2906.

#### *Thomomys canus* V. Bailey

Proc. Biol. Soc. Washington 23: 79, 4 May 1910.

= *Thomomys bottae canus* V. Bailey, 1910. See Goldman (1935a: 155).

Holotype: 78365. [Skin and skull]. Adult male. Deep Hole, at north end of Smoke Creek Desert, [Washoe County], Nevada. Collected 14 May 1896 by C. P. Streator. Original number 5169.

#### *Thomomys clusius* Coues

Proc. Acad. Nat. Sci. Philadelphia 27: 138, 15 Jun 1875b.

Holotype: 3051/[36805]. Skin and Skull. Adult female. Bridger's Pass, Rocky Mountains. Restricted by V. Bailey (1915: 100) to Bridger Pass, 18 mi (29 km) southwest of Rawlins, Carbon County, Wyoming. Collected 28, not 21 as in original description, Jul 1857 by W. A. Hammond. Original number [SL: 88].

#### *Thomomys clusius fuscus* Merriam

N. Amer. Fauna 5: 69, 30 Jul 1891b.

= *Thomomys talpoides fuscus* Merriam, 1891. See Davis (1939: 253).

Holotype: 24267/31671. Skin and skull. Adult female. Mountains [FC: Canyon] at head of Big Lost River, [Custer County], Idaho. Collected 23 Sep 1890 by [SL: V. Bailey and] B. H. Dutcher. Original number [FC: VB] 1847.

#### *Thomomys clusius ocius* Merriam

Proc. Biol. Soc. Washington 14: 114, 19 Jul 1901d.

= *Thomomys talpoides ocius* Merriam, 1901. See Durrant (1946:17).

Holotype: 18852/25586. Skin and skull. Adult male. Fort Bridger, Wyoming. Restricted to Mountainview, Smiths Fork, 4 mi (6 km), airline, southeast of Fort Bridger, Uinta County, Wyoming by Hooper (1943:503). Collected 24 May 1890 by V. Bailey. Original number 1194.

#### *Thomomys desertorum* Merriam

Proc. Biol. Soc. Washington 14: 114, 19 Jul 1901d.

= *Thomomys bottae desertorum* Merriam, 1901. See Goldman (1935a:156).

Holotype: [186523]. Skin and skull. Adult male. Mud Spring, [FC: lowest part of] Detrital Valley, [Mohave County], Arizona. Collected 21 Feb 1889 by V. Bailey. Original number 598. Merriam collection number 5387/6082.

#### *Thomomys douglasii oregonus* Merriam

Proc. Biol. Soc. Washington 14: 115, 19 Jul 1901d.

= *Thomomys mazama oregonus* Merriam, 1901. See Hall (1981: 466).

Holotype: 56939. [Skin and skull]. Adult male. [V. Bailey (1915:117): Ely's orchard, Ely, near] Oregon City, Willamette Valley, [Clackamas County], Oregon. Collected 24 Oct 1893 by C. P. Streator. Original number 3340.

*Thomomys douglasii shawi* Taylor

Proc. Biol. Soc. Washington 34: 121, 30 Jun 1921.

= *Thomomys talpoides shawi* Taylor, 1921. See Hall and Dalquest (1939:4).

Holotype: 232807. Skin and skull. Adult male. Owyhigh Lakes, altitude 5,100 ft (1,554 m), Mount Rainier, [Pierce County], Washington. Collected 9 Aug 1919 by G. G. Cantwell. Original number 1464.

*Thomomys douglasii tacomensis* Taylor

Proc. Biol. Soc. Washington 32: 169, 30 Sep 1919.

= *Thomomys mazama tacomensis* Taylor, 1919. See Johnson and Benson (1960:21).

Holotype: 231096. [Skin and skull]. Young adult female. [FC: Meadow Park Golf Links], 6 mi (10 km) south of Tacoma, Pierce County, Washington. Collected 24 Dec 1918 by G. G. Cantwell. Original number 857.

*Thomomys douglasii yelmensis* Merriam

Proc. Biol. Soc. Washington 13: 21, 31 Jan 1899a.

= *Thomomys mazama yelmensis* Merriam, 1899. See Johnson and Benson (1960:21).

Holotype: 31916/43777. Skin and skull. Adult male. Tenino, Yelm Prairie, [Thurston County], Washington. Collected 24 Oct 1891 by C. P. Streator. Original number 1385.

*Thomomys fossor kaibabensis* Goldman

J. Washington Acad. Sci. 28: 333, 15 Jul 1938c.

= *Thomomys talpoides kaibabensis* Goldman, 1938. See Goldman (1939h:234).

Holotype: 262891. Skin, skull [and baculum]. Adult male. De Motte Park, altitude 9,000 ft (2,743 m), Kaibab Plateau, Coconino County, Arizona. Collected 10 Sep 1937 by L. C. Goldman. Original number 443.

*Thomomys fossor levis* Goldman

J. Washington Acad. Sci. 28: 336, 15 Jul 1938c.

= *Thomomys talpoides levis* Goldman, 1938. See Goldman (1939h:234).

Holotype: 158979. Skin and skull. Adult female. Seven Mile Flat, altitude 10,000 ft (3,048 m), 5 mi (8 km) north of Fish Lake, Fish Lake Plateau, Sevier County, Utah. Collected 1 Oct 1908 by W. H. Osgood. Original number 3616.

*Thomomys fossor moorei* Goldman

J. Washington Acad. Sci. 28: 335, 15 Jul 1938c.

= *Thomomys talpoides moorei* Goldman, 1938. See Goldman (1939h:234).

Holotype: 248222. Skin and skull. Adult male. One mile (1.6 km) south of Fairview, altitude 6,000 ft (1,829 m), Sanpete County, Utah. Collected 19 Feb 1928 by A. W. Moore. Original number [SL: 355]. 24799-X.

*Thomomys fossor parowanensis* Goldman

J. Washington Acad. Sci. 28: 334, 15 Jul 1938c.

= *Thomomys talpoides parowanensis* Goldman, 1938. See Goldman (1939h:234).

Holotype: 158072. Skin and skull. Adult male. Brian Head, altitude 11,000 ft (3,353 m), Parowan Mountains, Iron County, Utah. Collected 8 Sep 1908 by W. H. Osgood. Original number 3483.

*Thomomys fulvus catalinae* Goldman

J. Washington Acad. Sci. 21: 419, 19 Oct 1931b.

= *Thomomys bottae catalinae* Goldman, 1931. See Goldman (1935a:157).

Holotype: 244081. [Skin and skull]. Adult male. Summerhaven, altitude 7,500 ft (2,286 m), Santa Catalina Mountains, Pima County, Arizona. Collected 6 Aug 1923 by E. A. Goldman. Original number 23517.

*Thomomys fulvus collinus* Goldman

J. Washington Acad. Sci. 21: 421, 19 Oct 1931b.

= *Thomomys bottae mearnsi* V. Bailey, 1914. See Hoffmeister (1986:233).

