LIST OF
NORTH AMERICAN
RECENT MAMMALS

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REMINGTON KELLOGG
Director, United States National Museum
The scientific publications of the National Museum include two series known, respectively, as *Proceedings* and *Bulletin*.

The *Proceedings* series, begun in 1878, is intended primarily as a medium for the publication of original papers based on the collections of the National Museum, that set forth newly acquired facts in biology, anthropology, and geology, with descriptions of new forms and revisions of limited groups. Copies of each paper, in pamphlet form, are distributed as published to libraries and scientific organizations and to specialists and others interested in the different subjects. The dates at which these separate papers are published are recorded in the table of contents of each of the volumes.

The series of *Bulletins*, the first of which was issued in 1875, contains separate publications comprising monographs of large zoological groups and other general systematic treatises (occasionally in several volumes), faunal works, reports of expeditions, catalogs of type specimens, special collections, and other material of similar nature. The majority of the volumes are octavo in size, but a quarto size has been adopted in a few instances. In the *Bulletin* series appear volumes under the heading *Contributions from the United States National Herbarium*, in octavo form, published by the National Museum since 1902, which contain papers relating to the botanical collections of the Museum.

The present work forms No. 205 of the *Bulletin* series.

Remington Kellogg,
Director, United States National Museum.
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Introduction

The object of the present list is to summarize the results of taxonomic studies of North American Recent mammals up to January 1, 1953, and to indicate the forms represented in the collections of the United States National Museum. North America as here understood includes the entire continent from Panamá northward, Greenland, the Greater Antilles, and the Lesser Antilles south to Grenada. In no other museum is the mammal fauna of an area of comparable size so largely represented. The extent of this representation is shown by the tabular synopsis on the following page.

At least 263,214 specimens, including 1871 types, comprise the collection of North American Recent mammals in the United States National Museum. Approximately 56 percent of this material is in the collection brought together by the staff of the Fish and Wildlife Service, Department of the Interior; the remainder, including the seals, sirensians, cetaceans, and all of the older, more historic specimens, is kept in the museum collection. The material derived from these two sources furnishes so complete a representation of the mammals of North America that, of the 3,622 forms now listed, only 544 are not included.

The number of specimens in the Fish and Wildlife collection entered in the Museum's catalogs to June 30, 1952, is 146,228. This material, assembled wholly by the activities of the Fish and Wildlife Service, belongs, according to Act of Congress (sundry civil act of March 3, 1879; 20 U. S. C. 394), to the United States National Museum. By the same authority, it is maintained as a separate collection pending investigations by members of the service. The wording of the act is as follows: "... And all collections of rocks, minerals, soils, fossils and objects of natural history, archeology, and ethnology made by the Coast and Interior Survey, the Geological Survey, or by any other parties of the Government of the United States, when no longer needed for the investigations in progress, shall be deposited in the National Museum."

In 1884 Dr. F. W. True published under the title "A Provisional List of the Mammals of North and Central America, and the West Indian Islands" (Proc. U. S. Nat. Mus., vol. 7 (App., Circ. 29), pp. 587–611, Nov. 29, 1884) a summary of the North American mammal fauna as then known. The number of forms known in 1884 was 363; in 1900 the number of forms recognized had increased to about 1,450 (Miller and Rehn, Systematic Results of the Study of North American Land Mammals to the Close of the Year 1900; Proc. Boston Soc. Nat. Hist., vol. 30, pp. 1–352, Dec. 27, 1901); in 1911 approximately 2,100 forms were recognized (Miller, List of North American Land Mammals in the United States National Museum, 1911; U. S. Nat. Mus. Bull. 79, Dec. 31, 1912); and in 1923 the list contained 2,554 forms (Miller, List of North American Recent Mammals, 1923; U. S. Nat. Mus. Bull. 128, Apr. 29, 1924).
Mammals represented in U. S. National Museum collections

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</table>

An asterisk is placed after the name of each form represented in the national collection. A dagger indicates that the type is there also. It is to be understood that, especially in unrevised genera, the indication that a form is in the collection implies nothing more than the presence of a specimen of the animal on which a name was based.


Under every species and subspecies reference is made to the first publication of the specific or subspecific name. To this, when necessary, is added (a) reference to first use of the current binomial or trinomial; (b) in the case of species described before 1834, but not at that date admitted as valid, reference
to their establishment as members of the North American fauna; (c) reference to True's list, but with the many species which prove to have been composite, as understood in 1884, no attempt is made to apportion the name then used to each of the component parts as they now stand; and (d) references to changes of such names as are now different from those used by True. References to alterations in generic names are also given, but the concordance with the nomenclature of 1884, being indicated by the citations under species, is here omitted. The type locality of each form is stated with all possible exactitude, and in revised genera the ranges are given, so far as practicable, in the words of the author of the revision.

All questions of nomenclature have been decided as nearly as possible in accordance with the International Zoological Code.

In the preparation of this bulletin assistance has been received from members of the Section of Distribution of Birds and Mammals, Fish and Wildlife Service, particularly Miss Viola S. Schantz, who has verified the presence of listed forms in that collection; from Dr. David H. Johnson, Dr. Henry W. Setzer, and Charles O. Handley, Jr., of the Division of Mammals, United States National Museum; and from Dr. E. Raymond Hall, Director, Museum of Natural History, University of Kansas.
North American Recent Mammals

Class MAMMALIA
Subclass THERIA
Infraclass METATHERIA
Superorder DIDELPHIA
Order MARSUPIALIA
Suborder POLYPROTODONTIA
Superfamily DIDELPHOIDEA
Family Didelphiidae

Genus Didelphis Linnaeus (opossums)

1758. Didelphis Linnaeus, Systema naturae, ed. 10, vol. 1, p. 54. (Type, Didelphis marsupialis Linnaeus.)

Didelphis marsupialis virginiana Kerr*


Didelphis marsupialis pigra Bangs*


Didelphis marsupialis texensis J. A. Allen‡*


Didelphis marsupialis mesamericana Oken*


**Didelphis marsupialis tabascensis** J. A. Allen†*


**Didelphis marsupialis yucatanensis** J. A. Allen†*


**Didelphis marsupialis cozumelae** Merriam†*


*Type Locality.*—Cozumel Island, Quintana Roo, México. *Range.*—Known from type locality only.

**Didelphis marsupialis richmondi** J. A. Allen†*


*Type Locality.*—Greytown [=San Juan del Norte], Comarca de San Juan del Norte, Nicaragua. *Range.*—Recorded also from near San José, Costa Rica (J. A. Allen, loc. cit.).
Didelphis marsupialis particeps Goldman
_Type Locality._—San Miguel Island, Archipiélago de las Perlas, Golfo de Panamá, Panamá. _Range._—Known from type locality only.

**Didelphis marsupialis battyi** Thomas
_Type Locality._—Coiba Island, Panamá. _Range._—Known from type locality only.

**Didelphis marsupialis etensis** J. A. Allen*

**Didelphis marsupialis insularis** J. A. Allen*

_Genus MARMOSA_* Gray (murine opossums)

_cinerca_—group

**Marmosa alstoni alstoni** (J. A. Allen) *

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Type Locality.—Tres Ríos, subtropics, east of divide, Cartago, Costa Rica. Range.—Subtropics of Costa Rica, Nicaragua, and Honduras and, missing lowlands of Panamá, reappearing in Colombian subtropics (Departments of Antioquia and Caldas).

**Marmosa alstoni nicaraguae** Thomas*


*murina*—group

**Marmosa mitis isthmica** Goldman†*


Type Locality.—Río Indio, near Gatún, Canal Zone, Panamá. Range.—From western Panamá through Canal Zone eastward into Colombia.

**Marmosa mitis ruatanica** Goldman†*


Type Locality.—Ruatán Island, off north coast (Caribbean) of Honduras. Range.—Known from Ruatán Island. Recorded also at Bokowina and Silkgrass in British Honduras (Hershkovitz, loc. cit.).

**Marmosa mitis chapmani** J. A. Allen*


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Type Locality.—Caura, head of Caura Valley, northern range, Trinidad, British West Indies. Altitude, 500 feet. Range.—Apparently common on Trinidad; and the animals from Grenada and Tobago, which, although appearing very slightly smaller than the Trinidad animals, are essentially the same, are referred to this species.

*Marmosa mitis fulviventer* Bangs


Type Locality.—San Miguel Island, Archipiélago de las Perlas, Golfo de Panamá, Panamá. Range.—Recorded only from islands of Saboga and San Miguel, Panamá (Pacific Coast).

*Marmosa mexicana mexicana* Merriam†*


Type Locality.—Juquila, Oaxaca, México. Altitude, 1,500 meters. Range.—From Veracruz and Oaxaca southward to Chiriquí, Panamá, excepting arid parts of Yucatán and higher parts of mountains in Guatemala, Honduras, Nicaragua, and Costa Rica.

*Marmosa mexicana mayensis* Osgood


*Marmosa mexicana zeledoni* Goldman†*


Type Locality.—Navarro, near Orosi, Caribbean slope, Cartago, Costa Rica. Altitude, between 2,500 and 3,000 feet. Range.—Parts of Costa Rica (Navarro, Boruco, Jiménez, Río Pacuare) and Nicaragua (Bluefields, Escondido River, Río Tuma, east of Matagalpa).

Marmosa canescens canescens (J. A. Allen) *

Type Locality.—Santo Domingo de Guzmán, Isthmus of Tehuantepec, Oaxaca, México. Range.—Yucatán, Oaxaca (and probably parts of Chiapas), Guerrero, parts of Puebla, Michoacán. A specimen from Colima and another from Nayarit appear intermediate between canescens and sinaloae.

Marmosa canescens sinaloae J. A. Allen*

Type Locality.—Tatemeles, Sinaloa, México. Range.—Provinces of Sinaloa, Durango and Nayarit, México.

Marmosa canescens oaxacae Merriam†

Type Locality.—City of Oaxaca, Oaxaca, México. Range.—Known from city of Oaxaca, only.

Marmosa canescens insularis Merriam†

Type Locality.—María Madre Island, Tres Marías Islands, Nayarit, México. Range.—Known from María Madre Island only.

noctivagans—group

Marmosa invicta Goldman†

Type Locality.—Cana (Santa Cruz de Cana), upper Río Tuyra, Darién, eastern Panamá. Altitude, 2,000 feet. Range.—Known from type locality only.
Genus MONODELPHIS Burnett (short bare-tailed opossums)


Monodelphis melanops (Goldman)†*

Type Locality.—Cana (Santa Cruz de Cana), upper Río Tuyra, Darién, eastern Panamá. Altitude, 2,000 feet. Range.—Known from type locality only.

Genus PHILANDER Tiedemann (four-eyed or gray-masked opossums)

(Type, P[hilander] virginianus Tiedemann=Didelphis opossum Linnaeus.)


Philander opossum fuscorugiseus (J. A. Allen) *


Philander opossum pallidus (J. A. Allen) †*


Genus METACHIRUS Burmeister (brown-masked opossums)

1854. Metachirus Burmeister, Systematische Uebersicht der Thiere Brasiliens, . . ., pt. 1, p. 135. (Type, Didelphys myosurus Temminck= D. nudicaudata E. Geoffroy-Saint-Hilaire.)

Metachirus nudicaudatus dentaneus Goldman†*


Genus CALUROMYS ‘J. A. Allen (woolly opossums)

1856. Philander Burmeister, Erläuterungen zur Fauna Brasiliens . . ., p. 74. (Type, Philander cayopollin Burmeister= Didelphis philander Linnaeus.) (Homonym of Philander Tiedemann, 1808.)


Subgenus MALLODELPHYS * Thomas

Caluromys derbianus derbianus (Waterhouse) *


Type Locality.—Cauca Valley, Colombia. Range.—Northward to Panamá (Goldman, Smithsonian Misc. Coll., vol. 69, No. 5, p. 54, Apr. 24, 1920).

Caluromys derbianus pallidus (Thomas) *


Caluromys derbianus nauticus (Thomas)
Type Locality.—Gobernadora Island, off west coast of Panamá. Range.—Recorded also from Brava and Cebaco islands (Thomas, op. cit., p. 360).

Caluromys derbianus canus (Matschie)*
Type Locality.—Nicaragua.

Caluromys derbianus centralis (Hollister)†*
Type Locality.—Talamanca, Limón, Costa Rica. Range.—Forested coastal region of eastern Costa Rica.

Caluromys derbianus fervidus (Thomas)*

Caluromys derbianus aztecus (Thomas)*
Type Locality.—San Juan de la Punta, Veracruz, México. Range.—Recorded also from Teapa, Tabasco, México (Thomas, loc. cit.).

Genus CHIRONECTES Illiger (water opossums)
1811. Chironectes Illiger, Prodromus systematis mammalium et avium . . ., p. 76. (Type, Lutra minima Zimmermann.)

Chironectes argyrodytes Dickey*
Chironectes panamensis Goldman†*

*Infraclass* EUTHERIA

*Superorder* MONODELPHIA

*Order* INSECTIVORA

*Superfamily* TENRECOIDEA

*Family* SOLENODONTIDAE

*Genus* SOLENODON Brandt


*Solenodon paradoxus* Brandt* *

*Type Locality.*—Hispaniola.

*Genus* ATOPOGALE Cabrera


*Atopogale cubana* (Peters)


*Atopogale poeyana* (Barbour)*

Type Locality.—Vicinity of Nipe Bay, Oriente, northeastern Cuba. Range.—Mountains of northeastern Cuba; recorded also from Sierra de Toar and near Nabuiabo swamp between Baracoa and Duaba.

Superfamily SORICOIDEA

Family SORICIDAE (shrews)

Subfamily SORICINAE

Genus SOREX Linnaeus

1758. Sorex Linnaeus, Systema Naturae, ed. 10, vol. 1, p. 53. (Type, Sorex araneus Linnaeus.)

Subgenus SOREX Linnaeus

cinereus—group

1899. Sorex idahoensis Merriam†, North Amer. Fauna No. 5, p. 32, July 30, 1891. (Timber Creek, Lemhi Mountains ["Salmon River Mountains"], Lemhi County, Idaho.)

Type Locality.—Fort Severn (Severn Settlement, now Severn), mouth of Severn River, southwest side of Hudson Bay, Ontario, Canada. Range.—Quebec from Chimo and western end of Gulf of St. Lawrence west, the whole of Ontario, eastern and northern Manitoba, northern Saskatchewan, northern and western Alberta, and Northwest Territories to northern limit of trees, central and southern Yukon (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 14, Jan. 24, 1947); and east-central Alaska, south to New Jersey, New York, mountains of West Virginia, North Carolina and Tennessee, northern half of lower peninsula of Michigan (Burt, Mammals of Michigan, p. 93, 1946), and through mountains of western Montana and western Wyoming to northern New Mexico, and to northeastern and central Washington.


Type Locality.—Black Bay, Strait of Belle Isle, Labrador. Range.—Labrador south of lat. 58° N.; west in Quebec along north shore of Gulf of St. Lawrence

*Revised by Jackson, North Amer. Fauna No. 51, pp. 30-200, July 24, 1928.
at least as far as Moisie River and Bay of Seven Islands (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 14, Jan. 24, 1947).

**Sorex cinereus acadicus** Gilpin*  

*Type Locality.*—Nova Scotia (assumed to be in vicinity of Halifax, Halifax County). *Range.*—Nova Scotia, New Brunswick, Prince Edward Island, and parts of eastern Quebec, Canada.

**Sorex cinereus nigriculus** Green  

*Type Locality.*—Alluvial tidewater marsh on Tuckahoe River, east of Tuckahoe, Cape May County, N. J. *Range.*—Known from type locality only.

**Sorex cinereus fontinalis** Hollister†*  

*Type Locality.*—Near Beltsville, Prince Georges County, Md. *Range.*—Northern Virginia (Bray, Journ. Mamm., vol. 20, No. 1, p. 102, Feb. 15, 1939), Maryland, eastern Pennsylvania, and Delaware (Poole, loc. cit.).

**Sorex cinereus ohioensis** Bole and Moulthrop*  

*Type Locality.*—Hunting Valley, Cuyahoga County, Ohio. *Range.*—Northern Ohio, from Ashtabula County at least as far west as Seneca County.

**Sorex cinereus lesueurii** (Duvernoy) *  


**Sorex cinereus ugyunak** Anderson and Rand*  
Type Locality.—Tuktoyaktok (Tuktak), about 20 miles southwest of Toker Point, on arctic coast near northeastern corner of Mackenzie River delta, Mackenzie district, Northwest Territories, Canada. Sea level. Range.—Arctic tundra region from northwestern side of Hudson Bay in Keewatin district (Chesterfield, 45 miles southwest of Padley Post), west along Arctic Coast to Mackenzie District (Coronation Gulf, Horton River, Harrowby Bay, Tuktak, and Aklavik), and northeastern Arctic Alaska (Hulahula River, Okpilak River near Barter Island), and above timber line in Brooks (or Endicott) Range about 80 miles west of Alaska—Yukon International Boundary (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 15, Jan. 24, 1847). Recorded also at Tolugak Lake, near head of Anaktuvuk River, Alaska (Rausch, Journ. Mamm., vol. 31, No. 4, p. 465, Nov. 21, 1950).