Holotype: 66053. [Skin and skull]. Adult male. Fly Park, altitude 9,000 ft (2,743 m) [FC: 10,000 ft (3,048 m)], Chiricahua Mountains, Cochise County, Arizona. Collected 10 Jun 1894 by A. K. Fisher. Original number 1527.

*Thomomys fulvus emotus* Goldman

Proc. Biol. Soc. Washington 46: 76, 27 Apr 1933a.

= *Thomomys umbrinus emotus* Goldman, 1933. See Nelson and Goldman (1934c:116).

Holotype: 157005. Skin and skull. Adult male. Animas Peak, altitude 8,000 ft (2,438 m), Animas Mountains, Hidalgo County, southwestern New Mexico. Collected 3 Aug 1908 by E. A. Goldman. Original number [FC: Nelson and Goldman] 19929.

*Thomomys fulvus flavidus* Goldman

J. Washington Acad. Sci. 21: 417, 19 Oct 1931b.

= *Thomomys bottae chrysonotus* Grinnell, 1912. See Goldman (1935a:156).

Holotype: 181065. [Skin and skull]. Adult male. Parker, altitude 350 ft (107 m), Yuma County, Arizona. Collected 1 Feb 1913 by E. A. Goldman. Original number 21810.

*Thomomys fulvus grahamensis* Goldman

J. Washington Acad. Sci. 21: 420, 19 Oct 1931b.

= *Thomomys bottae mearnsi* V. Bailey, 1914. See Hoffmeister (1986:233).

Holotype: 204313. [Skin and skull]. Adult male. Graham (Pinaleno) Mountains, altitude 9,200 ft (2,804 m), Graham County, Arizona. Collected 7 Jun 1914 by E. G. Holt. Original number 269.

*Thomomys fulvus intermedius* Mearns

Proc. U.S. Natl. Mus. 19: 719, 30 Jul 1897b.

= *Thomomys umbrinus intermedius* Mearns, 1897. See Nelson and Goldman (1934c:117).

Holotype: 21473/36697. Skin and skull. Adult male. Aspen and spruce zone at the summit of the Huachuca Mountains, altitude 9,000 ft (2,743 m), [Cochise County], southern Arizona. Hoffmeister (1986:243) states that the locality should just be Huachuca Mountains, Arizona. Collected 6 Sep 1893 by F. X. Holzner. Original number [FC: Mearns and Holzner] 1013.

*Thomomys fulvus modicus* Goldman

J. Washington Acad. Sci. 21: 418, 19 Oct 1931b.

= *Thomomys bottae modicus* Goldman, 1931. See Nelson and Goldman (1934c:122).

Holotype: 59203. [Skin and skull]. Adult male. La Osa, near Mexican Boundary, southern end of Altar Valley, Pima County, Arizona. Collected 14 Dec 1893 by E. A. Mearns and F. X. Holzner. Original number 2681.

*Thomomys fulvus mutabilis* Goldman

Proc. Biol. Soc. Washington 46: 75, 27 Apr 1933a.

= *Thomomys bottae fulvus* (Woodhouse, 1852). See Hoffmeister (1986:231).

Holotype: 214611. Skin and skull. Adult male. Camp Verde, [FC: 3 mi (5 km) south at Bell Ranch], altitude 3,200 ft (975 m), [Yavapai County], Arizona. Collected 25 Jul 1916 by W. P. Taylor. Original number 269.

*Thomomys fulvus peramplus* Goldman

J. Washington Acad. Sci. 21: 423, 19 Oct. 1931b.

= *Thomomys bottae peramplus* Goldman, 1931. See Goldman (1935a:157).

Holotype: 247632. Skin and skull. Adult male. Wheatfield Creek, [Miller and Kellogg (1955:297): about 27 mi (43 km) east of Chin Lee (Chinle)], west slope of Tunicha Mountains, altitude 7,000 ft (2,134 m), Apache County, northeastern Arizona. Collected 23 Jun 1927 by P. Trapier. Original number 720.

*Thomomys fulvus phasma* Goldman

Proc. Biol. Soc. Washington 46: 72, 27 Apr 1933a.

= *Thomomys bottae pusillus* Goldman, 1931. See Hoffmeister (1986:238).

Holotype: 203026. Skin and skull. Adult female. Two miles (3.2 km) south of Tule Tank, Tule Desert, near Mexican Boundary, [Miller and Kellogg (1955:290): altitude 1,200 ft (366 m)], Yuma County, Arizona. Collected 8 Dec 1913 by E. A. Goldman. Original number 22355.

*Thomomys fulvus pusillus* Goldman

J. Washington Acad. Sci. 21: 422, 19 Oct 1931b.

= *Thomomys bottae pusillus* Goldman, 1931. See Goldman (1935a:157).

Holotype: 209290. [Skin and skull]. Adult female. Coyote Mountains, [Miller and Kellogg (1955:291): Quinlan Mountains, 40 mi (64 km) west-southwest of Tucson], altitude 3,000 ft (914 m), Pima County, Arizona. Collected 4 Sep 1915 by E. A. Goldman. Original number 22722.

*Thomomys fulvus suboles* Goldman

Proc. Biol. Soc. Washington 41: 203, 18 Dec 1928a.

= *Thomomys bottae desertorum* Merriam, 1901. See Hoffmeister (1986:229).

Holotype: 244163. [Skin and skull]. Adult male. Alluvial bottom at Old Searchlight Ferry, Colorado River, altitude 1,000 ft (305 m), [Miller and Kellogg (1955:308): about 40 mi (64 km)] northwest of Kingman [Miller and Kellogg (1955:308): or 28 mi (45 km) west of Chloride, Mohave County], Arizona. Collected 26 Sep 1923 by L. C. Goldman. Original number 17. [SL: 23428-X].

*Thomomys fulvus subsimilis* Goldman

Proc. Biol. Soc. Washington 46: 74, 27 Apr 1933a.

= *Thomomys bottae subsimilis* Goldman, 1933. See Goldman (1935a:156).

Holotype: 227803. Skin and skull. Adult female. Harquahala Mountains, altitude 3,000 ft (914 m), [Yuma County], Arizona. Collected 14 Oct 1917 by E. A. Goldman. Original number 23356.

*Thomomys fulvus texensis* V. Bailey

Proc. Biol. Soc. Washington 15: 119, 2 Jun 1902.

= *Thomomys bottae texensis* V. Bailey, 1902. See Goldman (1935a:157).

Holotype: 22511/[31408], not 2251 as in original description. [Skin and skull]. Adult male. Head of Limpia Creek, altitude 5,500 ft (1,676 m), Davis Mountains, [Jeff Davis County], Texas. Collected 7 Jan 1890 by V. Bailey. Original number 876.

*Thomomys fuscus columbianus* V. Bailey

Proc. Biol. Soc. Washington 27: 117, 10 Jul 1914.

= *Thomomys talpoides columbianus* V. Bailey, 1914. See Goldman (1939h:234).