Sorex cinereus haydeni Baird†*

Type Locality.—Fort Union, Nebraska (later Fort Buford, now Mondak, Roosevelt County, Mont., near Buford, Williams County, N. Dak.). Range.—Extreme east-central Alberta (Islay), southern Saskatchewan, southwestern Manitoba, south through extreme western Minnesota to northwestern Iowa, northern Nebraska, southwestern South Dakota, southeastern Wyoming, and eastern Montana.

Sorex cinereus streatori Merriam†*


Sorex cinereus hollisteri Jackson†*


Sorex lyelli Merriam†*

Type Locality.—Mount Lyell [near head of Lyell Fork of Tuolumne River], Tuolumne County, Calif. Altitude, about 10,000 feet. Range.—Crest of central Sierra Nevada in California, recorded occurrences from Vogelsang Lake, Mariposa County, and near Williams Butte, Mono County, southeast to Mammoth, Mono County, Calif.; vertical range, 6,900 to 10,350 feet; zonal range, Canadian and Hudsonian (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 79, Sept. 26, 1933).

Sorex preblei Jackson†


Type Locality.—Jordan Valley, Malheur County, Oreg. Altitude, 4,200 feet. Range.—Known from eastern Oregon only.

fumeus—group

Sorex fumeus fumeus Miller*


Type Locality.—Peterboro, Madison County, N. Y. Range.—New Hampshire, Vermont, Connecticut, Rhode Island, and northern New York, south through northwestern New Jersey, Pennsylvania, and western Maryland to northwestern Georgia and Greenville County, northwestern South Carolina (Coleman, Journ. Mamm., vol. 29, No. 3, p. 293, Aug. 31, 1948); westward to south-central Ohio, Mammoth Cave, Edmondson County, Ky. (V. Bailey, Amer. Midl. Nat., vol. 14, No. 5, p. 57, 1933) and southeastern Wisconsin (Racine); locally in Middlesex (London), Oxford and Elgin Counties in southern Ontario; at Pancake Bay, Schreiber, and Thunder Bay on east and north sides of Lake Superior; north in Ontario to Fraserdale; and in Quebec north and east to Lake Edward (Champlain and Quebec Counties), and east on north side of St. Lawrence River to St. Joachim, Montmorency County (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 15, Jan. 24, 1947).

Sorex fumeus umbrosus Jackson†


Type Locality.—James River, Antigonish County, Nova Scotia. Range.—Nova Scotia (and probably Cape Breton Island), New Brunswick, Gaspé Peninsula, southeastern Quebec at least as far west as Rivière-du-Loup (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 16, Jan. 24, 1947), and Maine.

umbrosus—group

Sorex arcticus arcticus Kerr*


Sorex arcticus maritimensis R. W. Smith†


Type Locality.—Wolfville, Kings County, Nova Scotia, Canada. Range.—Nova Scotia and probably New Brunswick.

Sorex arcticus laricorum Jackson†


Type Locality.—Elk River, Sherburne County, Minn. Range.—Eastern North Dakota, northeastern South Dakota, northern and central Minnesota, northern Wisconsin, and northern Michigan; north to southern Manitoba (Emerson and Marchland), northwesterly as far as Aweme and Carberry (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 16, Jan. 27, 1947).

Sorex tuudrensis Merriam†


Sorex jacksoni Hall and Gilmore


Type Locality.—Sevoonga, 2 miles east of North Cape, St. Lawrence Island, Bering Sea, Alaska. Range.—Known from type locality only.

Sorex hydrodromus Dobson

Type Locality.—Unalaska Island, Aleutian Islands, Alaska. Range.—Known from type locality only.

*pribilofensis*—group

Sorex pribilofensis Merriam†*


Type Locality.—St. Paul Island, Pribilof Islands, Alaska. Range.—Known from type locality only.

*merriami*—group

Sorex merriami merriami Dobson†*

1890. Sorex merriami Dobson, A monograph of the Insectivora, pt. 3, fasc. 1, pl. 23, fig. 6, May 1890.


Sorex merriami leucogenys Osgood†*


Type Locality.—Mouth of canyon of Beaver River, about 3 miles from Beaver, Beaver County, Utah. Range.—Northeastern Arizona, southern Utah; and southern Nevada, near western border of Esmeralda County (Hall, Mammals of Nevada, p. 119, July 1, 1946).

*sclateri*—group

Sorex sclateri Merriam†*


Type Locality.—Tumbalá, Chiapas, México. Altitude, 5,000 feet. Range.—Known from type locality only.

*longirostris*—group

Sorex longirostris longirostris Bachman*


Type Locality.—Hume Plantation, swamps of Santee River [Cat Island, mouth of Santee River], S. C. Range.—Atlantic Plain and Piedmont region (except

\textit{Sorex longirostris fisheri} Merriam†*


\textit{Type Locality}.—Lake Drummond, Dismal Swamp, Norfolk County, Va. \textit{Range}.—Dismal Swamp, Va. and adjacent part (Chapanoke) of North Carolina. \textit{dispar}—group

\textit{Sorex dispar} Batchelder*


\textit{Type Locality}.—Beedes (sometimes called Keene Heights), Essex County, N. Y. \textit{Range}.—Mountains of eastern New York, western Massachusetts, northeastern Pennsylvania, and southern West Virginia. Recorded also from Clingmans Dome (6,642 feet), Swain County, N. C., and along West Prong and Walker Prong, Little Pigeon River, Great Smoky Mountains National Park, Sevier County, Tenn. (Conaway and Pfitzer, Journ. Mamm., vol. 33, No. 1, p. 107, Feb. 18, 1952).

\textit{Sorex gaspensis} Anthony and Goodwin


\textit{Type Locality}.—Mount Albert, Gaspé Peninsula, Quebec, Canada. Altitude, 2,000 feet. \textit{Range}.—Known from Gaspé Peninsula only.

\textit{trowbridgii}—group

\textit{Sorex trowbridgii trowbridgii} Baird†*


**Sorex trowbridgii destructioni** Scheffer and Dalquest†*


**Sorex trowbridgii humboldtensis** Jackson†*


*Type Locality.*—Carson’s Camp, Mad River, Humboldt Bay, Humboldt County, Calif. *Range.*—Coastal strip of Humboldt and Mendocino Counties; recorded definitely from Orick and Hoopa Valley south to vicinity of Mendocino; interiorly to Sherwood; vertical range, near sea level to 2,300 feet; zonal range, Transition and Canadian (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 79, Sept. 26, 1933).

**Sorex trowbridgii montereyensis** Merriam†*


*Type Locality.*—Monterey, Monterey County, Calif. *Range.*—Coastal strip of west-central California, from southern Mendocino County south to southern San Luis Obispo County (San Luis Obispo); one record for “Peachtree River,” San Rafael Mountains, northern Santa Barbara County; extreme interior occurrences at Mount St. Helena, Napa County; Berkeley, Alameda County; Mount Hamilton, Santa Clara County; and Fremont Peak, Gabilan Range, Monterey County; vertical range, from near sea level to 2,000 feet; zonal range, chiefly Transition, occasionally Upper Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 30, Sept. 26, 1933).

**Sorex trowbridgii mariposae** Grinnell*


*Type Locality.*—Yosemite Valley [near the old Sentinel Hotel], Mariposa County, Calif. Altitude, 4,000 feet. *Range.*—Extreme south-central Oregon, northern California south along higher inner Coast Ranges to vicinity of Mount Sanhedrin, Mendocino County; east at north to Parker Creek, Warner Mountains, Modoc County, and west to Jackson Lake, Siskiyou County; and northern Sierra Nevada, south on west slope as far as Kaweah River, Tulare County; vertical range, 1,268 to 7,500 feet; zonal range, predominantly Transition, locally also in Canadian (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 80, Sept. 26, 1933); and in southwestern Washoe County, western Nevada (Hall, Mammals of Nevada, p. 117, July 1, 1946).
vagrans-obscurus—group

Sorex vagrans vagrans Baird†*


_Type Località._—Shoalwater Bay (also known as Willapa Bay), Pacific County, Wash. _Range._—Southern British Columbia, western Washington, western Oregon, and northwestern California south to San Francisco Bay.

Sorex vagrans vancouverensis Merriam†*


_Type Località._—Goldstream, Vancouver Island, British Columbia, Canada. _Range._—Southern half of Vancouver Island, north on east coast to Sayward.

Sorex vagrans nevadensis Merriam†*


_Type Località._—Reese River at about 6,000 feet, at line between Lander and Nye Counties, Nev. _Range._—Central Nevada.

Sorex vagrans halicoetes Grinnell*


Sorex vagrans paludivagus von Bloeker


_Type Località._—Salt marsh at mouth of Elkhorn Slough, Moss Landing, Monterey County, Calif. _Range._—Insofar as known, confined to coastal salt marsh areas in west-central California, from San Gregorio, San Mateo County, south at least to Seaside Lagoon, Monterey County. Probably also occurs in salt marshes on seaward side of San Francisco Peninsula as far north as Rockaway Beach, San Mateo County, and on Monterey Peninsula as far south as Point Pinos, Monterey County.

Sorex vagrans amoenus Merriam†*


Type Locality.—Near Mammoth, head of Owens River, east slope of Sierra Nevada Mountains, Mono County, Calif. Altitude, about 8,000 feet. (A. B. Howell, Journ. Mamm., vol. 4, No. 4, p. 266, Nov. 1, 1923). Range.—South-central Oregon and northern California, east to Warner Mountains, Modoc County, west to Salmon Mountains, southwestern Siskiyou County; south in Sierra Nevada to Alvord (near Big Pine), Inyo County; vertical range, 3,900 to 8,100 feet; zonal range, Canadian and Upper Transition (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 81, Sept. 26, 1933); and central Nevada from western to eastern border (Hall, Mammals of Nevada, p. 119, July 1, 1946).

Sorex vagrans monticola Merriam†*


1891. Sorex dobsoni Merriam†, North Amer. Fauna No. 5, p. 33, July 30, 1891. (Sawtooth or Alturas Lake, east base of Sawtooth Mountains, Blaine County, Idaho. Altitude, about 7,200 feet.)


Sorex vagrans orizabae Merriam†*


Type Locality.—Volcán de Orizaba, Puebla, México. Altitude, 9,500 feet. Range.—Mountains of west-central Veracruz, south to Volcán de Popocatépetl, and west to central Michoacán, México.

Sorex milleri Jackson†*


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Type Locality.—Madera Camp, Sierra del Carmen, Coahuila, México. Altitude, 8,000 feet. Range.—Known from type locality only.

Sorex durangae Jackson†*


Type Locality.—El Salto, Durango, México. Range.—Known from type locality only.

Sorex obscursus obscursus Merriam†*

1891. Sorex vagrans similis Merriam, North Amer. Fauna No. 5, p. 34, July 30, 1891. (Not of Hensel, 1855.)

1895. Sorex obscursus Merriam, North Amer. Fauna No. 10, p. 72, Dec. 31, 1895. (Substitute for similis Merriam.)


Sorex obscursus neomexicanus V. Bailey†*


Type Locality.—Cloudcroft, Otero County, N. Mex. Altitude, 9,000 feet. Range.—Mountains of south-central New Mexico.

Sorex obscursus parvidens Jackson†*


Type Locality.—Spring known as Thurman’s Camp [now Bluff Lake], western side of San Bernardino Peak, San Bernardino County, Calif. Altitude, 7,500 feet. Range.—San Bernardino and San Gabriel Mountains, San Bernardino County, Calif.

Sorex obscursus shumaginensis Merriam†*


Type Locality.—Popof Island, Shumagin Islands, Alaska. Range.—Western Alaska, from Seward Peninsula southeast to northern part of Kenai Peninsula.
Sorex obscurus mixtus Hall
Type Locality.—Vananda, Texada Island, Georgia Strait, British Columbia, Canada. Range.—Texada Island, British Columbia.

Sorex obscurus calvertensis Cowan
Type Locality.—Safety Cove, Calvert Island, British Columbia, Canada. Range.—Calvert Island and Banks Island, British Columbia.

Sorex obscurus insularis Cowan
Type Locality.—Smythe Island, Bardswell Group, British Columbia, Canada. Range.—Smythe, Townsend, and Reginald Islands, British Columbia.

Sorex obscurus alascensis Merriam†*
Type Locality.—Yakutat Bay, Alaska. Range.—Coast region of Alaska from southern part of Kenai Peninsula south to Juneau; also Sheslay River, northwestern British Columbia.

Sorex obscurus malitiosus Jackson
Type Locality.—East side of Warren Island, Alaska. Range.—Known only from Warren and Coronation Islands, Alaska.

Sorex obscurus elassodon Osgood†*
Type Locality.—Cumshewa Inlet, Moresby Island, Queen Charlotte Islands, British Columbia, Canada. Range.—Certain islands of southeastern Alaska and British Columbia from Admiralty Island, Alaska, south to Moresby Island, Queen Charlotte Islands, British Columbia (except Coronation and Warren Islands, Alaska, inhabited by malitiosus), including Admiralty, Baranof, Prince of Wales, Duke, Mitkof, and Forrester Islands, Alaska, and Graham, Langara, and Moresby Islands, British Columbia.

Sorex obscurus longicauda Merriam†*
Type Locality.—Wrangell, Alaska. Range.—Coastal region of southeastern Alaska and British Columbia from Port Snettisham, Alaska, south to Metlakatla, Dean Channel, Bella Coola region, and Rivers Inlet (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 19, Jan. 24, 1947), as well as certain adjacent islands in Alaska, as Etolin, Gravina, Revillagigedo, Sergie, and Wrangell.

Sorex obscurus prevostensis Osgood†*


Type Locality.—North end of Prevost Island (Kunghit Island on some maps), on coast of Houston Stewart Channel, Queen Charlotte Islands, British Columbia, Canada. Range.—Known from the type locality only.

Sorex obscurus isolatus Jackson†*


Type Locality.—Mouth of Millstone Creek, Nanaimo, Vancouver Island, British Columbia, Canada. Range.—Vancouver Island.

Sorex obscurus setosus Elliot*


Sorex obscurus soperi Anderson and Rand


Type Locality.—Two and one-half miles northwest of Lake Audy, Riding Mountain National Park, southwestern Manitoba, Canada. Altitude 1,740 feet. Range.—Higher wooded areas at eastern and northern edges of Great Plains region of Canada, from southwestern Manitoba (Riding Mountain National Park), central Saskatchewan (Prince Albert National Park), and in Cypress Hills in southwestern Saskatchewan (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 20, Jan. 24, 1947).

Sorex obscurus permiliensis Jackson†*


Type Locality.—Permilia Lake, west base of Mount Jefferson, Cascade Range, Marion County, Oreg. Range.—Cascade Mountains (and foothills) of northern Oregon (Mount Hood south to Mount Jefferson).
Sorex obscurus bairdi Merriam†*
*Type Locality.*—Astoria, Clatsop County, Oreg. *Range.*—Extreme northwestern Oregon (Astoria, Netarts, Portland) southeasterly and southeast of Willamette River and west of Cascade Mountains to Prospect, Jackson County.

Sorex yaquinae Jackson†*

Sorex pacificus pacificus Coues†*

Sorex pacificus sonomae Jackson†*
*Type Locality.*—Sonoma County side of Gualala River, near Gualala, Calif. *Range.*—Humid coast region of California from vicinity of Point Arena, Mendocino County, south to Inverness, near Point Reyes, Marin County.

*stizodon*—group

Sorex stizodon Merriam†*
*Type Locality.*—San Cristóbal, Chiapas, México. *Range.*—Known from type locality only.

*veraepacis*—group

Sorex veraepacis veraepacis Alston*
*Type Locality.*—Cobán, Alta Verapaz, Guatemala. *Range.*—Central and western Guatemala at about lat. 16° N.

Sorex veraepacis chiapensis Jackson†*
Type Locality.—San Cristóbal, Chiapas, México. Altitude, 9,500 feet. Range.—Central Chiapas, México, to west-southwestern Guatemala.

_Sorex veraepacis mutabilis_ Merriam†*


Type Locality.—Reyes (near Cuicatlán), Oaxaca, México. Altitude, 10,200 feet. Range.—Central Guerrero west to north-central, and east-central Guerrero; and south to south-central Oaxaca.

_Sorex macrodon_ Merriam†*


Type Locality.—Orizaba, Veracruz, México. Altitude, 4,200 feet. Range.—West-central Veracruz, México.

saussurei—group

_Sorex saussurei saussurei_ Merriam†*


Type Locality.—North slope of El Nevado de Colima, Jalisco, México. Altitude, 8,000 feet. Range.—Extreme southern Coahuila south through western Tamaulipas, Guanajuato, Hidalgo, and western Puebla to northwestern Oaxaca and central Guerrero, west through northern Michoacán to west-central Jalisco.

_Sorex saussurei veraecrucis_ Jackson†*


Type Locality.—Xico, Veracruz, México. Altitude 6,000 feet. Range.—North-central part of State of Veracruz south to Mount Zempoaltepec, eastern Oaxaca, México.

_Sorex saussurei oaxacae_ Jackson†*


Type Locality.—Mountains near Ozolotepec, Oaxaca, México. Altitude, 10,000 feet. Range.—Known from type locality only.

_Sorex saussurei cristobalensis_ Jackson†*


Type Locality.—San Cristóbal, Chiapas, México. Altitude, 8,400 feet. Range.—Known from type locality only.

_Sorex saussurei godmani_ Merriam†*


Type Locality.—Volcán Santa María, Quezaltenango, Guatemala. Altitude, 9,000 feet. Range.—Known only from Todos Santos and Volcán Santa María, Guatemala.

Sorex saussurei salvini Merriam‡*

Type Locality.—Cael, Quezaltenango, Guatemala. Altitude, 10,200 feet. Range.—Known from type locality only.

Sorex emarginatus Jackson‡*

Type Locality.—Sierra Madre, near Bolaños, Jalisco, México. Altitude, 7,600 feet. Range.—Known from Sierra Madre near Bolaños, Jalisco, and Plateado, Zacatecas, México. Also recorded from Cerro Potosí, Nuevo León (Koestner, Journ. Mamm., vol. 25, No. 3, p. 288, Sept. 8, 1944).

Sorex ventralis Merriam‡*

Type Locality.—Cerro San Felipe, Oaxaca, México. Altitude, 10,000 feet. Range.—Mountains of northern Puebla and central Oaxaca, México.

Sorex oreopolus Merriam‡*

Type Locality.—North slope of El Nevado de Colima, Jalisco, México. Altitude, 10,000 feet. Range.—Mountains of Jalisco.

ornatus—group

Sorex ornatus ornatus Merriam‡*
1903. Sorex oreinus Elliot, Field Columb. Mus. Publ. 74, Zool. Ser., vol. 3 (April), p. 172, May 7, 1903. (Aguaje de las Fresas, Sierra San Pedro Mártir, Baja California, México. Altitude, 6,000 feet.)

Type Locality.—Head of San Emigdio Canyon, Mount Pinos, Kern County, Calif. Altitude about 5,500 feet. Range.—From lat. 30° N. in northern Baja California northward chiefly west of desert divides to Dudley and El Portal, in Mariposa County, on western flank of Sierra Nevada; northwest along Coast Ranges to vicinity of Monterey, and east to Little Lake, Inyo County; vertical range, from near sea level (San Diego) up to 9,000 feet (San Jacinto Mountains); zonal range, Lower Sonoran to Canadian (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 82. Sept. 26, 1933).
Sorex ornatus relictus Grinnell*


*Type Locality.*—Excavated slough just outside of east side levee, Buena Vista Lake, Kern County, Calif. Altitude 290 feet. *Range.*—Probably marshlands of upper (southern) portion of floor of San Joaquin Valley, from about where waters of Kings River divide toward San Joaquin River and toward bed of Tulare Lake, respectively, in Kings County, south to vicinity of Bakersfield and Buena Vista Lake, in Kern County; vertical range, below 300 feet; zonal range, Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 83, Sept. 26, 1933).

Sorex ornatus salicornicus von Bloeker


*Type Locality.*—Playa del Rey, Los Angeles County, Calif. *Range.*—Coastal marshes in Los Angeles and Ventura Counties.

Sorex ornatus californicus Merriam†*


*Type Locality.*—Walnut Creek [near town of], Contra Costa County, Calif. *Range.*—West-central California, centering in San Francisco Bay region; north to Rumsey, Yolo County, northeast to Auburn, Placer County, southeast to Mendota, Fresno County, and south to Chalk Peak, Monterey County; but not in humid coast belt north of San Mateo County; vertical range, from near sea level up to 3,000 feet; zonal range, mainly Upper Sonoran, entering Lower Sonoran in San Joaquin Valley (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 83, Sept. 26, 1933).

Sorex ornatus salarius von Bloeker


*Type Locality.*—Salt marsh at mouth of Salinas River, Monterey County, Calif. *Range.*—Coastal marshes in Los Angeles and Ventura Counties, Calif.; from Nigger Slough, Los Angeles County, to Point Mugu, Ventura County.

Sorex ornatus lagunae Nelson and Goldman†*


*Type Locality.*—La Laguna, Sierra Laguna, Baja California, México. Altitude, 5,500 feet. *Range.*—Known from type locality only.

Sorex willetti von Bloeker

**Type Locality.**—Avalon Canyon, Santa Catalina Island, Los Angeles County, Calif.

*Sorex trigonirostris* Jackson†


*Type Locality.*—Ashland, Jackson County, Oreg. Altitude 1,975 feet.

*Range.*—Known only from brackish marshes of Grizzly Island, bordering Suisun Bay.

*Sorex juncensis* Nelson and Goldman†


*Type Locality.*—Socorro, 15 miles south of San Quintín, Baja California, México.

*Subgenus NEOSOREX* Baird

Sorex palustris palustris Richardson*


Type Locality.—Marshy places from Hudson Bay to the Rocky Mountains, Canada. Range.—Central Mackenzie District, Northwest Territories (Fort Rae, Grandin River, lat. 64° N.) south to northeastern British Columbia (Peace River district), east-central Alberta (Edmonton), north-central Saskatchewan (Prince Albert National Park), and central Manitoba to northwestern Minnesota and western Ontario (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 20, Jan. 24, 1947).

Sorex palustris labradorensis Burt


Sorex palustris turneri Johnson†*


Type Locality.—Fort Chimo, on eastern bank of Koksoak River, lat. 58°8' N., long. 68°15' W., Ungava District, Quebec, Canada. Range.—Known from type locality only.

Sorex palustris gloveralleni Jackson*


Sorex palustris hydrobadistes Jackson†*


Type Locality.—Withac, Clark County, Wisc. Range.—Extreme northeastern South Dakota (Fort Sisseton), central Minnesota, easterly across northern Wisconsin and Upper Peninsula of Michigan to northern part of Lower Peninsula of Michigan (Burt, Mammals of Michigan, p. 96, 1946); and to eastern end of Lake Superior in Ontario (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 21, January 24, 1947).
Sorex palustris albibarbis (Cope)†*


Sorex palustris punctulatus Hooper*


Sorex palustris navigator (Baird)†*

Type Locality.—Near head of Yakima River, Cascade Mountains, Kittitas County, Wash. Range.—From extreme northwestern British Columbia, southern Yukon (Nisutlin River), and adjacent part of Alaska (Haines), approaching coast in Bella Coola region, Stillwater and Chilliwack Valley, south through central and southern British Columbia; the Rocky Mountain region of southwestern Alberta (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 21, Jan. 24, 1947); south through mountainous areas of Washington (Dalquest, Univ. Kansas Publ. Zool., vol. 2, p. 141, Apr. 9, 1948), Idaho, and eastern Oregon to central Nevada (Hall, Mammals of Nevada, p. 123, July 1, 1946) and
southern Utah, and in Rocky Mountains to northern New Mexico and west-central Arizona; south through Cascade Mountains of Oregon; and in Sierra Nevada of California from Mount Shasta, Siskiyou County, south to Whitney Meadows, Tulare County, also White Mountains, Mono and Inyo Counties, Warner Mountains of eastern Modoc County, Salmon Mountains in Trinity County, and Yolla Bolly Mountains in Trinity and Tehama Counties (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 84, Sept. 26, 1933).

**Sorex palustris brooksi** Anderson


*Type Locality.*—Black Creek, Comox district, east coast of Vancouver Island, British Columbia, Canada. Altitude, 150 feet. *Range.*—Southern Vancouver Island and lake district near Victoria.

**Sorex alaskanus** Merriam†*


*Type Locality.*—Point Gustavus, on east side of entrance to Glacier Bay, Alaska. *Range.*—Known from type locality only.

*Subgenus Atophyrax* Merriam


**Sorex bendirii bendirii** (Merriam) †*


**Sorex bendirii palmeri** Merriam†*


*Type Locality.*—Astoria, Clatsop County, Oregon. *Range.*—Northwestern Oregon west of Cascade Mountains, southwestern Oregon west of long. 123° W., and extreme northwestern California north of mouth of Klamath River.
Sorex bendirii albibenter Merriam†*

*Type Locality.*—Lake Cushman, Olympic Mountains, Mason County, Wash.


**Genus MICROSOREX**† Coues


**Microsorex hoyi hoyi** (Baird) †*


**Microsorex hoyi thompsoni** (Baird) †*


**Microsorex hoyi interveectus** Jackson†*


*Type Locality.*—Lakewood, Oconto County, Wis. *Range.*—Northwest Territories from Fort Franklin, Great Bear Lake, south to Fort Rae, Fort Robinson, Fort Resolution, Fort Simpson, and Fort Smith; westerly to southern Yukon (Alaska Highway, Irons Creek; Canol Road, Lapie River; Sheldon Lake, Dezadeash Lake, Haines Road), northern British Columbia west to Telegraph Creek; northern Alberta (Slave River and Athabaska Lake), central Saskatchewan (Cumberland district and Prince Albert National Park); northern Manitoba, western Ontario (Favourable Lake and Attawapiskat Lake in Patricia District); east and north to Quebec (Gaspé, Godbout, Lake Edward, and Chimo) and Hopedale on Labrador coast (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 22, Jan. 24, 1947); and south to Upper Peninsula of Michigan and northeastern Wisconsin.

† Revised by Jackson, North Amer. Fauna No. 51, pp. 200-210, July 24, 1928.
Microsorex hoyi winnemana Preble†*

_Type Locality._—Bank of Potomac River, near Stubblefield Falls, Fairfax County, Va. _Range._—Maryland in vicinity of District of Columbia south to Pisgah National Forest, N. C.

Microsorex hoyi alnorum (Preble) †*

_Type Locality._—Robinson Portage (upper Hayes River, about 35 miles southwest of Oxford Lake, at about lat. 54°30' N., long. 96° W.), Manitoba, Canada. _Range._—Northeastern Manitoba and extreme northwestern Ontario.

Microsorex hoyi eximius (Osgood) †*

_Type Locality._—Tyonek, Cook Inlet, Alaska. _Range._—Western Alaska from Yukon River south to Kenai Peninsula and base of Alaska Peninsula.

Microsorex hoyi washingtoni Jackson†*


_Genus_ BLARINA * Gray (short-tailed shrews)


Blarina brevicauda brevicauda (Say) *

_Type Locality._—West bank of Missouri River, near Blair, formerly Engineer Cantonment, Washington County, Nebr. _Range._—Missouri and Mississippi Val-


**Blarina brevicauda manitobensis** R. M. Anderson*


*Type Locality.*—Max Lake, Turtle Mountains, Manitoba, Canada. Altitude about 2,100 feet. *Range.*—Southern Manitoba from near eastern boundary west to Turtle Mountains, Riding Mountain National Park, and Dauphin; north to Lake St. Martin and Lake Winnipegosis; probably occurs in northwestern Minnesota and northeastern North Dakota near Canadian boundary.

**Blarina brevicauda kirtlandi** Bole and Moulthrop*


*Type Locality.*—The Holden Arboretum, Kirtland Township, Lake County, and Chardon Township, Geauga County, Ohio. (County line bisects type locality.)


**Blarina brevicauda talpoides** (Gapper)*


*Type Locality.*—Between York and Lake Simcoe, Ontario, Canada. *Range.*—Western and southern Ontario (Great Lakes region), most parts of southern Quebec, and western New Brunswick (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 24, January 24, 1947); and in less typical form, New York, northeastern Pennsylvania, New Jersey, and southern New England from Connecticut and Cape Cod at least as far north as Sagadahoc County, Maine (Bole and Moulthrop, loc cit.).

**Blarina brevicauda angusta** Anderson


*Type Locality.*—Kelly’s Camp, Berry Mountain Brook, near head of Grand Cascapedia River, Gaspé County, Quebec, Canada. Altitude, about 1,600 feet. *Range.*—Gaspé Peninsula from sea level up to about 1,600 feet in interior; and Madawaska County, Baker Lake, Edmundston, and St. Leonard in northwestern New Brunswick (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 23, Jan. 24, 1947).
Blarina brevicauda hooperi Bole and Moulthrop*
Type Locality.—Lyndon, Caledonia County, Vt. Range.—From northern Vermont to Stanstead County, Quebec (see Anderson, Nat. Mus. Canada Bull, 102 (1946), p. 23, Jan. 24, 1947.)

Blarina brevicauda pallida R. W. Smith*

Blarina brevicauda aloga Bangs*
Type Locality.—West Tisbury, Martha’s Vineyard Island, Dukes County, Mass. Range.—Restricted to Martha’s Vineyard.

Blarina brevicauda compacta Bangs*
Type locality.—Nantucket Island, Nantucket County, Mass. Range.—Restricted to Nantucket.

Blarina brevicauda carolinensis (Bachman)*

Blarina brevicauda peninsulae Merriam†*
1897. [Blarina brevicauda] peninsulae Trouessart, Catalogus Mammalium . . ., fasc. 1, p. 188.
Type Locality.—Miami River, Dade County, Fla. Range.—Peninsula of Florida, south of lat. 28° N.

Blarina brevicauda churchi Bole and Moulthrop*
Type locality.—Roan Mountain, Mitchell County, N. C. Altitude, about 6,000 feet. Range.—Presumably higher portions of Appalachian Mountains in western North Carolina and eastern Tennessee. (Specimens from mountainous parts of eastern Tennessee regarded as *churchi* by Hall and Kelson, Univ. Kansas Publ. Mus. Nat. Hist., vol. 5, No. 25, p. 328, Dec. 5, 1952.)

**Blarina brevicauda minima** Lowery*


**Blarina brevicauda hulophaga** Elliot*


**Blarina brevicauda plumbea** Davis


*Type Locality.*—Half mile west of Marano Mill, Aransas County, Tex. *Range.*—Known from Aransas National Wildlife Refuge in Aransas County, Tex., only.

**Blarina telmalestes** Merriam†


**Blarina costaricensis** J. A. Allen


*Type locality.*—La Carpintera, Costa Rica or upper Mississippi Valley (see Merriam, op. cit., p. 12).

Genus **CRYPTOTIS** *Pomel*


(Type, *Sorex cinereus* Bachman = *Sorex parvus* Say.)


213756—55—4
Cryptotis parva parva (Say) *


*Cryptotis parva elasson* Bole and Moulthrop


Type Locality.—Bettsville, Seneca County, Ohio. *Range.—*Ohio, intergrading with *harlani* along Ohio-Indiana boundary.

*Cryptotis parva harlani* (Duvernoy) *


Type Locality.—New Harmony, Posey County, southwestern Indiana. *Range.—*Indiana (Recorded by Bole and Moulthrop from southwestern and northeastern parts of the state).

*Cryptotis parva berlandieri* (Baird) †*


Type Locality.—Matamoros, Tamaulipas, México. *Range.—*Lower Rio Grande Valley, on both sides of river, north to Frio County, Tex., and eastward along coast region of southern Texas to Nueces County (Davis, loc. cit.). Also recorded from Boca del Río, Veracruz, México (Davis, *Journ. Mamm.,* vol. 25, No. 4, p. 376, Dec. 12, 1944).
Cryptotis floridana (Merriam)†*


Cryptotis per gracilis per gracilis (Elliot) *


Cryptotis per gracilis pueblensis Jackson†*

Cryptotis per gracilis nayaritensis Jackson†*

Cryptotis per gracilis macra Miller†*

Cryptotis obscura (Merriam)†*


Cryptotis soricina (Merriam)†*


Cryptotis alticola (Merriam)†*

Cryptotis nelsoni (Merriam)†*
Type Locality.—Volcán de Tuxtla, Veracruz, México. Altitude, 4,800 feet.

Cryptotis mexicana mexicana (Coues)†*
Type Locality.—Jalapa, Veracruz, México. Range.—Tropical areas of southeastern México (Veracruz and Oaxaca).

Cryptotis mexicana peregrina (Merriam)†*
Type Locality.—Mountains 15 miles west of city of Oaxaca, Oaxaca, México. Altitude, 9,500 feet.

Cryptotis mexicana machetes (Merriam)†*
Type Locality.—Mountains near Ozolotepec, Oaxaca, México. Altitude, 10,000 feet.

Cryptotis mexicana goldmani (Merriam)†*
Type Locality.—Mountains near Chilpancingo, Guerrero, México. Altitude, 10,000 feet.

Cryptotis guerrerensis Jackson†*
Type Locality.—Omitlteme, Guerrero, México. Altitude, about 8,000 feet.

Cryptotis frontalis Miller†*
Type Locality.—Near city of Tehuantepec, Oaxaca, México.
Cryptotis magna (Merriam)†*
Type Locality.—Totontepec, Oaxaca, México. Altitude, 6,800 feet. Range.—Mountains about Totontepec and Mount Zempoaltepec, Oaxaca, from 6,800 to 8,000 feet altitude.

Cryptotis fossor (Merriam)†*
Type Locality.—Mount Zempoaltepec, Oaxaca, México. Altitude, 10,500 feet. Range.—Higher slopes of Mount Zempoaltepec, from 8,200 to 10,500 feet altitude.

Cryptotis griseoventris Jackson†*
Type Locality.—San Cristóbal, Chiapas, México. Altitude, 9,500 feet.

Cryptotis mayensis (Merriam)†*
Type Locality.—Maya ruin at Chichén-Itzá, Yucatán, México.

Cryptotis micrura (Tomes) *
Type Locality.—Cobán, Alta Verapaz, Guatemala. Altitude, about 4,400 feet.

Cryptotis goodwini Jackson†*
Type Locality.—Calel, Quezaltenango, Guatemala. Altitude, 10,200 feet.