Holotype: 23722/31117. Skin and skull. Adult male. Touchet, [FC: about 700 ft (213 m) on edge of plain], Walla Walla County, Washington. Collected 10 Sep 1890 by C. P. Streator. Original number 234.

*Thomomys fuscus fisheri* Merriam

Proc. Biol. Soc. Washington 14: 111, 19 Jul 1901d.

= *Thomomys talpoides fisheri* Merriam, 1901. See Goldman (1939h:234).

Holotype: 101238. [Skin and skull]. [Lyon and Osgood (1909:64): Young] adult male. Beckwith, Sierra Valley, Plumas County, California. Collected 3 Aug 1900 by W. K. Fisher. Original number 1547.

*Thomomys fuscus loringi* V. Bailey

Proc. Biol. Soc. Washington 27: 118, 10 Jul 1914.

= *Thomomys talpoides loringi* V. Bailey, 1914. See Goldman (1939h:234).

Holotype: 68746. [Skin and skull]. Adult male. South Edmonton, [FC: 2 mi (3.2 km) south of Edmonton], Alberta, [Canada]. Collected 23 Sep 1894 by J. A. Loring. Original number 2437.

*Thomomys fuscus saturatus* V. Bailey

Proc. Biol. Soc. Washington 27: 117, 10 Jul 1914.

= *Thomomys talpoides saturatus* V. Bailey, 1914. See Davis (1939:253).

Holotype: 28781/40885. Skin and skull. Adult male. Silver, altitude 4,300 ft (1,311 m) [FC: 3,200 ft (975 m)], near Saltese, Coeur d'Alene Mountains, in the western corner of Missoula County, Montana. Collected 20 Jun 1891 by C. P. Streator. Original number 979.

*Thomomys goldmani* Merriam

Proc. Biol. Soc. Washington 14: 108, 19 Jul 1901d.

= *Thomomys umbrinus goldmani* Merriam, 1901. See Nelson and Goldman (1934c:115).

Holotype: 58075. [Skin and skull]. Adult male. Mapimi, [Nelson and Goldman (1934c:115): 3,800 ft (1,158 m)], Durango, Mexico. Collected 15 Dec 1893 by E. A. Goldman. Original number 240.

*Thomomys hesperus* Merriam

Proc. Biol. Soc. Washington 14: 116, 19 Jul 1901d.

= *Thomomys mazama hesperus* Merriam, 1901. See Hall (1981: 466).

Holotype: 69825. [Skin and skull]. Adult female. Tillamook, [Tillamook County], Oregon. Collected 9 Nov 1894 by J. E. McLellan. Original number 1189.

*Thomomys idahoensis* Merriam

Proc. Biol. Soc. Washington 14: 114, 19 Jul 1901d.

= *Thomomys idahoensis idahoensis* Merriam, 1901. See Thaeler (1972:420).

Holotype: 23482/30900. Skin and skull. Adult male. Birch Creek, [Bailey (1915:108): 10 mi (16 km) south of Nicholia, at about 6,400 ft (1,951 m) altitude, Lemhi County], Idaho. Collected 8 Aug 1890 by C. P. Streator. Original number 129.

*Thomomys lachuguilla confinalis* Goldman

J. Washington Acad. Sci. 26: 119, 15 Mar 1936b.

= *Thomomys bottae confinalis* Goldman, 1936. See Goldman (1938a:55).

Holotype: 117571. Skin and skull. Subadult male. Thirty-five miles (56 km) east of Rock Springs, altitude 2,450 ft (747 m), [Miller and Kellogg (1955:306): north fork of Guadalupe River, 15 mi (24 km) west of Japonica, Kerr

County], Texas. Collected 11 Jul 1902 by V. Bailey. Original number 7910.

*Thomomys lachuguilla limitaris* Goldman

J. Washington Acad. Sci. 26: 118, 15 Mar 1936b.

= *Thomomys bottae limitaris* Goldman, 1936. See Goldman (1938a:55).

Holotype: 110339. Skin and skull. Adult male. [FC: On mesa] 4 mi (6.4 km) west of Boquillas, Brewster County, Texas. Collected 28 May 1901 by V. Bailey. Original number 7659.

*Thomomys laticeps* Baird

Proc. Acad. Nat. Sci. Philadelphia 7: 335, reported favorably for publication 24 Apr 1855a, receipt acknowledged 15 Jun 1855 by the American Philosophical Society.

= *Thomomys bottae laticeps* Baird, 1855. See V. Bailey (1915:46).

Holotype: [513/1648. Skin and skull. Age and sex unknown]. Humboldt Bay, [Humboldt County, California]. Collected on unknown date by Lieut. [W. P.] Trowbridge. Cataloged 21 Feb 1855. Type not designated by number in original description. Baird (1857:393) indicates he only had this single specimen.

*Thomomys latirostris* Merriam

Proc. Biol. Soc. Washington 14: 107, 19 Jul 1901d.

= *Thomomys bottae aureus* J. A. Allen, 1893. See Goldman (1935a:156).

Holotype: 18003/24914. Skin and skull. Adult male. [Hall and Kelson (1959:426): Tanner Crossing, about 3 mi (4.8 km) above Cameron; Hoffmeister (1986:227): says actually 1 mi (1.6 km) south, 1 2/3 mi (2.7 km) east of Cameron], [FC: 4,000 ft (1,219 m)], Little Colorado River, Painted Desert, [Coconino County], Arizona. Collected 22 Sep 1899 by V. Bailey. Original number 504.

*Thomomys leucodon* Merriam

Proc. Biol. Soc. Washington 11: 215, 15 Jul 1897c.

= *Thomomys bottae leucodon* Merriam, 1897. See V. Bailey (1915:47).

Holotype: 32034/43848. Skin and skull. Adult male. Grant (Grants) Pass, Rogue River Valley, [Josephine County], Oregon. Collected 17 Dec 1891 by C. P. Streator. Original number 1394.

*Thomomys leucodon navus* Merriam

Proc. Biol. Soc. Washington 14: 112, 19 Jul 1901d.

= *Thomomys bottae navus* Merriam, 1901. See V. Bailey (1915:49).

Holotype: 57791. [Skin and skull]. Adult male. Red Bluff, [FC: Tehama County], California. Collected 26 Dec 1893 by C. P. Streator. Original number 3462.

*Thomomys limosus* Merriam

Proc. Biol. Soc. Washington 14: 116, 19 Jul 1901d.

= *Thomomys talpoides limosus* Merriam, 1901. See Goldman (1939h:235).

Holotype: 89724. [Skin and skull]. Adult male. White Salmon, gorge of the Columbia, [Klickitat County], Washington. Collected 26 Jun 1897 by J. A. Loring. Original number 4382.

#### *Thomomys magdalena* Nelson and Goldman

Proc. Biol. Soc. Washington 22: 24, 10 Mar 1909.

= *Thomomys bottae magdalena* Nelson and Goldman, 1909. See Goldman (1943:147).