Cryptotis olivacea (J. A. Allen)


Cryptotis nigrescens (J. A. Allen) *


Cryptotis jacksoni Goodwin†*


Type Locality.—Volcán Irazú, Cartago, Costa Rica. Altitude, about 10,000 feet. Range.—Known from type locality only.

Cryptotis orophila (J. A. Allen) *


Cryptotis gracilis Miller†*


Cryptotis endersi Setzer


Type Locality.—Cylindro, Chiriquí, Panamá. Range.—Known from type locality only.

Cryptotis zeteki Setzer†*


Type Locality.—Cerro Punta, lat. 8°42' N., long. 82°43' W., Chiriquí, Panamá. Altitude, 6,500 feet. Range.—Known from type locality only.
Cryptotis mera Goldman†*  
_Type Locality._—Near head of Río Limón, Mount Pirri, Darién, eastern Panamá. Altitude, 4,500 feet.

Genus NOTIOSOREX †† Coues  

Notiosorex crawfordi crawfordi (Coues) †*  

Notiosorex crawfordi evotis (Coues) †*  

Genus MEGASOREX Hibbard  

Megasorex gigas (Merriam) †*  
_Type Locality._—Mountains at Milpillas, near San Sebastián, Jalisco, México.

Family TALPIDAE (moles)

Subfamily SCALOPINAE

Genus NEUROTРИCHUS Günther


Neurolrithus gibbsii gibbsii (Baird)†

1899. Neurolrithus gibbsi major Merriam†, North Amer. Fauna No. 16, p. 88, Oct. 28, 1899. (Carberry Ranch, between Mount Shasta and Mount Lassen, Shasta County, Calif. Altitude, 4,100 feet.)

Type Locality.—White River Pass [=Naches Pass, altitude, 4,500 feet; see Dalquest and Burgner, Murrelet, vol. 22, No. 1, p. 12, Apr. 30, 1941], Pierce County, Wash. Range.—Extreme southwestern British Columbia north to North Vancouver, western Washington and Oregon west of Cascade Mountains, south in coast region to Eureka, Humboldt County, Calif., and in interior, west of Sierra Nevada, to South Yolla Bolly Mountain, Calif.

Neurolrithus gibbsii minor Dalquest and Burgner*


Neurolrithus gibbsii hyacinthinus Bangs*


Type Locality.—Nicasio, Marin County, Calif. Range.—Narrow humid coast belt, from Cuddeback, Humboldt County, south as far as near Watsonville, Santa Cruz County, and vicinity of Fremont Peak, near north end of Gabilan Range, Monterey County, Calif.; vertical range, below 800 feet; zonal range, chiefly Transition (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 79, Sept. 26, 1933).

INSECTIVORA: TALPIDAE

Genus SCAPANUS* Pomel


Scapanus townsendii (Bachman)*


Scapanus orarius orarius True†*


Type Locality.—Shoalwater [=Willapa] Bay, Pacific County, Wash.  

Scapanus orarius schefferi Jackson†*


Type Locality.—Walla Walla, Walla Walla County, Wash.  

Scapanus orarius yakimensis Dalquest and Scheffer

Type Locality.—Near (¾ mile north of) Union Gap, Yakima County, Wash.  

Scapanus latimanus latimanus (Bachman)*


Type Locality.—Santa Clara, Santa Clara County, Calif. Range.—Coastal region of California south of San Francisco Bay and entirely west of San Joaquin Valley, south at least to Santa Margarita, San Luis Obispo County; vertical range from near sea level (Seaside, Monterey County) to 4,400 feet (San Benito Mountain, San Benito County). Zonal range, Lower Sonoran through Transition.

Scapanus latimanus parvus F. G. Palmer

Type Locality.—Alameda Island, Alameda County, Calif. Range.—So far as known confined to island of Alameda. Vertical range all within a few feet of sea level; zonal range, Upper Sonoran.

Scapanus latimanus insularis F. G. Palmer*

Type Locality.—Angel Island, San Francisco Bay, Marin County, Calif. Range.—Angel Island. Vertical range from near sea level to about 760 feet; zonal range, Upper Sonoran and weak Transition.

Scapanus latimanus caurinus F. G. Palmer*

Type Locality.—Laytonville, Mendocino County, Calif. Range.—Coastal region of California north of San Francisco Bay, except narrow strip extending north to Oregon line from Humboldt Bay, and west of Sacramento Valley except at its extreme northern end. Vertical range from near sea level (Bolinas, Marin County) to 5,500 feet (South Fork Mountain, Humboldt County); zonal range Upper Sonoran through Canadian.

Scapanus latimanus dilatus Truef†*


Type Locality.—Fort Klamath, Klamath County, Oreg. Altitude, 4,200 feet. Range.—South-central Oregon, northeastern California east from western end of Siskiyou Mountains and western base of Sierra Nevada; extreme western border of Nevada to central Douglas County (Hall, Mammals of Nevada, p. 111, July 1, 1946). Vertical range from 600 feet (at Dale’s on Paine’s Creek, Tehama County) to 3,500 feet (at Lake Helen, Shasta County, Calif.); zonal range, Upper Sonoran to Hudsonian.
Scapanus latimanus minusculus Bangs*  
*Type Locality.*—Fyffe, Eldorado County, Calif. Altitude, 3,500 feet. *Range.*—Known only from a very restricted range from Placerville, Eldorado County, east to type locality. Vertical range from 2,000 feet (as at Placerville) to 3,500 feet (as at type locality); zonal range, chiefly Transition.

Scapanus latimanus sericatus Jackson†*  
*Type Locality.*—Yosemite, Yosemite Valley, Mariposa County, Calif. Altitude, 4,000 feet. *Range.*—Western slope of Sierra Nevada of California from Twain Harte Post Office, Tuolumne County, southwest to vicinity of Coulterville, Mariposa County (1,665 feet); east to Tuolumne Meadows, Tuolumne County; south in the Sierra to Shaver Ranger Station, Fresno County. Vertical range from 3,200 to 9,500 feet (in Lyell Canyon, Yosemite National Park, Tuolumne County. Grinnell and Storer, Animal life in the Yosemite, . . ., p. 43, Apr. 17, 1924); zonal range, Transition to Hudsonian.

Scapanus latimanus monoensis Grinnell*  
*Type Locality.*—Taylor Ranch, 2 miles south of Benton Station, Mono County, Calif. Altitude, 5,800 feet. *Range.*—East base of Sierra Nevada in Mono County from Farrington’s Ranch, near Mono Lake, south to vicinity of Benton Station (see also A. B. Howell, Journ. Mamm., vol. 5, No. 1, p. 27, Feb. 9, 1924); and in Nevada along Walker River and its forks from near Wabuska southwestward (Hall, Mammals of Nevada, p. 111, July 1, 1946).

Scapanus latimanus grinnelli Jackson*  
*Type Locality.*—Site of old Fort Independence (on ranch of Carl Walters), two miles north of Independence, Inyo County, Calif. Altitude, 3,900 feet. *Range.*—Southern end of Sierra Nevada south probably from Olancha Peak, Inyo County, and in Owens Valley probably from Bishop, Inyo County, to Little Lake, Inyo County. Vertical range from 3,700 feet (at Lone Pine, Inyo County) to 6,700 feet (at Upper Funston Meadow, Kern River, Tulare County); zonal range, Lower Sonoran to high Transition.

Scapanus latimanus campi Grinnell and Storer  
*Type Locality.*—Snelling, Merced County, Calif. Altitude, 250 feet. *Range.*—East side of San Joaquin Valley and lower slopes of Sierran foothills from Snelling, Merced County, and El Portal, Mariposa County, southeast to Dunlap,
Fresno County. Vertical range from 200 feet (Minkler, Fresno County) to 2,000 feet (Dunlap, Fresno County).

**Scapanus latimanus occultus** Grinnell and Swarth*


_Type Locality._—Santa Ana Canyon at 400 feet altitude, 12 miles northeast of Santa Ana, Orange County, Calif. **Range.**—Chiefly southern California. From near Porterville, Tulare County, and Kings River Canyon, Fresno County, south in Sierra Nevada west of Kern River drainage, and through Tehachapi Mountains (west at least to Santa Barbara), thence south, west of desert divides, to Mexican boundary, and in Baja California, México, probably in favorable places throughout Sierra Juarez. Vertical range, from near sea level (Ventura) to 9,800 feet (Twin Lakes, Sequoia National Park, Tulare County); zonal range, Lower Sonoran to Canadian.

**Scapanus latimanus anthonyi** J. A. Allen


_Type Locality._—Sierra San Pedro Mártir, Baja California, México. Altitude, 7,000 feet. **Range.**—Known only from Sierra San Pedro Mártir, Baja California, from Vallecitos south to La Grulla. Vertical range from 7,000 feet (type locality) to 7,500 feet (at Vallecitos).

**Genus PARASCALOPS** 13 True


**Parascalops breweri** (Bachman) * (hairy-tailed mole)


_Type Locality._—Eastern North America; type supposed by Bachman to have been taken on the island of Martha’s Vineyard, Mass., a locality where the animal probably does not occur. **Range.**—Southeastern Canada and northeastern United States from southern New Brunswick, southern Quebec, and eastern Ontario, south to southeastern and west-central Ohio (Olive, Journ. Mamm., vol. 31, No. 4, pp. 458-459, Nov. 21, 1950) and southern Pennsylvania, and in Appalachian Mountains to western North Carolina.

Genus SCALOPUS* É. Geoffroy-Saint-Hilaire


Scalopus aquaticus aquaticus (Linnaeus) *


Scalopus aquaticus howelli Jackson† *


_Type Locality._—Autaugaville, Autauga County, Ala. _Range._—North Carolina (except in Appalachian Mountains), South Carolina, northern Georgia, thence southwest across central Alabama and southern Mississippi to Pensacola Bay and Mississippi River (southeastern Louisiana).

Scalopus aquaticus australis (Chapman) *


Scalopus aquaticus anastasae (Bangs) *


_Type Locality._—Point Romo, Anastasia Island, St. Johns County, Fla. _Range._—Anastasia Island.

Scalopus aquaticus parvus (Rhoads) *


**Type Locality.**—Tarpon Springs, Pinellas County, Fla. **Range.**—Region north of Tampa Bay, in Hillsboro, Pasco, and Pinellas Counties, Fla.

*Scalopus aquaticus bassi* A. H. Howell*


**Type Locality.**—Engelwood, Sarasota County, Fla. **Range.**—Known from type locality only.

*Scalopus aquaticus porteri* Schwartz


**Type Locality.**—Uleta, Dade County, Fla. **Range.**—Known only from Uleta and Biscayne Gardens, Dade County, Fla., but probably occurs along east coast of Florida Peninsula south of Jupiter and Hypoluxo.

*Scalopus aquaticus machrinus* (Rafinesque)*


**Type Locality.**—Near Lexington, Fayette County, Ky. **Range.**—Eastern Iowa, and east of Mississippi River west of Appalachian Mountains from western Wisconsin, northern Illinois, southern Michigan, southwestern Ontario (Essex County), and northern Ohio (not present in northeastern Ohio, side Bole and Moulethrop, Sci. Publ. Cleveland Mus. Nat. Hist., vol. 5, No. 6, p. 87, Sept. 11, 1942), south to central Tennessee.

*Scalopus aquaticus machrinoides* Jackson†*


**Type Locality.**—Manhattan, Riley County, Kan. **Range.**—West of Mississippi River, except eastern Iowa, from central Minnesota, southeastern South Dakota, and eastern border of Nebraska, south through eastern Kansas to extreme northern Arkansas.

*Scalopus aquaticus pulcher* Jackson†*


**Type Locality.**—Delight, Pike County, Ark. **Range.**—Humid lowland region of southern and eastern Arkansas, southeastern Oklahoma, Louisiana west of Mississippi River (Lowery, Occ. Pap. Mus. Zool. Louisiana State Univ. No. 13, p. 217, Nov. 22, 1943), and eastern Texas (Denton County to Hardin County).

*Scalopus aquaticus aereus* (Bangs)

INSECTIVORA: TALPIDAE


**Type Locality.**—Stilwell, Adair County, Okla. **Range.**—Known from type locality only.

*Scalopus aquaticus caryi* Jackson†*


**Type Locality.**—Neligh, Antelope County, Neb. **Range.**—Arid and semiarid plains region of central and western Nebraska, northeastern Colorado, and northwestern Kansas.

*Scalopus aquaticus intermedius* (Elliot) *


**Type Locality.**—Alva, Woods County, Okla. **Range.**—Central and western Oklahoma and adjacent parts of northern Texas; and in southwestern Kansas east to Sumner County and north to Stafford County (Cockrum Univ. Kansas Publ. Mus. Nat. Hist., vol. 7, No. 1, p. 52, Aug. 25, 1952).

*Scalopus aquaticus texanus* (J. A. Allen) *


*Scalopus aquaticus alleni* Baker*


**Type Locality.**—Rockport, Aransas County, Tex. **Range.**—Southern Texas north to Bexar County and east to Refugio County.

*Scalopus aquaticus cryptus* Davis


**Type Locality.**—College Station, Brazos County, Tex.

*Scalopus aquaticus nanus* Davis


**Type Locality.**—Thirteen miles east of Centerville, Leon County, Tex. **Range.**—Southeastern Texas.

*Scalopus montanus* Baker

Type Locality.—Club Sierra del Carmen, 2 miles north and 6 miles west of Piedra Blanca, Coahuila, México. Range.—Known only from type locality; probably found in other localities in Sierra del Carmen of northern Coahuila.

Scalopus inflatus Jackson†*


Type Locality.—Tamaulipas, México, 45 miles from Brownsville, Tex. Range.—Known from type locality only.

Subfamily CONDYLURINAE

Genus CONDYLOURA * Iliger

1811. Condylura Illiger, Prodromus systematis Mammalium et Avium . . ., p. 125. (Type, Sorex cristatus Linnaeus.)

Condylura cristata cristata (Linnaeus)* (star-nosed mole)


Type Locality.—Eastern Pennsylvania. Range.—Eastern and southern Canada from the Atlantic coast to Labrador to southwestern Manitoba; north to Hamilton Inlet (Labrador), East Main River (Quebec, east side of James Bay), south and west sides of James Bay (Ontario), and to Riding Mountain, Manitoba (Anderson, loc. cit.); south through New Brunswick along the Atlantic Coast to Virginia (Dismal Swamp) and Georgia (Marlow) and on the Appalachian Mountains to western North Carolina; and south through the Lake States to Illinois, Indiana, and Ohio.

Condylura cristata nigra R. W. Smith*


Type Locality.—Wolfville, Kings County, Nova Scotia, Canada. Range.—Nova Scotia.

Family NESOPHONTIDAE

Genus NESOPHONTES Anthony


Nesophontes edithae Anthony


Type Locality.—Cueva Catedral, near Morovis, Puerto Rico. (Known from skeletal remains only.)

Nesophontes hypomicrus Miller†*
_Type Locality._—Cave near Atalaye plantation, about 4 miles east of St. Michel, Haiti. (Known from skeletal remains only.)

*Nesophontes longirostris* Anthony
_Type Locality._—Cave near the beach at Daiquirí, Oriente, Cuba. (Known from skeletal remains only.)

*Nesophontes micrus* G. M. Allen*
_Type Locality._—Sierra de Hato-Nuevo, Matanzas, Cuba. (Known from skeletal remains only.)

*Nesophontes paramicrus* Miller†*
_Type Locality._—Cave near Atalaye plantation, about 4 miles east of St. Michel, Haiti. (Known from skeletal remains only.)

*Nesophontes zamicrus* Miller†*
_Type Locality._—Cave near Atalaye plantation, about 4 miles east of St. Michel, Haiti. (Known from skeletal remains only.)

Order CHIROPTERA ¹⁰ (bats)
Suborder MICROCHIROPTERA
Superfamily EMBALLONUROIDEA
Family EMBALLONURIDAE
Subfamily EMBALLONURINAE (sac-winged bats)

Genus RHYNCHISCUS Miller

*Rhynchiscus naso* (Wied-Neuwied) *


**Type Locality.**—Banks of Rio Mucuri, near Morro d'Arara, Minas Geraes, Brazil. **Range.**—From Southern México, south through Central America to northern Perú and central Brazil (Sanborn, loc. cit.).

**Genus SACCOPTERYX** Illiger

1811. *Saccopteryx* Illiger, Prodromus systematis Mammalium et Avium ... , p. 121. (Type, *Vespertilio lepturus* Schreber.)

**Saccopteryx bilineata** (Temminck) *


**Type Locality.**—Surinam; exact locality not known. **Range.**—From southern México (Colima, Guerrero, and Veracruz) to central Bolivia and Mato Grosso and Rio de Janeiro, Brazil (Sanborn, op. cit., p. 330).

**Saccopteryx leptura** (Schreber) *

1774. *Vespertilio lepturus* Schreber, Die Säugethiere ... , Theil 1, Heft 8, pl. 57 (Heft 9, p. 173, vernacular name only, and description).

1829. *Saccopteryx lepturus* Fischer, Synopsis Mammalium, p. 121.


**Genus CORMURA** Peters


**Cormura brevirostris** (Wagner) *


**Genus PEROPTERYX** Peters

**Peropteryx macrotis macrotis** (Wagner) *


**Peropteryx macrotis phaea** G. M. Allen*


*Type Locality.*—Point Saline, Grenada, Lesser Antilles.