Holotype: 146832. [Skin and skull]. Adult male. Magdalena Island, [FC: 20 ft (6 m)], Lower California (Baja California Sur), Mexico. Collected 3 Dec 1905 by E. W. Nelson and E. A. Goldman. Original number 18743.

#### *Thomomys mazama* Merriam

Proc. Biol. Soc. Washington 11: 214, 15 Jul 1897c.

= *Thomomys mazama mazama* Merriam, 1897. See Hall (1981: 466).

Holotype: 80502. [Skin and skull]. Adult male. Head of Anna Creek, [V. Bailey (1915: 123): near] Crater Lake, Mount Mazama, altitude 6,000 ft (1,829 m), [Klamath County], Oregon. Collected 3 Sep 1896 by E. A. Preble. Original number 1485.

#### *Thomomys mearnsi* V. Bailey

Proc. Biol. Soc. Washington 27: 117, 10 Jul 1914.

= *Thomomys bottae mearnsi* V. Bailey, 1914. See Anderson (1966:195).

Holotype: 157008. [Skin and skull]. Adult male. Gray's Ranch, [SL: altitude 5,000 ft (1,524 m)], Animas Valley [Hidalgo County], southwest corner of New Mexico. Collected 10 Aug 1908 by E. A. Goldman. Original number [FC: Nelson and Goldman] 19939.

#### *Thomomys melanops* Merriam

Proc. Biol. Soc. Washington 13: 21, 31 Jan 1899a.

= *Thomomys mazama melanops* Merriam, 1899. See Johnson and Benson (1960:21).

Holotype: 90630. Skin and skull. Adult female. Timberline at head of Soleduck (Sole Duc) River, altitude 5,200 ft (1,585 m), Olympic Mountains, [Clallam County], Washington. Collected 28 Aug 1897 by V. Bailey. Original number 6219.

#### *Thomomys mewa* Merriam

Proc. Biol. Soc. Washington 21: 146, 9 Jun 1908b.

= *Thomomys bottae mewa* Merriam, 1908. See V. Bailey (1915:50).

Holotype: 133183. [Skin and skull]. Adult male. Raymond, Madera County, California. Collected 28 Jun 1904 by N. Hollister. Original number 908.

#### *Thomomys monticola pinetorum* Merriam

N. Amer. Fauna 16: 97, 28 Oct 1899b.

= *Thomomys monticola* J. A. Allen, 1893. See Goldman (1943:146).

Holotype: 95152. [Skin and skull]. Adult male. Sisson, Siskiyou County, California. Collected 4 Sep 1898 by R. T. Fisher. Original number 173.

#### *Thomomys muralis* Goldman

J. Washington Acad. Sci. 26: 112, 15 Mar 1936b.

= *Thomomys bottae desertorum* Merriam, 1901. See Hoffmeister (1986:229).

Holotype: 202580. Skin and skull. Adult male. Lower end of Prospect Valley, [Miller and Kellogg (1955:207): about 25 mi (40 km) west-southwest of Supai], Grand Canyon, altitude 4,500 ft (1,372 m), Hualpai Indian Reservation, [Coconino County], Arizona. Collected 3 Oct 1913 by E. A. Goldman. Original number 22264.

#### *Thomomys myops* Merriam

Proc. Biol. Soc. Washington 14: 112, 19 Jul 1901d.

= *Thomomys talpoides fuscus* Merriam, 1891. See Dalquest and Scheffer (1944:438).

Holotype: 91066. Skin and skull. Adult female. Conconully, east base Cascade Range, [Okanogan County], Washington. Collected 11 Sep 1897 by J. A. Loring. Original number 4650.

#### *Thomomys nasicus* Merriam

Proc. Biol. Soc. Washington 11: 216, 15 Jul 1897c.

= *Thomomys mazama nasicus* Merriam, 1897. See Hall (1981: 466).

Holotype: 79815. [Skin and skull]. Adult male. Farewell Bend (Bend), Des Chutes River, [Deschutes County], Oregon. Collected 4 Aug 1896 by E. A. Preble. Original number 1274.

#### *Thomomys neglectus* V. Bailey

Proc. Biol. Soc. Washington 27: 117, 10 Jul 1914.

= *Thomomys bottae bottae* (Eydoux and Gervais, 1836). See Patton and Smith (1990:112).

Holotype: 137869. [Skin and skull]. Adult male. Bear Flat Meadows, altitude 6,400 ft (1,951 m), San Antonio (Baldy) Peak, San Gabriel Mountains, [Los Angeles County], California. Collected 23 Jul 1905 by J. H. Gaut. Original number 3719.

#### *Thomomys nelsoni* Merriam

Proc. Biol. Soc. Washington 14: 109, 19 Jul 1901d.

= *Thomomys umbrinus nelsoni* Merriam, 1901. See Anderson (1972:292).

Holotype: 96451. [Skin and skull]. Adult female. [FC: Near] Parral, [FC: 6,000 ft (1,829 m)], Chihuahua, Mexico. Collected 18 Sep 1898 by E. W. Nelson and E. A. Goldman. Original number 13035.

#### *Thomomys nevadensis* Merriam

Proc. Biol. Soc. Washington 11: 213, 15 Jul 1897c.

= *Thomomys townsendii nevadensis* Merriam, 1897. See V. Bailey (1915:44).

Holotype: 25001/32413. Skin and skull. Young adult male. [FC: On flats in valley 5 mi (8 km) south of] Austin, [Miller and Kellogg (1955:324): 5 mi (8 km) west, Reese River bottomlands], [Lander County], Nevada. Collected 11 Nov 1890 by V. Bailey. Original number 2097.

***Thomomys nevadensis atrogriseus* V. Bailey**

Proc. Biol. Soc. Washington 27: 118, 10 Jul 1914.

= *Thomomys townsendii townsendii* (Bachman, 1839). See Miller (1924:236).

Holotype: 181196. [Skin and skull]. Adult male. Nampa, [Canyon County], Idaho. Collected 15 Mar 1913 by L. E. Wyman. Original number 35. [SL: 10181-X].

***Thomomys niger* Merriam**

Proc. Biol. Soc. Washington 14: 117, 19 Jul 1901d.

= *Thomomys mazama niger* Merriam, 1901. See Hall (1981: 466).

Holotype: 69407. [Skin and skull]. Adult male. Seaton, near mouth of Umpqua River, [Douglas County], Oregon. Collected 6 Oct 1894 by J. E. McLellan. Original number 1147.

***Thomomys operarius* Merriam**

Proc. Biol. Soc. Washington 11: 215, 15 Jul 1897c.

= *Thomomys bottae operarius* Merriam, 1897. See Goldman (1935a:155).

Holotype: 25054/32466. Skin and skull. Adult male. Keeler, [Miller and Rehn (1901:147): east side of] Owens Lake, Inyo County, California. Collected 29 Nov 1890 by E. W. Nelson. Original number 1.

***Thomomys orizabae* Merriam**

Proc. Biol. Soc. Washington 8: 145, 29 Dec 1893b.