**Peropteryx kappleri** Peters*


**Genus CENTRONYCTERIS** Gray


(*Type, *Vespertilio calcarius* Wied-Neuwied= *V. maximiliani* Fischer.)

**Centronycteris maximiliani centralis** Thomas


**Genus BALANTIOPTERYX** Peters

Balantiopteryx io Thomas*


Balantiopteryx plicata plicata Peters*


Balantiopteryx plicata pallida Burt


*Type Locality.*—San Bernardo, Río Mayo, Sonora, México. *Range.*—West coast of northern México from southern Sonora and Baja California to the southeast; southern limit of range unknown.

Balantiopteryx ochoterena Martínez and Villa


*Type Locality.*—Cuautla, Morelos, México. *Range.*—Known from type locality only.

Subfamily DICLIDURINAE

Genus DICLIDURUS Wied-Neuwied

1820. Diclidurus Wied-Neuwied, Isis von Oken, 1819, p. 1629. (Type, Diclidurus albus Wied-Neuwied.)
**CHIROPTERA: NOCTILIONIDAE**

**Diclidurus virgo** Thomas*


**Family NOCTILIONIDAE**

**Genus NOCTILIO** Linnaeus


**Noctilio leporinus mastivus** (Vahl) *


**Noctilio leporinus mexicanus** Goldman†*


**Noctilio labialis minor** Osgood*

Superfamily **PHYLLOSTOMATOIDEA**

*Family* **PHYLLOSTOMIDAE** (American leaf-nosed bats)

*Subfamily* **CHILONYCTERINAE**

**Genus** **CHILONYCTERIS**" Gray


**Chilonycteris fuliginosa fuliginosa** Gray*


*Type Locality.*—Port au Prince, Haitian Republic. *Range.*—Haiti and Santo Domingo.

**Chilonycteris fuliginosa inflata** Rehn*


**Chilonycteris macleayii macleayii** Gray*


*Type Locality.*—Cuba. *Range.*—Cuba.

**Chilonycteris macleayii grisea** Gosse*


**Chilonycteris torrei torrei** G. M. Allen*


*Type Locality.*—La Cueva de la Majana, Baracoa, Oriente, Cuba. *Range.*—Cuba.

**Chilonycteris torrei continentis** Sanborn


*Type Locality.*—Laguna de Zotz, Petén, Guatemala.

Chilonycteris personata Wagner


Chilonycteris parnessii parnessii (Gray) *


Chilonycteris parnessii boothi Gundlach *


*Type Locality.*—Fundador, Matanzas, Cuba. *Range.*—Cuba.

Chilonycteris parnessii portoricensis Miller†*


Chilonycteris parnessii pusillus G. M. Allen *

*Type Locality.*—Arroyo Salado, Dominican Republic. *Range.*—Hispaniola.

Chilonycteris rubiginosa fusca J. A. Allen *


Chilonycteris rubiginosa mexicana Miller†*


Chilonycteris psilotis Dobson*


*Genus PTERONOTUS* **Gray**


Pteronotus davyi davyi Gray*


*Type Locality.*—Island of Trinidad, British West Indies. *Range.*—From Brazil northward to island of Dominica, Lesser Antilles.

Pteronotus davyi fulvus (Thomas) *


Pteronotus suapurensis suapurensis (J. A. Allen)


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**Pteronotus suapurensis centralis** Goodwin


**Type Locality.**—Matagalpa, Matagalpa, Nicaragua. **Altitude,** 3,000 feet. **Range.**—Known from type locality only.

**Genus MORMOOPS** Leach


**Mormoops blainvillii blainvillii** Leach*


**Type Locality.**—Jamaica. **Range.**—Jamaica.

**Mormoops blainvillii cinnamomea** (Gundlach) *


**Type Locality.**—Cafetal San Antonio el Fundador, Matanzas, Cuba. **Range.**—Cuba, Santo Domingo, and Mona Island, between Santo Domingo and Puerto Rico.

**Mormoops megalophylla megalophylla** Peters*


**Mormoops megalophylla senicula** Rehn†*


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Type Locality.—Fort Clark, Kinney County, Tex. Range.—Southern Texas (Mulaik, Journ. Mamm., vol. 24, No. 2, p. 269, June 7, 1943), northern and central México.

Subfamily Phyllostominae

Genus MICRONYcteris  Gray


Subgenus MICRONYcteris Gray

Micronycteris megalotis mexicana Miller† *


Micronycteris megalotis mexicana Miller† *


Micronycteris schmidtorum Sanborn


Subgenus Xenoctenes  Miller


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Micronycteris hirsuta (Peters)


*Subgenus LAMPRONYCTERIS* Sanborn

Micronycteris platyceps Sanborn

*Type Locality.*—Guanapo, Trinidad, British West Indies. *Range.*—Recorded from Trinidad, Venezuela, and possibly Volcán de Chinandega, Nicaragua.

*Subgenus GLYPHONYCTERIS* Thomas

Micronycteris sylvestris (Thomas) *


*Genus MACROTUS* Gray

(Type, *Macrotus waterhousii* Gray.)


1891. *Otopterus* Lydekker, in Flower and Lydekker, An introduction to... mammals living and extinct, p. 673. (Same type; proposed because of the name *Macrotis* Reid, applied to an Australian marsupial in 1837.)

**Macrotus waterhousii waterhousii** Gray*


*Type Locality.*—Haiti. *Range.*—Haiti and Santo Domingo.

**Macrotus waterhousii jamaicensis** Rehn†*


**Macrotus waterhousii compressus** Rehn†*


**Macrotus waterhousii heberfolium** Shamel†*


*Type Locality.*—Kingston, Providenciales Island, Bahamas. *Range.*—Known from type locality only.

**Macrotus waterhousii minor** Gundlach*


*Type Locality.*—Western Cuba. *Range.*—Cuba and Isle of Pines.

**Macrotus mexicanus mexicanus** Saussure*


*Type Locality.*—Yautepec, near Cuautla, Morelos, México. *Range.*—From Colima, Michoacán, and Morelos, México, south to Vera Paz, Guatemala.

**Macrotus mexicanus bulleri** H. Allen*


Type Locality.—Bolanos, Jalisco, México. Range.—From Guadalajara north to Durango and central Chihuahua, also including Tres Marias Islands.

**Macrotus californicus** Baird*


**Macrotus pygmaeus** Rehn


Type Locality.—Izamal, Yucatán, México.

*Genus LONCHORHINA* Tomes


**Lonchorhina aurita** Tomes*


*Genus MACROPHYLLUM* Gray


(Type, *Macrophyllum nieuwiexii* Gray = *Phyllostoma macrophyllum* Schinz.)

1891. *Dolichophyllum*, Lydekker, in Flower and Lydekker, An introduction to . . . mammals living and extinct, p. 673. (Same type.)

**Macrophyllum macrophyllum** (Schinz) *


1826. *Phyllostoma* *macrophyllum* Wied-Neuwied, Beiträge zur Naturgeschichte von Brasilien, vol. 2, p. 188.


Type Locality.—Rio Mucuri, Minas Geraes, Brazil. Range.—Minas Geraes, Brazil, north to the city of Panamá, Panamá.
Genus TONATIA * Gray

1827. Tonatia Gray, in Griffith, The animal kingdom . . . by the Baron Cuvier . . . , vol. 5, p. 71. (Type, Vampyrus bidens Spix.)

Tonatia amblyotis (Wagner) *


Type Locality.—Mato Grosso, Brazil. Range.—From Mato Grosso, Brazil, north on west coast (Perú, Ecuador, Colombia) to Panamá and north in Central America to British Honduras (Goodwin, Bull. Amer. Mus. Nat. Hist., vol. 87, p. 305, Dec. 31, 1946).

Tonatia bidens (Spix)


Tonatia nicaraguæ Goodwin


Type Locality.—Kanawa Creek, near Cukra, north of Bluefields, Zelaya, Nicaragua. Altitude, 100 feet. Range.—Known from type locality only.

Genus MIMON Gray


Mimon bennettii (Gray) *


* For a recent “summary of recognizable species of Tonatia” see Goodwin, Journ. Mamm., vol. 23, no. 2, pp. 204-209, May 14, 1942.
Mimon cozumelae Goldman†


**Genus PHYLLOSTOMUS** Lacépède

1799. Phyllostomus Lacépède, Tableau des divisions, sous-divisions, ordres et genres des mammifères, p. 16 (Published as supplement to Discours d'ouverture et de clôture du cours d'histoire naturelle . . .). (Type, _Vespertilio hastatus_ Pallas.)

Phyllostomus discolor discolor Wagner *


_Type Locality._—Cuyaba, Mato Grosso, Brazil. _Range._—Mato Grosso, Piaui, and Amazonas, Brazil, west to Perú, and north to Guianas; and to Barro Colorado Island, Canal Zone, Panamá (Miller, loc. cit.).

Phyllostomus discolor verrucosus (Elliot) *


_Type Locality._—Niltepec, Oaxaca, México. _Range._—Recorded also at Ori-zaba, Veracruz, México, and at Patulul, Solola, and Escobas, Izabal, Guatemala (Sanborn, loc. cit.).

Phyllostomus hastatus panamensis J. A. Allen *


**Genus PHYLLODERMA** Peters


Phylloderma septentrionalis Goodwin


_Type Locality._—Las Pilas, six miles north of Marcala, La Paz, Honduras. Altitude about 4,000 feet. _Range._—Known from Honduras only.
Genus TRACHOPS Gray


Trachops cirrhosus (Spix) *

1823. Vampyrus cirrhosus Spix, Simiarum et vespertilionum Brasiliensium . . . , p. 64.


Trachops coffini Goldman†*


Genus CHROTOPTERUS Peters


Chrotopterus auritus auritus (Peters) *


Genus VAMPYRUM Rafinesque


Vampyrum spectrum nelsoni (Goldman) †*


Subfamily Glossophaginae (long-tongued bats)

Genus Glossophaga  

Glossophaga soricina lechii (Gray) *


Glossophaga soricina alticola Davis


Type Locality.—Thirteen kilometers northeast of Tlaxcala, Tlaxcala, México. Altitude, 7,800 feet. Range.—Known from type locality.

Glossophaga soricina mutica Merriam†*


Type Locality.—María Madre Island, Tres Marías Islands, Nayarit, México. Range.—Tres Marías Islands.

Glossophaga soricina antillarum Rehn *


Type Locality.—Port Antonio, Jamaica. Range.—Jamaica.

Glossophaga morenoi Martínez and Villa


Type Locality.—Xiutepec, Morelos, México.


213756—55—6
Glossophaga longirostris—group

Glossophaga longirostris rostrata Miller†*

_Type Locality._—Westerhall estate, Grenada, Lesser Antilles. _Range._—Grenada and Grenadines (Union and Carriacou), Lesser Antilles; Dominica? ²⁶

Genus LONCHOPHYLLA Thomas


Lonchophylla concava Goldman†*

_Type Locality._—Cana (Santa Cruz de Cana), upper Río Tuyra, Darién, eastern Panamá. Altitude, 2,000 feet. _Range._—Known from type locality only.

Lonchophylla robusta Miller†*

_Type Locality._—Cave on Chilibrillo River, near Alhajuela, Panamá. _Range._—Panamá.

Genus MONOPHYLLUS ²⁷ Leach

1821. Monophyllus Leach, Trans. Linn. Soc. London, vol. 13, p. 75. (Type, Monophyllus redmani Leach.)

Monophyllus redmani Leach*

_Type Locality._—Jamaica. _Range._—Jamaica.

Monophyllus cubanus cubanus Miller†*

_Type Locality._—Baracoa, Oriente, eastern Cuba. _Range._—Cuba.

Monophyllus cubanus ferreus Miller†*

_Type Locality._—Cave 8 miles west-southwest of Jérémie, southwestern Haitian Republic.

²⁶ Two specimens; one too young, the other too mutilated, for exact determination.
Monophyllus portoricensis Miller†*
Type Locality.—Cave near Bayamón, Puerto Rico. Range.—Puerto Rico.

Monophyllus plethodon Miller†*
Type Locality.—St. Michael Parish, Barbados, Lesser Antilles. Range.—Barbados.

Monophyllus luciae Miller†*
Type Locality.—St. Lucia, Lesser Antilles. Range.—St. Lucia.

Monophyllus frater Anthony
Type Locality.—Cave near Morovis, Puerto Rico. Range.—Known from skeletal remains only.

Monophyllus clinedaphus Miller†*
Type Locality.—Unknown. Range.—Unknown.

Genus ANOURA Gray

Anoura geoffroyi lasiopyga (Peters) *
Type Locality.—Southern México. Range.—Southern México, Guatemala, and El Salvador.

Genus CHOERONYCTERIS Tschudi
1844. Choeronycteris Tschudi, Untersuchungen über die Fauna Peruana . . ., p. 70. (Type, Choeronycteris mexicana Tschudi.)

Choeronycteris mexicana Tschudi†*
1844. Choeronycteris mexicana Tschudi, Untersuchungen über die Fauna Peruana . . ., p. 72.


Genus CHOERONISCUS Thomas


Choeronicus godmani (Thomas)


Genus HYLONYCTERIS Thomas


Hylonycteris underwoodi Thomas


Genus LEPTONYCTERIS Lydekker

1891. Leptonycteris Lydekker, in Flower and Lydekker, An introduction to ... mammals living and extinct, p. 674. (Type, Ischnoglossa nivalis Saussure.)

Leptonycteris nivalis nivalis (Saussure)*


CHIROPTERA: PHYLLOSTOMIDAE


Leptonycteris nivalis yerbabuenae Martínez and Villa


_Type Locality._—Yerba Buena, Guerrero, México. _Range._—Known from type locality only.

Genus Lichonycteris Thomas


Lichonycteris obscura Thomas*


Subfamily Carolliniae *29*

Genus Carollia Gray


Carollia perspicillata perspicillata (Linnaeus)*


_Type Locality._—Surinam (see Thomas, Proc. Zool. Soc. London, 1911, pt. 1, p. 130, Mar. 22, 1911). _Range._—Probably the whole of tropical and subtropical South America, Trinidad, the Lesser, and perhaps the Greater, Antilles. The northern limit may be considered to be Panamá.

Carollia perspicillata azteca Saussure*


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*Carollia subrufa* (Hahn) †*


*Carollia castanea* H. Allen‡*


**Subfamily STURNIRINAE**

**Genus STURNIRA** Gray

*Type, Sturnira spectrum* Gray = *Phyllostoma lilium* É. Geoffroy-Saint-Hilaire.)

*Sturnira lilium parvidens* Goldman‡*


*Sturnira hondurensis* Goodwin


Genus STURNIOPS Goodwin

Sturniops mordax Goodwin†*
Type Locality.—El Sauce Peralta, a farm on the Atlantic Railroad, less than halfway from San José to Limón, Cartago, Costa Rica. Range.—Known from type locality only.

Subfamily STENODERMINAE

Genus BRACHYPHYLLA Gray

Type Locality.—St. Vincent, Lesser Antilles.

Brachyphylla minor Miller†*
Type Locality.—Coles Cave, St. Thomas Parish, Barbados, Lesser Antilles.

Brachyphylla nana Miller†*
Type Locality.—El Guamá, Pinar del Rio, Cuba.

Brachyphylla pumila Miller†*
Type Locality.—Cave near Port de Paix, Haiti. Range.—Also recorded from Santo Domingo (Goodwin, Journ. Mamm., vol. 14, No. 2, p. 154, May 15, 1933).

Genus URODERMA *° Peters

Uroderma bilobatum Peters*


Genus VAMPYROPS Peters

Vampyrops helleri Peters*

Vampyrops lineatus (É. Geoffroy-Saint-Hilaire)*
Type Locality.—Paraguay. Range.—Supposed to range north to Central America.

Vampyrops vittatus (Peters)*
Type Locality.—Puerto Cabello, Carabobo, Venezuela. Range.—Venezuela and north to Costa Rica.

Genus VAMPYRODES Thomas

Vampyrodes major G. M. Allen
Genus VAMPYRESSA Thomas

Vampyressa minuta Miller†*

Genus CHIRODERMA Peters

Chiroderma isthmicum Miller†*

Chiroderma salvini Dobson*
1878. Chiroderma salvini Dobson, Catalogue of the Chiroptera in the ... British Museum, p. 532.

Genus ECTOPHYLLA H. Allen

Ectophylla alba H. Allen†*

Genus ARTIBEUS Leach
1855. Dermanura Gervais, in [Castelnau, Expédition dans les parties centrales de l’Amérique du Sud, ... , pt. 7, Zoologie:] Animaux nouveaux, ou rares, recueillis ..., p. 36. (Type, Dermanura cinereum Gervais.)

Artibeus hirsutus Andersen†*

Type Locality.—La Salada, Michoacán, México. Range.—States of Michoacán, Colima, and Jalisco, México.

Artibeus jamaicensis jamaicensis Leach*


Type Locality.—Jamaica. Range.—Central America and southern México, exclusive of Yucatán, north to Morelos and central Veracruz; St. Andrews and Old Providence Islands; Jamaica, Puerto Rico, Santo Domingo, Barbados, and Lesser Antilles as far east as St. Kitts.

Artibeus jamaicensis parvipes Rehn*


Artibeus jamaicensis grenadensis Andersen*


Type Locality.—Grenada, Lesser Antilles. Range.—Grenada.