= *Thomomys umbrinus umbrinus* (Richardson, 1829). See Castro-Campillo and Ramirez-Pulido (2000:32).

Holotype: 53616. [Skin and skull]. Adult female. Mount Orizaba, 9,500 ft (2,896 m), Puebla, Mexico. Collected 25 Apr 1893 by E. W. Nelson. Original number 4744.

***Thomomys pectoralis* Goldman**

J. Washington Acad. Sci. 26: 120, 15 Mar 1936b.

= *Thomomys bottae pectoralis* Goldman, 1936. See Patton (2005b:867).

Holotype: 244372. Skin and skull. Adult male. Vicinity of [FC: on ridge near] Carlsbad Cave, Carlsbad Cave National Monument, Eddy County, New Mexico. Collected 17 Mar 1924 by V. Bailey. Original number 10222.

***Thomomys perditus* Merriam**

Proc. Biol. Soc. Washington 14: 108, 19 Jul 1901d.

= *Thomomys bottae perditus* Merriam, 1901. See Patton (2005b:867).

Holotype: 25605/32998. Skin and skull. Adult male. [FC: On mountainside], Lampazos [Miller and Kellogg (1955:329):

Lampazos de Narango], Nuevo Leon, Mexico. Collected 22 Jan 1891 by C. P. Streator. Original number 512.

***Thomomys peregrinus* Merriam**

Proc. Biol. Soc. Washington 8: 146, 29 Dec 1893b.

= *Thomomys umbrinus umbrinus* (Richardson, 1829). See Castro-Campillo and Ramirez-Pulido (2000:33).

Holotype: 50130. [Skin and skull]. Young adult female. Salazar, [FC: 10,300 ft (3,139 m)], Mexico, [Mexico]. Collected 24, not 23 as in original description, Oct 1892 by E. W. Nelson. Original number 3668.

***Thomomys perpallidus absonus* Goldman**

J. Washington Acad. Sci. 21: 425, 19 Oct 1931b.

= *Thomomys bottae planirostris* Burt, 1931. See Hoffmeister (1986:237).

Holotype: 250016. [Skin and skull]. Adult male. Jacob's Pools, altitude 4,000 ft (1,219 m), Houserock Valley, Coconino County, northern Arizona. Collected 7 Jun 1931 by E. A. Goldman. Original number 23569.

***Thomomys perpallidus dissimilis* Goldman**

J. Washington Acad. Sci. 21: 425, 19 Oct 1931b.

= *Thomomys bottae dissimilis* Goldman, 1931. See Goldman (1935a:156).

Holotype: 158526. [Skin and skull]. Adult female. East slope of Mount Ellen, altitude 8,000 ft (2,438 m), Henry Mountains, Garfield County, Utah. Collected 15 Oct 1908 by W. H. Osgood. Original number 3677.

***Thomomys perpallidus osgoodi* Goldman**

J. Washington Acad. Sci. 21: 242, 19 Oct 1931b.

= *Thomomys bottae osgoodi* Goldman, 1931. See Goldman (1935a:156).

Holotype: 158530. [Skin and skull]. Adult male. Hanksville, Wayne County, Utah. Collected 20 Oct 1908 by W. H. Osgood. Original number 3701.

***Thomomys pryorii* V. Bailey**

Proc. Biol. Soc. Washington 27: 116, 10 Jul 1914.

= *Thomomys talpoides pryorii* V. Bailey, 1914. See V. Bailey (1915:104).

Holotype: 66469. [Skin and skull]. Adult male. Head of Sage Creek, altitude 6,000 ft (1,829 m), Pryor Mountains, [Carbon County], Montana. Collected 16 Jul 1894 by V. Bailey. Original number 4646.

***Thomomys pygmaeus* Merriam**

Proc. Biol. Soc. Washington 14: 115, 19 Jul 1901d.

= *Thomomys idahoensis pygmaeus* Merriam, 1901. See Thaeler (1972:425).

Holotype: 55271. [Skin, skull, and baculum]. Adult male. Montpelier Creek, [Miller (1924:240): about 10 mi (16 km) northeast of Montpelier], altitude 6,700 ft (2,042 m), [Bear

Lake County], Idaho. Collected 29 Jul 1893 by V. Bailey. Original number 4150.

*Thomomys quadratus* Merriam

Proc. Biol. Soc. Washington 11: 214, 15 Jul 1897c.

= *Thomomys talpoides quadratus* Merriam, 1897. See Goldman (1939h:234).

Holotype: 57134. [Skin and skull]. Adult male. The Dalles, [Wasco County], Oregon. Collected 2 Nov 1893 by C. P. Streator. Original number 3359.

*Thomomys sheldoni* V. Bailey

N. Amer. Fauna 39: 93, 15 Nov 1915.

= *Thomomys umbrinus madrensis* Nelson and Goldman, 1934. See Anderson (1972:291).

Holotype: 90819. [Skin and skull]. Adult male. Santa Teresa, altitude 6,800 ft (2,073 m), Tepec (Nayarit), Mexico. Collected 10 Aug 1897 by E. W. Nelson and E. A. Goldman. Original number 11443.

*Thomomys simulus* Nelson and Goldman

J. Mamm. 15: 120, 15 May 1934c.

= *Thomomys bottae simulus* Nelson and Goldman, 1934. See Dunnigan (1967:144).

Holotype: 96463. Skin and skull. Adult male. Alamos, altitude [FC: about] 1,200 ft (366 m), southern Sonora, Mexico. Collected 29 Dec 1898 by E. A. Goldman. Original number [FC: Nelson and Goldman] 13339.

*Thomomys simulus parviceps* Nelson and Goldman

J. Mamm. 15: 121, 15 May 1934c.

= *Thomomys atrovarius parviceps* Nelson and Goldman, 1934. See Hafner et al. (2011:1377).

Holotype: 96743. Skin and skull. Young adult female. Chacala, [FC: about] 3,000 ft (914 m), western Durango, Mexico. Collected 6 Mar 1899 by E. A. Goldman. Original number [FC: Nelson and Goldman] 13485.

*Thomomys sinaloae* Merriam

Proc. Biol. Soc. Washington 14: 108, 19 Jul 1901d.

= *Thomomys bottae sinaloae* Merriam, 1901. See Nelson and Goldman (1934c:124).

Holotype: 96745. [Skin and skull]. Adult male. Altata, [FC: about 175 ft (53 m)], Sinaloa, Mexico. Collected 28 Mar 1899 by E. A. Goldman. Original number [FC: Nelson and Goldman] 13607.

*Thomomys sturgisi* Goldman

Proc. Biol. Soc. Washington 51: 56, 18 Mar 1938a.

= *Thomomys bottae sturgisi* Goldman, 1938. See Patton and Smith (1990:148).

Holotype: 263376. Skin and skull. Adult female. Carmen Mountains, altitude 6,000 ft (1,829 m), Coahuila, Mexico. Collected 21 Sep 1937 by R. S. Sturgis. Original number 74. [SL: 28064-X].

*Thomomys talpoides agrestis* Merriam

Proc. Biol. Soc. Washington 21: 144, 9 Jun 1908a.

Holotype: 150725. [Skin and skull]. Adult female. Medano Ranch, [SL and FC: 15 mi (24 km) northeast of Mosca], [FC: 7,600 ft (2,316 m)], San Luis Valley, [Alamosa County], Colorado. Collected 29 Oct 1907 by M. Cary. Original number 1205.

*Thomomys talpoides andersoni* Goldman

J. Mamm. 20: 235, 14 May 1939.

Holotype: 69001. Skin and skull. Adult male. Medicine Hat, on the South Saskatchewan River, Alberta, Canada. Collected 14 Oct 1894 by J. A. Loring. Original number 2567.

*Thomomys talpoides badius* Goldman

J. Mamm. 20: 242, 14 May 1939.

= *Thomomys talpoides yakimensis* Hall and Dalquest, 1939. See Dalquest and Scheffer (1944:440).

Holotype: 91073. Skin and skull. Adult male. Wenatchee, Chelan County, Washington. Collected 19 Sep 1897 by J. A. Loring. Original number 4695.

*Thomomys talpoides bullatus* V. Bailey

Proc. Biol. Soc. Washington 27: 115, 10 Jul 1914.

Holotype: 55159, not 55795 as in original description. [Skin and skull]. Adult male. Powderville, [Powder River County], Montana. Collected 21 Jul 1893 by A. K. Fisher. Original number 1402.

*Thomomys talpoides caryi* V. Bailey

Proc. Biol. Soc. Washington 27: 115, 10 Jul 1914.

Holotype: 168946. [Skin and skull]. Adult female. Head of Trapper Creek, [FC: below timberline at] altitude 9,500 ft (2,896 m), [FC: west slope] Bighorn Mountains, [Big Horn County], Wyoming. Collected 10 Jun 1910 by M. Cary. Original number 1993.

*Thomomys talpoides couchi* Goldman

J. Mamm. 20: 243, 14 May 1939.

= *Thomomys mazama couchi* Goldman, 1939. See Johnson and Benson (1960:21).

Holotype: 243092. Skin and skull. Adult male. Four miles (6 km) north of Shelton, Mason County, Washington. Collected 27 Jun 1922 by L. K. Couch. Original number [SL: 15]. 22896-X.

*Thomomys talpoides ericaeus* Goldman

J. Mamm. 20: 243, 14 May 1939.

= *Thomomys talpoides devexus* Hall and Dalquest, 1939. See Dalquest and Scheffer (1944:434).

Holotype: 242445. [Skin and skull]. Adult male. Badger Mountains, altitude 3,000 ft (914 m), 8 mi (13 km) southwest of Waterville, Douglas County, Washington. Collected 8 Nov 1921 by G. G. Cantwell. Original number 2813.

*Thomomys talpoides glacialis* Dalquest and Scheffer

Proc. Biol. Soc. Washington 55: 97, 13 Aug 1942.

= *Thomomys mazama glacialis* Dalquest and Scheffer, 1942. See Johnson and Benson (1960:21).

Holotype: 272033. Skin and skull. Adult male. Two miles (3.2 km) south of Washington, Pierce County, Washington. Collected 19 Dec 1941 by W. W. Dalquest. Original number 2672. [SL: 30556-X].

*Thomomys talpoides incensus* Goldman

J. Mamm. 20: 240, 14 May 1939h.

Holotype: 67096. Skin and skull. Adult female. Shuswap, Yale District, British Columbia, [Canada]. Collected 1 Sep 1894 by C. P. Streator. Original number 4228.

*Thomomys talpoides kelloggi* Goldman

J. Mamm. 20: 237, 14 May 1939h.

Holotype: 225907. Skin and skull. Adult male. West Boulder Creek, Absaroka Mountain, 18 mi (29 km) southeast of Livingston, Park County, Montana. Collected 29 Jun 1917 by R. Kellogg. Original number 964.

*Thomomys talpoides louiei* Gardner

J. Mamm. 31: 92, 21 Feb 1950.

= *Thomomys mazama louiei* Gardner, 1950. See Johnson and Benson (1960:21).

Holotype: 276436. Skin and skull. Adult female. Crown-Zellerbach's Cathlamet Tree Farm, altitude 2,500 ft (762 m), 12 mi (19 km) north northeast of Cathlamet, Wahkiakum County, Washington. Collected 27 May 1949 by W. A. Moore. Original number 760. [SL: 33482-X].

*Thomomys talpoides medioides* Goldman

J. Mamm. 20: 241, 14 May 1939h.

Holotype: 66653. Skin and skull. Adult female. Silver King Mine, summit of Toad Mountain, 6 mi (9.7 km) south of Nelson, Kootenay District, British Columbia, [Canada]. Collected 23 Jul 1894 by J. A. Loring. Original number 2042.

*Thomomys talpoides nebulosus* V. Bailey

Proc. Biol. Soc. Washington 27: 116, 10 Jul 1914.

Holotype: 202495. [Skin and skull]. Adult male. Jack Boyden's Ranch, 5 mi (8 km) above mouth of Sand Creek Canyon, altitude 3,750 ft (1,143 m), [Miller (1924:248): 15 mi (24 km) northeast of Sundance], Black Hills, [Crook County], Wyoming. Collected 25 Aug 1913 by V. Bailey. Original number 9508.

*Thomomys talpoides perpallidus* Merriam

Science 8: 588, 24 Dec 1886d.

= *Thomomys bottae perpallidus* Merriam, 1886. See Goldman (1935a:155).

Lectotype: [191935. Skin and skull. Adult male]. [V. Bailey (1915:68): Palm Springs (Agua Caliente), 6 mi (9.7 km)

south of Palm Springs Station, at sea level on the edge of the] Colorado Desert, [Riverside County], California. Collected [SL: 22 Mar] 1886 by F. Stephens. Original number [MCC: 235]. [SL: Merriam collection number 2218/2734]. No type specimen designated in original description. Lectotype designated by V. Bailey (1915:68).

*Thomomys talpoides pugetensis* Dalquest and Scheffer

Proc. Biol. Soc. Washington 55: 96, 13 Aug 1942.

= *Thomomys mazama pugetensis* Dalquest and Scheffer, 1942. See Johnson and Benson (1960:21).

Holotype: 272032. Skin, skull [and baculum]. Adult male. Three miles (4.8 km), not 4 (6.4 km) as in original description, south of Olympia, Thurston County, Washington. Collected 31 Dec 1940, not 1941 as in original description, by W. W. Dalquest. Original number 2022. [SL: 30555-X]. Changes from original description correspond to skin label data; also see Lidicker (1971:13).