Artibeus jamaicensis yucatanicus J. A. Allen*


Artibeus jamaicensis planirostris (Spix)*

1823. Phyllostoma planirostre Spix, Simiarum et vespertilionum Brasilense ..., p. 66.
1878. Artibeus planirostris Dobson, Catalogue of the Chiroptera in the ... British Museum, p. 515. (Part.)

*Type Locality.—Suburbs of Bahia, Brazil. Range.—From central Brazil to southern México.

Artibeus lituratus palmarum J. A. Allen and Chapman*  


Artibeus lituratus praeceps Andersen†  

†Type Locality.—Guadeloupe, Lesser Antilles. Range.—Islands of Guadeloupe and Dominica.

Artibeus cinereus toltecus (Saussure)*  

*Type Locality.—México (Restricted to Mirador, Veracruz, by Hershkovitz, Proc. U. S. Nat. Mus., vol. 99, p. 449, May 10, 1949). Range.—Central America, southern and central México, as far north as Durango. Recorded also at Plan...

**Artibeus cinereus phaeotis** (Miller) †*


**Artibeus cinereus watsoni** Thomas*


**Artibeus aztepus** Andersen†*


*Type Locality.*—Tetela del Volcán, Morelos, México. *Range.*—As yet only known from Morelos, México.

**Artibeus turpis** Andersen


*Type Locality.*—Teapa, Tabasco, México. *Range.*—Known from type locality only.

**Artibeus nanus** Andersen*


**Genus ENCHISTHENES** Andersen


**Enchisthenes hartii** (Thomas)


Genus ARDOPS Miller


Ardops annectens Miller†*

Type Locality.—Guadeloupe, Lesser Antilles.

Ardops luciae (Miller) †*

Type Locality.—St. Lucia, Lesser Antilles.

Ardops montserratensis (Thomas)

Type Locality.—Montserrat, Lesser Antilles.

Ardops nichollsi (Thomas) *

Type Locality.—Dominica, Lesser Antilles.

Genus PHYLLOPS Peters


Phyllops falcatus (Gray) *

Type Locality.—Cuba.

Phyllops haitiensis (J. A. Allen) *

Phyllops vetus Anthony*


Type Locality.—Cave at Daiquirí, Oriente, Cuba. (Known from skeletal remains only.)

Genus ARITEUS Gray


Ariteus flavescens (Gray)*


Type Locality.—Unknown. Range.—Jamaica.

Genus STENODERMA 32 Oken


Stenoderma rufus Oken*


Type Locality.—Unknown. Skeletal remains recorded by Anthony from caves in Puerto Rico.

Genus PYGODERMA Peters


Type, Stenoderma (Pygoderma) microdon Peters = Phyllostoma bilabiatum Wagner.)

Pygoderma bilabiatum (Wagner)*


Type Locality.—Ipanema, São Paulo, Brazil. Range.—Southern Brazil north to southern México.

Genus CENTURIO 33 Gray


Type, Centurio senex Gray.)

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Centurio senex Gray*


Range.—From south-central México to Costa Rica.

Subfamily Phyllonycterinae

Genus Erophylla Miller


Erophylla bombifrons (Miller) †*


Type Locality.—Cave near Bayamón, Puerto Rico. Range.—Puerto Rico.

Erophylla planifrons planifrons (Miller) †*


Type Locality.—Nassau, New Providence, Bahamas.

Erophylla planifrons mariguanensis Shamel †*


Type Locality.—Abrahams Hill, Mariguana [= Mayaguana] Island, Bahamas.

Erophylla santacristobalensis (Elliot) *


Type Locality.—San Cristóbal, Dominican Republic.

Erophylla sezekorni sezekorni (Gundlach) *


*Type Locality.*—Cuba.

**Erophylla sezekorni syops** G. M. Allen*


*Genus PHYLLONYCTERIS* Gundlach


**Phyllonycteris major** Anthony


*Type Locality.*—Cave near Morovis, Puerto Rico. (Known from skeletal remains only.)

**Phyllonycteris obtusa** Miller†*


*Type Locality.*—Cave near the Atalaye plantation, about 4 miles east of St. Michel, Haiti. (Known from skeletal remains only.)

**Phyllonycteris poeyi** Gundlach*


*Type Locality.*—Cuba.

*Genus REITHRONYCTERIS* Miller


**Reithronycteris aphylla** Miller†*


*Type Locality.*—Jamaica.

*Family DESMODONTIDAE* (vampire bats)

*Genus DESMODUS* Wied-Neuwied


**Desmodus rotundus murinus** Wagner*


**Genus DIPHYLLA** Spix

1823. Diphylla Spix, Simiarum et vespertilionum Brasiliensium . . ., p. 68. (Type, Diphylla ecaudata Spix.)

_Diphylla ecaudata centralis_ Thomas*


**Superfamily VESPERTILIONOIDEA**

**Family Natalidae**

**Genus NATALUS** Gray


**Subgenus NATALUS** Gray

_Natalus mexicanus mexicanus_ Miller†*


_Natalus mexicanus saturatus_ Dalquest and Hall*


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Natalus major Miller†*


Type Locality.—Near Savaneta, Dominican Republic. Range.—Also recorded from Haiti (Sanborn, Field Mus. Nat. Hist., Publ. 511, Zool. Ser., vol. 27, p. 380, Dec. 8, 1941).

Natalus dominicensis Shamel‡*


Type Locality.—Dominica, Lesser Antilles. Range.—Recorded also from Antigua (G. M. Allen, Extinct and vanishing mammals of the Western Hemisphere . . ., p. 29, Dec. 11, 1942).

Natalus primus Anthony


Type Locality.—Cueva de los Indios, Daiquirí, Oriente, Cuba. Range.—Known only from skeletal remains from Island of Cuba.

Subgenus NYCTIELLUS Gervais

1855. Nyctiellus Gervais, Mammifères, in [Castelnau, Expédition dans les parties centrales de l’Amérique du Sud, . . ., pt. 7, Zoologie:] Animaux nouveaux, ou rares, recueillis . . ., p. 84, (Type, Vesperptilio lepidus Gervais.)

Natalus lepidus (Gervais) *


Subgenus CHILONATALUS Miller


Natalus brevimanus Miller†*


Type Locality.—Old Providence Island, off coast of Nicaragua, Caribbean Sea. Range.—Old Providence Island.

Natalus macer (Miller) †*


Type Locality.—Baracoa, Oriente, Cuba. Range.—Cuba.

Natalus micropus Dobson*


Type Locality.—Kingston, Jamaica. Range.—Jamaica.

Natalus tumidifrons (Miller) †*


Type Locality.—Watling Island, Bahama Islands. Range.—Watling Island.

Family THYROPTERIDAE (disk-winged bats)

Genus THYROPTERA Spix

1823. Thyroptera Spix, Simiarum et vespertilionum Brasiliensium . . . , p. 61. (Type, Thyroptera tricolor Spix.)

Thyroptera discifera discifera (Lichtenstein and Peters) *


**Thyroptera tricolor albigua** G. M. Allen*


1931. *Thyroptera tricolor albiventer* (nec Tomes) Dunn, Journ. Mamm., vol. 12, No. 4, p. 430, Nov. 11, 1931. *(Lapsus calami.)*


**Family Vespertilionidae**

**Subfamily Vespertilioninae**

**Genus MYOTIS**  
*Kaup*

1829. *Myotis* Kaup, Skizzirte Entwicklung-Geschichte und natürliches System der Europäischen Thierwelt, pt. 1, p. 106. *(Type, *Vespertilio myotis* Borkhausen.)*

**Myotis lucifugus lucifugus** (Le Conte) *(little brown hat)*


Type Locality.—Georgia; probably the Le Conte plantation, near Riceboro, Liberty County. Range.—The entire forested portion of North America north of southern border of United States except in Rocky Mountain region and on Pacific coast of California, Oregon, Washington, British Columbia, and southern Alaska; also recorded from 5 kilometers northwest of Texcoco, México (state), México (Davis, Journ. Mamm., vol. 25, No. 4, p. 379, Dec. 12, 1944).

**Myotis lucifugus alascensis** Miller†


Type Locality.—Sitka, Alaska. Range.—Moist coastal region of western North America, from the archipelago of southern Alaska south through British

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**Myotis lucifugus pernox** Hollister†*


**Myotis lucifugus carissima** Thomas*


**Myotis lucifugus phasma** Miller and G. M. Allen†*


Myotis yumanensis yumanensis ³² (H. Allen)*


_Type Locality._—Old Fort Yuma, Imperial County, Calif., on right bank of Colorado River, opposite present town of Yuma, Ariz. _Range._—Interior desert country of Great Basin, from western edges of Mohave and Colorado deserts and eastern edge of Sierra Nevada in California eastward through southern Nevada to western Texas, and south into Baja California and in México to State of Durango.

Myotis yumanensis sociabilis H. W. Grinnell*


Myotis yumanensis saturatus Miller†*


_Type Locality._—Hamilton, Skagit County, Wash. _Range._—Humid northwest coast from Vancouver Island and on mainland from Horseshoe Lake to Dean Channel and Vancouver (Rand, Murrelet, vol. 23, p. 33, Feb. 15, 1943). See also Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 26, Jan. 24, 1947) in southern British Columbia; south to south-central California (San Luis Obispo County) and inland in the northern Sierra Nevada.

Myotis yumanensis lutosus Miller and G. M. Allen†*


_Type Locality._—Pátzcuaro, Michoacán, México. _Range._—Southern portion of Mexican highlands. Also recorded from Hidalgo, México (Davis, Journ. Mamm., vol. 25, No. 4, p. 379, Dec. 12, 1944).

Myotis yumanensis oxalis Dalquest


Type Locality.—Oxalis, San Joaquin Valley, Fresno County, Calif. Range.—Central San Joaquin Valley, lower Sacramento Valley, and area about San Francisco Bay, Calif.

*Myotis yumanensis lambi* Benson


_Type Locality._—San Ignacio, lat. 27°17’ N., Baja California, México. Range.—Known only from type locality, but probably present in suitable habitats in Baja California south of Sierra San Pedro Mártir.

*Myotis australriparius australriparius* (Rhoads)*


*Myotis australriparius gatesi* Lowery*


_Type Locality._—University Campus, near Baton Rouge, East Baton Rouge Parish, La. Range.—Louisiana (the type locality, and Provencal, Natchitoches Parish).

*Myotis grisescens* Howell†*


_Type Locality._—Nickajack Cave, near Shellmound, Marion County, Tenn. Range.—limestone area from extreme southern Indiana and Illinois south to Tennessee, Georgia, northern Florida (Sherman, Journ. Mamm., vol. 15, No. 2, p. 156, May 15, 1934), and central Alabama westward to southwestern Missouri and northern Arkansas.

*Myotis velifer velifer* (J. A. Allen)*


_Type Locality._—Santa Cruz del Valle, near Guadalajara, Jalisco, México. Range.—From highlands of Guatemala northward to western Arizona and southern California.
Myotis velifer incautus (J. A. Allen) *
_Type Locality._—San Antonio, Bexar County, Tex. _Range._—Open arid country from Texas to New Mexico northeastward to Kansas; south in México as far as Durango.

Myotis velifer peninsularis Miller*
_Type Locality._—San José del Cabo, Baja California, México. _Range._—Southern end of Baja California.

Myotis fortidens Miller and G. M. Allen*
_Type Locality._—Teapa, Tabasco, México. _Range._—Lower part of Tropical zone of Isthmus of Tehuantepec, northward on the west coast to southern Sinaloa and on east coast to southern Veracruz, México.

Myotis occultus Hollister†*

Myotis keenii keenii (Merriam) †*

Type Locality.—Masset, Graham Island, Queen Charlotte Islands, British Columbia, Canada. Range.—Humid northwest coast region from northern British Columbia and southeastern Alaska to northwestern Washington.

Myotis keenii septentrionalis (Trouessart) †*


1897. Myotis subulatus Miller, North Amer. Fauna No. 13, p. 75, Oct. 16, 1897. (Not of Say, 1823.)


Myotis evotis evotis (H. Allen) †*


Myotis evotis pacificus Dalquest*


Type Locality.—Three and a half miles east and five miles north of Yacolt, Clark County, Wash. Altitude, 500 feet. Range.—Forested areas of southern
British Columbia, north on coast as far as head of Dean Channel (Cranbrook, Horseshoe Lake near Powell River, Kimsquit, Kingcome Inlet, Okanagan Landing, Shuswap, Vernon, Victoria); Rocky Mountains (Jasper and Waterton Lakes National Parks, where pacificus is somewhat intermediate with evotis) in western Alberta (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 27, Jan. 24, 1947); western Washington, western Oregon, and northwestern coastal area of California.

**Myotis milleri** Elliot*


*Type Locality.*—La Grulla, Sierra San Pedro Mártir, Baja California, México. Altitude, 8,000 feet. *Range.*—Sierra San Pedro Mártir, Baja California, México.

**Myotis thysanodes thysanodes** Miller†*


**Myotis thysanodes azteacus** Miller and G. M. Allen


**Myotis sodalis** Miller and G. M. Allen*


*Type Locality.*—Wyandotte Cave, Crawford County, Ind. *Range.*—Eastern United States from central Mississippi Valley [Arkansas and Missouri] and northern Alabama to western part of New England.

**Myotis volans volans** (H. Allen) †*


*Type Locality.*—Cape San Lucas, Baja California, México. *Range.*—So far as known the typical form is confined to Baja California.

*Myotis volans longicrus* (True)+*  


*Myotis volans interior* Miller†  


*Myotis volans amotus* Miller†  

*Type Locality.*—Cofre de Perote, Veracruz, México. *Altitude,* 12,500 feet. *Range.*—Southern México, including the States of Veracruz and Jalisco; limits of range as yet undetermined.

*Myotis californicus californicus* (Audubon and Bachman)*  


*Type Locality.*—California. (The original specimen, on which the description was based, was received from "California." It is probably not now in existence. Type locality by subsequent restriction, Monterey, Monterey County, Calif. See Miller and G. M. Allen, U. S. Nat. Mus. Bull. 144, p. 153, May 25, 1928.)


*Myotis californicus caurinus* Miller† *


*Type Locality.*—Massett, Graham Island, Queen Charlotte Islands, British Columbia, Canada. *Range.*—Humid area of Pacific coast from extreme south of Alaskan archipelago, along coastal areas of British Columbia, Washington, Oregon, and northwestern California, to vicinity of San Francisco Bay.

*Myotis californicus stephensi* Dalquest *


*Type Locality.*—Vallecito, eastern San Diego County, Calif. (The names *pallidus* and *stephensi* have the same type locality but are based on different type specimens.) *Range.*—Arid interior of southwestern United States; northward to northern Nevada (Hall, Mammals of Nevada, p. 142, July 1, 1946) and central Utah (Hardy, Journ. Mamm., vol. 22, No. 3, p. 290, Aug. 14, 1942); also recorded from low arid desert region of northwestern Sonora, México (Burt, Univ. Michigan Mus. Zool. Misc. Publ. 39, p. 23, Feb. 15, 1938).

*Myotis californicus mexicanus* (Saussure) *


*Type Locality.*—Exact locality unknown: probably somewhere in Veracruz, Puebla, or Oaxaca, México. *Range.*—Southern México, from Oaxaca north to about Tropic of Cancer.
Myotis subulatus subulatus (Say) *


Myotis subulatus melanorhinus (Merriam) †*


1903. Myotis orinomus Elliot, Field Columb. Mus. Publ. 79, Zool. Ser., vol. 3, p. 228, (June) August 15, 1903. (La Grulla, Sierra San Pedro Mártir, Baja California, México. Altitude, 8,000 feet.)


Myotis subulatus leibii (Audubon and Bachman) *


*Myotis nigricans nigricans* (Schinz) *


*Myotis nigricans extremus* Miller and G. M. Allen† *


*Myotis nigricans dominicensis* Miller† *


*Myotis albescens* (È. Geoffroy-Saint-Hilaire) *


*Myotis argentatus* Dalquest and Hall

Type Locality.—Fourteen kilometers southwest of Coatzacoalcos, Veracruz, México. Altitude, 100 feet. Range.—Known from type locality only.

Genus PIZONYX  

Pizonyx vivesi (Menegaux)  
Type Locality.—"Îlot du Cardonal ou Islo, parti de l’Archipel Salsi puedes," Gulf of California, Baja California, México.  
Range.—Islands and coasts of Gulf of California.

Genus LASIONYCTERIS  

Lasionycteris noctivagans (Le Conte)  
Type Locality.—Eastern United States. Range.—North America north of México, from Atlantic to Pacific; probably not breeding south of Transition Zone.

Genus PIPISTRELLUS  
1829. Pipistrellus Kaup, Skizzirte Entwickelungs-Geschichte und natürliches System der Europäischen Thierwelt, pt. 1, p. 98 (Type, Vespertilio pipistrellus Schreber.)

Pipistrellus hesperus hesperus (H. Allen)  

Type Locality.—Old Fort Yuma, Imperial County, Calif., on right bank of Colorado River, opposite present town of Yuma, Ariz. Range.—Intermontane region of United States from south-central Washington south to Cataviña in northeastern Baja California, and from southeastern California eastward to southern Utah and northward in Utah to Tooele County (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 6, p. 51, Aug. 10, 1952).