*Thomomys talpoides relicinus* Goldman

J. Mamm. 20: 239, 14 May 1939h.

Holotype: 243549. Skin and skull. Adult female. Twin Springs, 20 mi (32 km) north of Minidoka, Snake River Desert, [Minidoka County], Idaho. Collected 22 Apr 1923 by L. J. Goldman. Original number 2841.

*Thomomys talpoides retrorsus* Hall

Univ. Kansas Publ., Mus. Nat. Hist. 5: 83, 1 Oct 1951.

Holotype: 69840. Skin and skull. Subadult male. Flagler, Kit Carson County, Colorado. Collected 26 Nov 1894 by C. P. Streator. Original number 4460.

*Thomomys talpoides tenellus* Goldman

J. Mamm. 20: 238, 14 May 1939h.

Holotype: 169753. Skin and skull. Adult female. [SL and FC: Pahaska Tepee], Whirlwind Peak, Absaroka Range, altitude 10,500 ft (3,200 m), Park County, Wyoming. Collected 3 Aug 1910 by M. Cary. Original number 2114.

*Thomomys talpoides trivialis* Goldman

J. Mamm. 20: 236, 14 May 1939h.

Holotype: 225918. Skin and skull. Adult male. Near head of Big Timber Creek, [Miller and Kellogg (1955:312): about 15 mi (24 km) northwest Big Timber], altitude 5,200 ft (1,585 m), aneroid reading, Crazy Mountains, [Sweet Grass County], Montana. Collected 20 Jun 1917 by M. A. Hanna. Original number 349.

*Thomomys talpoides tumuli* Dalquest and Scheffer

Proc. Biol. Soc. Washington 55: 96, 13 Aug 1942.

= *Thomomys mazama tumuli* Dalquest and Scheffer, 1942. See Johnson and Benson (1960:21).

Holotype: 272034. Skin and skull. Adult male. Seven miles (11 km) [SL: 5 mi (8 km)] north of Tenino, Thurston

County, Washington. Collected 2 Jan 1942 by W. W. Dalquest. Original number 2781. [SL: 30557-X].

*Thomomys talpoides whitmani* Drake and Booth  
Walla Walla Coll. Publ. Dep. Biol. Sci. and Biol. Sta. 1: 52, 25 Nov 1952.

Holotype: [286835]. Skin and skull, [SL and MC: 14 Jan 1957, skin destroyed by moths]. Adult male. Whitman National Monument, 6 mi (9.7 km) west of Walla Walla, altitude 750 ft (229 m), Walla Walla County, Washington. Collected 8 May 1952 by E. S. Booth. Original number 1694.

*Thomomys townsendii lenis* Goldman

Proc. Biol. Soc. Washington 55: 75, 25 Jun 1942.  
= *Thomomys bottae lenis* Goldman, 1942. See Durrant (1946:53).

Holotype: 264805. Skin and skull. Adult male. Richfield, Sevier County, Utah. Collected 11 Mar 1928 by A. W. Moore. Original numbers [SL: 203 and 385]. 28835-X.

*Thomomys uinta* Merriam

Proc. Biol. Soc. Washington 14: 112, 19 Jul 1901d.  
= *Thomomys talpoides uinta* Merriam, 1901. See Goldman (1939h:234).

Holotype: 22501/30051. Skin, skull [and baculum]. Adult male. [Miller (1924:250): Black's Fork], [V. Bailey (1915:113): north base of Gilbert Peak], altitude 10,000 ft (3,048 m), Uinta Mountains, [Summit County], Utah. Collected 6 Jun 1890 by V. Bailey. Original number 1262.

*Thomomys umbrinus albicularis* Nelson and Goldman

J. Mamm. 15: 106, 15 May 1934c.  
= *Thomomys umbrinus umbrinus* (Richardson, 1829). See Castro-Campillo and Ramirez-Pulido (2000:33).

Holotype: 51888. Skin and skull. Adult female. El Chico, altitude 9,800 ft (2,987 m), Sierra de Pachuca, Hidalgo, Mexico. Collected 27 Mar 1893, not 1896 as in original description, by [E. W.] Nelson and [E. A.] Goldman. Original number EWN 4505.

*Thomomys umbrinus analogus* Goldman

Proc. Biol. Soc. Washington 51: 59, 18 Mar 1938a.  
= *Thomomys bottae analogus* Goldman, 1938. See Patton and Smith (1990:19).

Holotype: 116994. Skin and skull. Adult male. Sierra Guadalupe, [Hall and Kelson (1959:419): about 12 mi (19 km) south of General Cepeda], [FC: about 6,500 ft (1,981 m)], southeastern Coahuila, Mexico. Collected 25 Apr 1902 by [E. W.] Nelson and [E. A.] Goldman. Original number 15117.

*Thomomys umbrinus caliginosus* Nelson and Goldman

J. Mamm. 15: 116, 15 May 1934c.  
= *Thomomys umbrinus madrensis* Nelson and Goldman, 1934. See Anderson (1972:291).

Holotype: 250887. [Skin and skull]. Adult male. Eight miles (13 km) west of Altamirano, altitude 8,000 ft (2,438 m), Sierra Madre, northwestern Chihuahua, Mexico, near Sonora boundary west of Casas Grandes. Collected 3 Nov 1932 by V. Bailey and F. Winthrop. Original number [FC: VB] 11071.

*Thomomys umbrinus chihuahuae* Nelson and Goldman

J. Mamm. 15: 114, 15 May 1934c.  
Holotype: 96452. Skin and skull. Adult male. Sierra Madre, altitude [FC: about] 7,000 ft (2,134 m), about 65 mi (105 km) east of Batopilas, Chihuahua, Mexico. Collected 1 Oct 1898 by E. A. Goldman. Original number [FC: Nelson and Goldman] 13076.

*Thomomys umbrinus chiricahuae* Nelson and Goldman

J. Mamm. 15: 117, 15 May 1934c.  
= *Thomomys bottae mearnsi* V. Bailey, 1914. See Hoffmeister (1986:233).  
Holotype: 247828. Skin and skull. Adult male. Pinery Canyon, altitude 7,500 ft (2,286 m), west slope of Chiricahua Mountains, [Cochise County], Arizona. Collected 28 Apr 1927 by G. G. Cantwell. Original number 2918.

*Thomomys umbrinus crassidens* Nelson and Goldman

J. Mamm. 15: 113, 15 May 1934c.  
Holotype: 91986. Skin and skull. Adult male. Sierra de Valparaíso, altitude 8,700 ft (2,652 m), western Zacatecas, Mexico. Collected 30 Nov 1897 by [E. W.] Nelson and [E. A.] Goldman. Original number 11793.

*Thomomys umbrinus durangi* Nelson and Goldman

J. Mamm. 15: 114, 15 May 1934c.  
Holotype: 94603. Skin and skull. Adult male. Durango, [FC: altitude 6,200 ft (1,890 m)], Durango, Mexico. Collected 28 [FC: 29] Jun 1898 by [E. W.] Nelson and [E. A.] Goldman. Original number 12656.