*Pipistrellus hesperus merriami* (Dobson)†*


*Pipistrellus hesperus australis* Miller†*


Type Locality.—Barranca Ibarra, Jalisco, México. Range.—Central Arizona south to Jalisco, and including southern half of Baja California (Hall and Dalquest, Univ. Kansas Publ. Mus. Nat. Hist., vol. 1, No. 26, p. 597, Jan. 20, 1950)

*Pipistrellus hesperus potosinus* Dalquest*


Type Locality.—Presa de Guadalupe, San Luis Potosí, México. Range.—Known only from western and central parts of San Luis Potosí, but probably ranging over eastern part of Mexican Plateau.

*Pipistrellus hesperus maximus* Hatfield*


*Pipistrellus hesperus santarosae* Hatfield*


Type Locality.—Santa Rosa, Guadalupe County, N. Mex. Range.—In so far as known, northern New Mexico and western Colorado.
Pipistrellus subflavus subflavus (F. Cuvier)*


Pipistrellus subflavus obscurus Miller† *

_Type Localities._—Lake George, Warren County, N. Y. _Range._—From southern Quebec and southern Ontario south to southern Ohio and West Virginia; from Atlantic coast west into Wisconsin (Hall and Dalquest, Univ. Kansas Publ. Mus. Nat. Hist., vol. 1, No. 26, p. 600, Jan. 20, 1950).

Pipistrellus subflavus verae CRUCIS (Ward)

_Type Localities._—Las Vegas, Canton of Jalapa, Veracruz, Mexico. Altitude, 3,500 feet. _Range._—From type locality southward at least to Jilamo Farm, Tela District, Honduras (Hall and Dalquest, loc. cit.).

Genus _EPTESICUS_ ‡ Rafinesque
1820. Eptesicus Rafinesque, Annals of nature . . . , p. 2. (Type, Eptesicus melanops Rafinesque = Vespertilio fuscus Palisot de Beauvois.)

Eptesicus fuscus fuscus (Palisot de Beauvois) * (big brown bat)


**Eptesicus fuscus osceola** Rhoads*  

**Type Locality.**—Tarpon Springs, Pinellas County, Fla. **Range.**—Southern Florida.

**Eptesicus fuscus pallidus** Young†*  


**Eptesicus fuscus bernardinus** Rhoads*  


**Type Locality.**—Near San Bernardino, San Bernardino County, Calif. **Range.**—Pacific Coastal region, mainly west of Cascade–Sierran Divide, from southern British Columbia south to southern California.

**Eptesicus fuscus miradorensis** (H. Allen) *  


**Eptesicus fuscus peninsulare** (Thomas) *  

Type Locality.—Sierra Laguna, Baja California, México. Range.—Arid tip of the Baja California Peninsula.

_Eptesicus fuscus bahamensis_ (Miller) †*

_Type Locality._—Nassau, New Providence, Bahama Islands. Range.—Bahama Islands.

_Eptesicus fuscus dutertreus_ (P. Gervais) *


_Eptesicus fuscus hispaniolae_ Miller†*

_Type Locality._—Constanza, Dominican Republic. Range.—Haiti and Dominican Republic.

_Eptesicus fuscus wetmorei_ Jackson†*

_Type Locality._—Maricao, Puerto Rico. Range.—Puerto Rico.

_Eptesicus lynnii_ Shamel†*

_Type Locality._—Cave 3 miles east of Montego Bay, Jamaica. Range.—Jamaica.

_Eptesicus propinquus_ (Peters)*


**Eptesicus albigularis** (Peters)


**Type Locality.**—“México.” **Range.**—Recorded also at Comayaguela, Honduras (Goodwin, loc. cit.).

**Eptesicus chiriquinus** Thomas


**Type Locality.**—Bóquete, Chiriquí, Panamá.

**Genus LASIURUS** *a*


1831. *Lasiurus* Gray, Zool. Misc., No. 1, p. 38. (Based on “the hairy-tailed species of America.” Type, *Vespertilio borealis* Müller.)

**Lasiurus borealis borealis** (Müller) * (red bat)


1777. *[Vespertilio] növeboracensis* Erxleben, Systema regni animalis . . ., p. 155. (Based on the New York bat of Pennant.)


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*Lasiurus borealis seminolus* (Rhoads) *


*Lasiurus borealis teliotis* (H. Allen) † *


*Lasiurus borealis ornatus* Hall† *


**Lasiurus borealis frantzii** (Peters) *


**Lasiurus pfeifferi** (Gundlach) *


Type Locality.—Cuba. Range.—Cuba; Bahamas?

**Lasiurus degelidus** Miller† *


Type Locality.—Sutton’s, District of Vere, Jamaica. Range.—Jamaica.

**Lasiurus minor** Miller† *


Type Locality.—“Voute l’ Église,” a cave situated near the Jacmel road a few kilometers north of Trouin, Haiti. Range.—Probably the entire island of Hispaniola. Also recorded from Cat Island, Bahamas (G. M. Allen and Sanborn, Journ. Mamm., vol. 18, No. 2, p. 229, May 12, 1937).

**Lasiurus cinereus cinereus** (Palisot de Beauvois) *

1796. *Vesperitilio cinereus* (misspelled *linereus*) Palisot de Beauvois, Catalogue raisonné du muséum de Mr. C. W. Peale, Philadelphia, p. 18. (English edition by Peale and Palisot de Beauvois, p. 15.)

CHIROPTERA: VESPERTILIONIDAE

Genus DASYPTERUS 41 Peters


Dasypterus intermedius (H. Allen) *


Type Locality.—Matamoros, Tamaulipas, México. Range.—From Tekom, Yucatán (Hershkovitz, Fieldiana-Zool., Chicago Nat. Hist. Mus. Publ. 670, vol. 31, p. 553, July 10, 1951) and Chiapas, México, north to extreme southern Texas. Recorded also from Cuba (de Beaufort, Journ. Mamm., vol. 15, No. 4, p. 316, Nov. 15, 1934.)

Dasypterus floridanus Miller†*


Dasypterus ega panamensis Thomas*


Dasypterus ega xanthinus Thomas*


Type Locality.—Sierra Laguna, Baja California, México. Range.—Southern half of peninsula of Baja California; also recorded from Palm Springs, Riverside County, Calif. (Constantine, Bull. Southern California Acad. Sci., vol. 45, p. 107, Sept. 20, 1946).

Genus NYCTICEIUS 42 Rafinesque


Nycticeius humeralis humeralis (Rafinesque) *


*Type Locality.*—Kentucky. *Range.*—Austral Zones in the eastern United States, north to southwestern Ontario (Point Pelee) and southwestern Michigan (Kalamazoo County), south to Florida, Alabama, Louisiana, and southern Texas; west to northeastern Kansas (Cockrum, Univ. Kansas Publ. Mus. Nat. Hist., vol. 7, No. 1, p. 72, Aug. 25, 1952).

*Nycticeius humeralis subtropicalis* Schwartz


*Type Locality.*—Two and one-half miles west of Monroe Station, Collier County, Fla. *Range.*—Known only from area near Monroe Station at intersection of Tamiami Trail (U. S. Route 41) and State Route 94, Collier County, Fla., but probably occurs over most of subtropical portion of southern Florida.

*Nycticeius humeralis mexicanus* Davis


*Type Locality.*—Río Ramos, 20 kilometers northwest of Montemorelos, Nuevo León, México. Altitude, 1,000 feet.

*Nycticeius cubanus* (Gundlach)*


*Type Locality.*—Near Cárdenas, Matanzas, Cuba. *Range.*—Cuba.

*Genus RHOGÉESSA* **H. Allen**


*Type, Rhogeëssa tumida* H. Allen.)*

*Rhgéëssa parvula parvula* H. Allen*


*Type Locality.*—Tres Marías Islands, Nayarit, México. *Range.*—Tres Marías Islands and western mainland of México from Alamos, Sonora, south to San Blas, Nayarit (Hall, loc. cit.).

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Rhogeessa parvula tumida H. Allen†*

Rhogeessa gracilis Miller†*
Type Locality.—Piaxtla, Puebla, México. Range.—Southern México.

Genus BAEODON Miller

Baeodon allenii (Thomas)
Type Locality.—Santa Rosalía, near Autlán, Jalisco, México. Range.—Known from type locality only.

Genus EUDERMA H. Allen

Euderma maculata (J. A. Allen) *
Type Locality.—Near Piru, Ventura County, Calif. (probably at mouth of Castac Creek, Santa Clara Valley, Los Angeles County, 8 miles east of Piru; see Miller, North Amer. Fauna No. 13, p. 49, Oct. 16, 1897). Range.—Southwestern United States; recorded definitely from Piru, Mecca, Yosemite Valley, and Red Rock Canyon, Calif.; Reno, Nev.; Salt Lake City, Utah; Yuma, Ariz.; Mesilla Park, N. Mex. (see Durrant, Journ. Mamm., vol. 16, No. 3, p. 226, Aug. 12,


Genus CORYNORHINUS 4 H. Allen


Corynorhinus rafinesquii rafinesquii (Lesson) *


Type Locality.—“The lower parts of the Ohio” River, probably in southern Indiana and Illinois or western Kentucky in the region between the Wabash and Green Rivers. Range.—Central eastern United States from extreme western Virginia, northeastern West Virginia (Wilson, Journ. Mamm., vol. 27, No. 1, p. 86, Mar. 14, 1946), through Kentucky, southern Indiana and Illinois, intergrading with the race pallescens to the westward.

Corynorhinus rafinesquii pallescens Miller† *


Corynorhinus rafinesquii townsendii (Cooper) *


Type Locality.—Columbia River, Oreg. Range.—Humid coast region from Vancouver Island, British Columbia, southward to 4 miles south of Calistoga,

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Corynorhinus rafinesquii intermedius H. W. Grinnell


Corynorhinus rafinesquii mexicanus G. M. Allen†*


Type Locality.—Near Pacheco, Chihuahua, México. Range.—The Mexican tableland, from central and western Chihuahua, southward to Oaxaca and Vera-cruz; the precise limits are not yet fully ascertained.

Corynorhinus macrotis (Le Conte) *

1831. Plecotus] macrotis Le Conte, in McMurtrie, The animal kingdom . . .

by the Baron Cuvier, vol. 1, p. 431.


Type Locality.—Georgia; probably the Le Conte plantation, near Riceboro, Liberty County. Range.—Southeastern United States, from North Carolina, Georgia, and northern Florida, westward through the Southern and Gulf States, into Louisiana, and probably eastern Texas. Recorded also from Dismal Swamp, extreme southeastern Virginia (Miller, North Amer. Fauna No. 13, p. 52, Oct. 16, 1897); Collison Cave, Nicholas County, south-central West Virginia (Frum, Journ. Mamm., vol. 29, No. 4, p. 418, Dec. 31, 1948); Zellwood, Orange County, Fla. (Moore, Quart. Journ. Florida Acad. Sci., vol. 11, No. 1, p. 50, March 22, 1949); and Obion County, Tenn. (Goodpaster and Hoffmeister, Journ. Mamm., vol. 33, No. 3, p. 365, Aug. 19, 1952).

Corynorhinus phyllotis G. M. Allen


Type Locality.—San Luis Potosí (probably near city of same name), México. Range.—At present known from type locality only.

Genus IDIONYCTERIS Anthony

Idionycteris mexicanus Anthony

*Type Locality.*—Miquihuana, Tamaulipas, México.

**Subfamily NYCTOPHILINAE**

**Genus ANTROZOUS** *H.* Allen


**Antrozous pallidus pallidus** (Le Conte) †*


**Antrozous pallidus pacificus** Merriam†*


**Antrozous pallidus cantwelli** V. Bailey†*


**Antrozous bunkeri** Hibbard*


CHIROPTERA: MOLOSSIDAE

Type Locality.—Seven miles south of Sun City, Barber County, Kan. (in tunnel at the natural bridge on south fork of Bear Creek). Range.—Also recorded from Cimmaron County, extreme northwestern Oklahoma (Burt, Journ. Mamm., vol. 26, No. 3, p. 309, Nov. 14, 1945).

Antrozous minor Miller†


Type Locality.—Comondú, Baja California, México.

Family MOLOSSIDAE

Genus Cynomops Thomas


Cynomops planirostris planirostris (Peters) *


Genus Tadarida Rafinesque

1814. Tadarida Rafinesque, Précis des découvertes et travaux sommiologiques . . . , p. 55. (Type, Cephalotes teniotis Rafinesque.)


brasiliensis—group

Tadarida brasiliensis (I. Geoffroy-Saint-Hilaire) *


Revised (under the name Molossops) by Miller, North Amer. Fauna No. 13, pp. 42–46, Oct. 16, 1897.

Tadarida mexicana (Saussure)*


*Tadarida texana* Stager


*Type Locality.*—Ney Cave, 20 miles north of Hondo, Medina County, Tex.

*Range.*—Known from type locality only.

*Tadarida intermedia* Shamel†*


*Type Locality.*—Valley of Comitán, Chiapas, México.

*Range.*—Tropical Zone in Guatemala and southern México.

*Tadarida cynocephala* (Le Conte)‡*


*Type Locality.*—Georgia; probably the Le Conte plantation, near Riceboro, Liberty County.

*Range.*—Louisiana, Alabama, Florida, Georgia, and South Carolina.

*Tadarida bahamensis* (Rehn)*


**Type Locality.**—Governor’s Harbor, Eleuthera, Bahamas. **Range.**—Eleuthera, Long, and Little Abaco Islands, Bahamas.

**Tadarida muscula** (Gundlach) *


**Tadarida murina** (Gray) *


**Tadarida constanzae** Shamel‡ *


**Tadarida antillularum** (Miller) ‡ *


*macrotis*—group

**Tadarida femorosacca** (Merriam) ‡ *


**Tadarida yucatanica** (Miller) *


Tadarida molossa (Pallas) *


Genus MORMOPTERUS Peters


Mormopterus minutus (Miller)


Type Locality.—Trinidad, Santa Clara, Cuba.

Genus PROMOPS Gervais


Promops centralis Thomas* 


*Genus EUMOPS* * Miller


**Eumops perotis perotis** (Schinz)*


**Eumops perotis californicus** (Merriam)†*


**Eumops abrasus milleri** (J. A. Allen)*


**Eumops underwoodi underwoodi** Goodwin


*Type Locality.*—El Pedrero, 6 kilometers north of Chincala, La Paz, Honduras. Altitude, 3,000 feet. *Range.*—Recorded also from Rancho Escondido,
2 miles north of Apo, Tancítaro Mountain, Michoacán, México (Hall and Villa, loc. cit.).

**Eumops underwoodi sonoriensis** Benson


*Type Locality.*—Rancho de Costa Rica, Río Sonora, México. Altitude, 270 feet. *Range.*—Recorded also at 10 miles northwest of Noche Buena (approximately 18 miles north-northwest of Guaymas), Sonora, México.

**Eumops glaucinus** (Wagner)*


**Eumops bonariensis nanus** (Miller)*


**Genus MOLOSSUS** É. Geoffroy-Saint-Hilaire


*rufus*—group

**Molossus nigricans** Miller†*


*“Notes”* on the genus *Molossus*, as nearly monographic in character as the material would permit, were published by Miller, Proc. U. S. Nat. Mus., vol. 46, pp. 85-92, Aug. 23, 1913.

*Molossus rufus sinaloae* J. A. Allen*


*currentium*—group

*Molossus bondae* J. A. Allen*


*obscurus*—group

*Molossus fortes* Miller†*


**Type Locality.**—Luquillo, Puerto Rico.

*Molossus milleri* Johnson*


**Type Locality.**—Jamaica.

*Molossus major major* (Kerr)*


**Type Locality.**—Martinique, Lesser Antilles. **Range.**—Recorded also in Dominica.

*Molossus major verrilli* J. Allen*


_Type Locality._—Samaná, Dominican Republic. _Range._—Recorded also from Petionville, Haiti.

**Molossus debilis** Miller†*


_Type Locality._—St. Kitts, Lesser Antilles. _Range._—Recorded also in Nevis, Antigua, and Montserrat.

**Molossus obscurus** É. Geoffroy-Saint-Hilaire*


**Molossus aztecus** Saussure*


_Type Locality._—Amecameca, México, México. _Range._—Also recorded from British Honduras (Murie, Univ. Michigan Mus. Zool. Misc. Publ. 26, p. 20, July 15, 1935), and Huehuetán, Chiapas, México (Miller, loc. cit.).

_**pygmaeus**—group_

**Molossus coibensis** J. A. Allen*


_Type Locality._—Coiba Island, Panamá. (See also Hershkovitz, Proc. U. S. Nat. Mus., vol. 99, p. 454, May 10, 1949.) _Range._—Recorded also on mainland of Panamá.

**Molossus tropidorhynchus** Gray*


_Type Locality._—Cuba.
PRIMATES: CEBIDAE

Order PRIMATES

Suborder ANTHROPOIDEA

Superfamily CEBOIDEA

Family CEBIDAE

Subfamily AOTINAE (douroucoulis)

Genus AOTUS Humboldt

1811. Aotus Humboldt, Recueil d'observations de zoologie et d'anatomie comparée; . . . in Humboldt and Bonpland, Voyage aux régions equinoxiales du nouveau continent, . . ., pt. 2, [Zoology], vol. 1, p. 358. (Type, Simia trivirgata Humboldt. For use of Aotus in place of Nyctipithecus Spix (Simiarum et vespertilionum Brasilienium . . ., p. 24, 1823) see Palmer, Science, new ser., vol. 10, p. 493, Oct. 6, 1899.)