*Thomomys umbrinus enixus* Nelson and Goldman

J. Mamm. 15: 112, 15 May 1934c.  
Holotype: 90834. Skin and skull. Adult male. Sierra Moroni, altitude 8,500 ft (2,591 m), near Plateado, Zacatecas, Mexico. Collected 2 Sep 1897 by [E. W.] Nelson and [E. A.] Goldman. Original number 11606.

*Thomomys umbrinus eximius* Nelson and Goldman

J. Mamm. 15: 118, 15 May 1934c.  
Holotype: 96458. Skin and skull. Adult male. Sierra de Choix, altitude [FC: about] 5,000 ft (1,524 m), about 20 mi (32 km) [FC and SL: 50 mi (80 km)] northeast of Choix, Sinaloa, Mexico. Collected 19 Oct 1898 by E. A. Goldman. Original number [FC: Nelson and Goldman] 13137.

*Thomomys umbrinus extimus* Nelson and Goldman

J. Mamm. 15: 119, 15 May 1934c.

= *Thomomys atrovarius atrovarius* J. A. Allen, 1898. See Hafner et al. (2011: 1377).

Holotype: 88131. Skin and skull. Adult male. Colomo, altitude 600 ft (183 m), southern Nayarit, Mexico. Collected 5 Apr 1897, not 1898 as in original description, by [E. W.] Nelson and [E. A.] Goldman. Original number 10878.

#### *Thomomys umbrinus madrensis* Nelson and Goldman

J. Mamm. 15: 115, 15 May 1934c.

Holotype: 98203. Skin and skull. Adult male. Pilares Canyon, altitude 6,400 ft (1,951 m), 10 mi (16 km) northeast of Colonia Garcia, and about 25 mi (40 km) southwest of Casas Grandes, Chihuahua, Mexico. Collected 23 Jun 1899 by [E. W.] Nelson and [E. A.] Goldman. Original number 13810.

#### *Thomomys umbrinus martinensis* Nelson and Goldman

J. Mamm. 15: 108, 15 May 1934c.

= *Thomomys umbrinus umbrinus* (Richardson, 1829). See Castro-Campillo and Ramirez-Pulido (2000:33).

Holotype: 55622. Skin and skull. Adult female. San Martin Texmelucan, altitude 7,400 ft (2,256 m), Puebla, Mexico. Collected 13 Aug 1893 by [E. W.] Nelson and [E. A.] Goldman. Original number 5305.

#### *Thomomys umbrinus musculus* Nelson and Goldman

J. Mamm. 15: 119, 15 May 1934c.

= *Thomomys atrovarius atrovarius* J. A. Allen, 1898. See Hafner et al. (2011:1377).

Holotype: 90818. Skin and skull. Adult male. Pedro Pablo, altitude 3,500 ft (1,067 m), about 22 mi (35 km) east of Acaponeta, Sierra Teponahuaxtla, Nayarit, Mexico. Collected 3 Aug 1897 by [E. W.] Nelson and [E. A.] Goldman. Original number 11440.

#### *Thomomys umbrinus potosinus* Nelson and Goldman

J. Mamm. 15: 111, 15 May 1934c.

Holotype: 82057. Skin and skull. Adult male. La Tinaja, altitude [FC: about] 6,000 ft (1,829 m), about 20 mi (32 km) northeast of San Luis Potosi, [San Luis Potosi], Mexico. Collected 22 Jan 1897 by [E. W.] Nelson and [E. A.] Goldman. Original number 10469.

#### *Thomomys umbrinus sonoriensis* Nelson and Goldman

J. Mamm. 15: 118, 15 May 1934c.

Holotype: 250893. Skin and skull. Old adult female, not male as in original description. Ten miles (16 km) east of Chinapa, altitude 3,000 ft (914 m), Sonora River Valley, northern Sonora, Mexico. Collected 21 Nov 1932 by V. Bailey and F. Winthrop. Original number [FC: VB] 11135.

#### *Thomomys umbrinus supernus* Nelson and Goldman

J. Mamm. 15: 110, 15 May 1934c.

Holotype: 81687. Skin and skull. Adult male. Santa Rosa, altitude between 8,500 ft (2,591 m), not 9,500 as in original description, and 10,000 ft (3,048 m), about 7 mi (11 km) northeast of Guanajuato, Guanajuato, Mexico. Collected 15 Nov 1896 by [E. W.] Nelson and [E. A.] Goldman. Original number 10353.

#### *Thomomys umbrinus tolucae* Nelson and Goldman

J. Mamm. 15: 109, 15 May 1934c.

= *Thomomys umbrinus umbrinus* (Richardson, 1829). See Castro-Campillo and Ramirez-Pulido (2000:33).

Holotype: 55908. Skin and skull. Adult male. North slope Volcano of Toluca, altitude 9,500 ft (2,896 m), [Mexico], Mexico. Collected 5 Sep 1893 by [E. W.] Nelson and [E. A.] Goldman. Original number [FC: EWN] 5385.

#### *Thomomys umbrinus vulcanius* Nelson and Goldman

J. Mamm. 15: 109, 15 May 1934c.

= *Thomomys umbrinus umbrinus* (Richardson, 1829). See Castro-Campillo and Ramirez-Pulido (2000:33).

Holotype: 51885. Skin and skull. Adult female. Volcano of Popocatepetl, [FC: timberline], altitude 12,900 ft (3,932 m), Mexico, Mexico. Collected 27 Feb 1893 by [E. W.] Nelson and [E. A.] Goldman. Original number [FC: EWN] 4407.

#### *Thomomys umbrinus zacatecae* Nelson and Goldman

J. Mamm. 15: 112, 15 May 1934c.

Holotype: 57972. Skin and skull. Adult male. Berriozabal, altitude 6,600 ft (2,012 m) [FC: 6,800 ft (2,073 m)], Zacatecas, Mexico. Collected 29 Dec 1893 by [E. W.] Nelson and [E. A.] Goldman. Original number 5607.

### Genus *Zygogeomys* Merriam, 1895

#### *Zygogeomys trichopus* Merriam

N. Amer. Fauna 8: 196, 31 Jan 1895.

= *Zygogeomys trichopus trichopus* Merriam, 1895. See Goldman (1938d:211).

Holotype: 50107. [Skin and skull]. Adult male. Nahuatzin, [FC: 8,500 ft (2,591 m)], Michoacan, Mexico. Collected 11 Oct 1892 by E. W. Nelson. Original number 3571.

#### *Zygogeomys trichopus tarascensis* Goldman

Proc. Biol. Soc. Washington 51: 211, 23 Dec 1938d.

Valid subspecies according to J. L. Patton (in litt.) 17 Jan 2011.

Holotype: 34922/47187. Skin and skull. Adult female. Mountains 6 mi (10 km) southeast of Patzcuaro, altitude [SL and FC: about] 8,000 ft (2,438 m), Michoacan, Mexico. Collected 24 Jul 1892 by [E. W.] Nelson and [E. A.] Goldman. Original number [FC: EWN] 2943.

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