Aotus bipunctatus Bole


Type Locality.—Paracoté, 3 miles east of Montijo Bay, and 1½ miles south of mouth of Rio Angulo, Veraguas, Panamá.

Aotus rufipes (Sclater)


Aotus vociferans (Spix)


Type Locality.—Tabatinga, Amazonas, Brazil. Range.—A specimen is said to have been taken in the forest of Quindín, Costa Rica (Sclater, Proc. Zool. Soc. London, 1872, pt. 1, p. 3, June 1872), but this record is almost certainly erroneous (Elliot, A review of the Primates, vol. 2 (1912), pp. 14–15, June 15, 1913), and the species should be omitted from the North American list. Re-
Aotus zonalis Goldman†*


Type Locality.—Gatún, Canal Zone, Panamá. Altitude, 100 feet. Range.—Canal Zone and eastern Panamá (Goldman, Smithsonian Misc. Coll., vol. 69, No. 5, p. 225, Apr. 26, 1920).

Subfamily ALOUATTINAE (howlers)

Genus ALOUATTA a Lacépède

1799. Alouatta Lacépède, Tableau des divisions, sous-divisions, ordres et genres des mammifères, p. 4. (Published as a supplement to Discours d’ouverture et de clôture du cours d’histoire naturelle . . . . Type, Simia belzebub Linnaeus.)

Alouatta palliata palliata (Gray) *

1897. [Alouata] palliata Trouessart, Catalogus Mammalium . . . , fasc. 1, p. 34.

Type Locality.—Lake Nicaragua. (Not Caracas, Venezuela. See Sclater, Proc. Zool. Soc. London, 1872, pt. 1, pp. 7–8, June 1872.) Range.—From extreme western part of Panamá north through Costa Rica, Nicaragua, and Honduras. In the south it merges gradually with aequatorialis, making the individuals from Panamá quite intermediate. Specimens from Honduras near Guatemalan border are typical palliata; intergradation between these and the Mexican and black Guatemalan forms probably takes place farther north.

Alouatta palliata aequatorialis Festa*


**Type Localilty.**—Vinces, Ecuador. **Range.**—From southern limit of distribution of *palliata* in western Panamá through rest of Panamá and down along Pacific coast of South America through Colombia and Ecuador to region south of bay of Guayaquil. It is not, however, a strictly coastal form but is found as far inland as the region around Mindo in Ecuador. Specimens from Puntarenas, Costa Rica, and Boquerón in southwestern Panamá regarded as *aequatorialis* by Goodwin (Bull. Amer. Mus. Nat. Hist., vol. 87, p. 347, Dec. 31, 1946).

**Alouatta palliata trabeata** Lawrence*


*Type Locality.*—Capina, Herrera, Panamá. **Range.**—Azuero Peninsula, Pacific coast of Panamá.

**Alouatta palliata coibensis** Thomas*


*Type Locality.*—Coiba Island, Panamá. **Range.**—Coiba Island, off Pacific coast of Panamá.

**Alouatta palliata pigra** Lawrence*


*Type Locality.*—Uaxactún, Petén, Guatemala. **Range.**—Probably confined to forests of limestone region of northern Guatemala and Yucatán and southern Chiapas, México.

**Alouatta palliata luctuosa** Lawrence


*Type Locality.*—Mountain Cow, Cayo District, British Honduras. **Range.**—Probably a fairly small area in British Honduras.

**Alouatta palliata mexicana** Merriam†*


*Type Locality.*—Minatitlán, Veracruz, México. **Range.**—Southeastern part of México in province of Veracruz; probably extending south to edge of limestone region inhabited by *pigra*.

**Subfamily CEBINAE** (capuchins)

**Genus CEBUS** Erxleben

Cebus capucinus capucinus (Linnaeus) *

Cebus capucinus imitator Thomas *

Cebus capucinus limitaneus Hollister† *
Type Locality.—Río Segovia [or Wanks], eastern Honduras. [Restricted to Cabo Gracias a Dios at mouth of Río Segovia, eastern border between Honduras and Nicaragua, by Hershkovitz, Proc. U. S. Nat. Mus., vol. 98, p. 347, May 10, 1949.] Range.—Eastern and northern Honduras, and northeastern Nicaragua.

Genus SAIMIRI Voigt (squirrel marmosets)

Saimiri örstedii örstedii (Reinhardt) *

Saimiri örstedii citrinellus Thomas *
Subfamily ATELINAE (spider-monkeys)

Genus ATELES \(^{a}\) É. Geoffroy-Saint-Hilaire


*Ateles fusciceps robustus* J. A. Allen*


Type Locality.—Gallera, Department of Cauca, western Andes, Colombia. Altitude, 5,000 feet. Range.—Western cordillera of Andes from southwestern Colombia northward on west side of Río Cauca to eastern Panamá (Mount Pirre).

*Ateles geoffroyi geoffroyi* Kuhl*

1820. *Ateles* Kuhl (op. cit., p. 31) to San Juan del Norte (Greytown), Nicaragua. Range.—Coastal region bordering San Juan del Norte or Matina Bay, southeastern Nicaragua; probably ranging across through lowlands to Pacific coast.

*Ateles geoffroyi vellerosus* Gray*


Type Locality.—Mirador, about 15 miles northeast of Huatusco, Veracruz, México. Altitude, 2,000 feet. Range.—Unbroken forests of Veracruz and eastern San Luis Potosí and southeastward through Tabasco, across Isthmus of Tehuantepec in eastern Oaxaca to Honduras and El Salvador, except for highlands of Guatemala.

Ateles geoffroyi yucatanensis Kellogg and Goldman†*


Type Locality.—Puerto Morelos, northeast coast of Quintana Roo, México. Altitude, 100 feet. Range.—Forests of Yucatán Peninsula, northeastern Guatemala, and probably adjoining parts of British Honduras; doubtless intergrading to southward with vellerosus.

Ateles geoffroyi pan Schlegel*


Type Locality.—Cobán, Alta Verapaz, Guatemala. Range.—Mountains of central Guatemala; doubtless intergrades with vellerosus.

Ateles geoffroyi frontatus (Gray)*


Ateles geoffroyi ornatus Gray*

1870. Ateles ornatus Gray, Catalogue of monkeys, lemurs and fruit-eating bats in the . . . British Museum, p. 44.


Type Locality.—Unknown; assumed by Kellogg and Goldman to have been Cuabre, Talamanca region, Limón, southeastern Costa Rica. Range.—Eastern slope of Cordillera Central of Costa Rica; doubtless intergrading with pana-mensis on Pacific side of central mountain range.

Ateles geoffroyi panamensis Kellogg and Goldman†*


Type Locality.—Cerro Bruja, about 15 miles southeast of Portobello, Province of Colón, Panamá. Range.—Forested regions of Panamá east of Canal Zone (Cordillera de San Blas), and west through Chiriquí to central western Costa Rica.
Ateles geoffroyi azuereensis Bole

*Type Locality.*—Altos Negritos, 10 miles east of Montijo Bay (part of the spur forming south drainage divide of Río Negro), Mariato Suay Lands, Azuero Peninsula, Veraguas, Panamá. Altitude, 1,500 feet. *Range.*—Forest mountains of Azuero Peninsula, Veraguas Province, Panamá, probably in deeper forests on both sides, but known only from western (Veraguas) side from vicinity of Ponuga southward. Possibly ranging west to Burica Peninsula on Panama-Costa Rican boundary.

*Ateles geoffroyi grisescens* Gray*

*Type Locality.*—Unknown. “Restricted” by Kellogg and Goldman (op. cit., p. 43) to Río Tuyra, Darién, southeastern Panamá. *Range.*—Presumably the valley of Río Tuyra and probably through Serranía del Sapo of extreme southeastern Panamá and Cordillera de Baudo of northwestern Colombia.

*Ateles rufiventris* Sclater

*Type Locality.*—Río Atrato, northern Colombia. *Range.*—A specimen in the Leyden Museum is said to have been taken in Panamá (Elliot, A review of the Primates, vol. 2, p. 36, June 15, 1913).

**Family** CALLITHRICIDAE (marmosets)

**Genus** MARIKINA Lesson

**Subgenus** OEDIPOMIDAS Reichenbach

*Mariquina geoffroyi* (Pucheran) *
1823. *Midas* *Œdipus* (varietas) Spix, Simiarum et vespertilionum Brasiliensium, p. 30, pl. 23. (“Habitat, ut opinor, in provincia Guiana.”)


1862. *J[acchus] spixii* Reichenbach, Die vollständigste Naturgeschichte der Affen, p. 1, pl. 1, fig. 2. (Copied from Spix, pl. 23, with slight alterations; shows the characteristic head markings of the Panamá marmoset.)


**Superfamily CERCOPITHECOIDEA** (macaquelike Primates)

**Family CERCOPITHECIDAe**

**Subfamily CERCOPITHECINAE** (guenons)

**Genus CERCOPITHECUS** Linnaeus


*Cercopithecus aethiops sabaeus* (Linnaeus) *


*Cercopithecus mona mona* (Schreber) *

1774. *Simia mona* Schreber, Die Säugethiere . . . , Theil 1, Heft 2, pl. 15 (Heft 7, p. 97, vernacular name only, and description).


Superfamily HOMINOIDEA (manlike Primates)

Family HOMINIDAE (men)

Genus HOMO Linnaeus
1758. Homo Linnaeus, Systema naturae, ed. 10, vol. 1, p. 20. (Type, Homo sapiens Linnaeus.)

Homo sapiens sapiens Linnaeus* (Caucasian)
Type Locality.—Upsala, Sweden. Range.—Now almost cosmopolitan.

Homo sapiens afer Linnaeus* (Negro)
Type Locality.—Africa. Range.—Introduced and widely established in North America.

Homo sapiens americanus Linnaeus* (American Indian)
Type Locality.—Eastern North America. Range.—North, Central, and South America.

Homo sapiens asiaticus Linnaeus* (Chinese, Japanese, etc.)

Order EDENTATA

Suborder XENARTHRA

Superfamily MEGALONYCHOIDEA (sloths)

Family MEGALONYCHIDAE (ground sloths)

Genus ACRATOCNUS Anthony

Acratocnus odontirigonus Anthony
Type Locality.—Cueva de la Ceiba, Hacienda Jobo, near Utuado, Puerto Rico. Range.—Known only from remains found in caves.

Acratocnus major Anthony

**Type Locality.**—Cave on the property of Don Gervacio Torano, near Utuado, Puerto Rico. **Range.**—Known only from remains found in caves.

**Acratocnus comes** Miller†*


**Type Locality.**—Large cave near St. Michel, Haiti. **Range.**—Known only from remains found in caves and Indian deposits (see Miller, op. cit., pp. 25–26; and vol. 82, No. 5, p. 11, Dec. 11, 1929).

**Genus PAROCNUS** Miller


**Parocnus serus** Miller†*


**Type Locality.**—Large cave near St. Michel, Haiti. **Range.**—Known only from remains found in caves.

**Superfamily MYRMECOPHAGOIDEA**

**Family MYRMECOPHAGIDAE**

**Genus MYRMECOPHAGA** Linnaeus


**Myrmecophaga tridactyla centralis** Lyon†*


**Genus TAMANDUA** 44 Gray

1775. *Tamandua* Frisch, Das Natur-System der vierfüssigen Thiere . . . , p. 5. (Type, not designated. Included species: *Tamandua guacu* Frisch,


Tamandua tetradactyla mexicana (Saussure)*


Tamandua tetradactyla chiriquensis J. A. Allen*


Genus CYCLOPES Gray

Cyclopes didactylus dorsalis (Gray)*


Cyclopes didactylus mexicanus Hollister†*

Type Locality.—Tehuantepec, Oaxaca, México. Range.—Oaxaca, southern Veracruz, and Tabasco to Chiapas, México.

Superfamily BRADYPODOIDEA

Family Bradypodidae (sloths)

Genus Bradypus Linnaeus (three-toed sloths)
1758. Bradypus Linnaeus, Systema naturae, ed. 10, vol. 1, p. 34. (Type, Bradypus tridactylus Linnaeus.)

Bradypus griseus griseus (Gray)*


Bradypus griseus castaneiceps (Gray)*


*Type Locality.*—Woods surrounding Javali gold mine in Chontales District, Nicaragua. Altitude, 2,000 feet. *Range.*—From Jiménez, northeastern Costa Rica, north through lowlands of Nicaragua to Patuca in eastern Honduras.

**Bradypus griseus ignavus** Goldman†*


*Type Locality.*—Marraganti (about 2 miles above Real de Santa María), near head of tidewater on Río Tuyra, Darién, Eastern Panamá. *Range.*—Eastern Panamá (Goldman, Smithsonian Misc. Coll., vol. 69, No. 5, p. 58, Apr. 26, 1920).

**Genus CHOLEOEPUS** Illiger (two-toed sloths)

1811. *Choloepus* Illiger, Prodromus systematis Mammalium et Avium . . . , p. 108. (Type, *Bradypus didactylus* Linnaeus.)

**Choloepus hoffmanni** Peters*


**Superfamily DASYPODOIDEA** (armadillos)

**Family Dasypodidae**

**Subfamily CABASSOINAE**

**Genus CABASSOUS** McMurtrie


213750—55—10
Cabassous centralis (Miller)†*


Subfamily Dasypodinae

Genus DASYPUS Linnaeus (nine-banded armadillos)


Dasyus novemcinctus mexicanus Peters*


1905. Tatu novemcinctum texanum V. Bailey†, North Amer. Fauna No. 25, p. 52, Oct. 24, 1905. (Brownsville, Cameron County, Tex.)

1917. Dasypus cucurbitinus Gaumer, Monografía de los mamíferos de Yucatán, p. 21. (In synonymy of Dasyus novemcinctus.)


EDENTATA: DASYPODIDAE


**Dasypus novemcinctus fenestratus** Peters*


**Dasypus novemcinctus hoplites** G. M. Allen*


_**Type Locality.**—Hills back of Gouyave, Grenada, Lesser Antilles. **Range.**—Known from Grenada only (see also G. M. Allen, Extinct and vanishing mammals of the Western Hemisphere . . . , pp. 34–35, Dec. 11, 1942).

**Order LAGOMORPHA**

*Family OCHOTONIDAE* (pikas)

*Genus OCHOTONA* Link


*Subgenus PIKA* Lacépède

1799. *Pika* Lacépède, Tableau des divisions, sous-divisions, ordres et genres des mammifères, p. 9. (Published as a supplement to Discours d’ouverture et de clôture du cours d’histoire naturelle . . . Type, *Lepus alpinus* Pallas.)


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Ochotona collaris (Nelson)†∗


*Type Locality.*—Near head of Tanana River, about 200 miles south of Fort Yukon, Alaska. *Range.*—From south-central Alaska (Chitina River Glacier, Mount McKinley, Seward Creek, Tanana River, White Pass); central and southern Yukon (Ogilvy Mountains), Conrad, Teslin Lake, Canol Road (Ross River, Mile 96; Macmillan Pass, Mile 232); east to head of Carcajou River, Canol Road, Mile 111E, Mackenzie District; south to Bennett, Tagish Lake, in extreme northwestern British Columbia (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 94, Jan. 24, 1947).

Ochotona princeps princeps (Richardson)∗


Ochotona princeps lutescens A. H. Howell†∗


*Type Locality.*—Mount Inglesmaldie, near Banff, Alberta, Canada. *Altitude,* about 8,000 feet. *Range.*—Rocky Mountains in Banff National Park, Alberta (Banff; Boom Lake 27 miles west of Banff, 6,500 feet; Bryant Creek; Cascade Basin, 7,000 feet; Mistaya Creek, Banff-Jasper Highway, 6,400 feet; south to Mount Forget-me-not, 50 to 75 miles southwest of Calgary); and Snake Indian River and Wall Pass Trail in eastern part of Jasper National Park (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 96, Jan. 24, 1947).

Ochotona princeps levis Hollister†∗


Ochotona princeps cuppes Bangs∗


### Ochotona princeps septentrionalis Cowan and Racey


**Type Locality.**—Itcha Mountains, British Columbia. Altitude, 6,500 feet. **Range.**—Known from type locality only.

### Ochotona princeps brooksi A. H. Howell†*


**Type Locality.**—Sicamous, British Columbia, Canada. **Range.**—Interior of southern British Columbia, from Shuswap Lake west to Mount McLean and McGillivray Creek, Lillooet District; limits of range unknown.

### Ochotona princeps fenisex Osgood*


### Ochotona princeps brunnescens A. H. Howell†*


Ochotona princeps fumosa A. H. Howell†*


*Type Locality.*—Permilia Lake, west base of Mount Jefferson, Marion County, Oreg. *Range.*—Western slopes of Cascade Mountains in Oregon, from west slope of Mount Jefferson on upper Clackamas River south at least to Three Sisters in Lane County; also mountains near Pauline Lake, Crook County.

Ochotona princeps jewetti A. H. Howell†*


*Type Locality.*—Head of Pine Creek, near Cornucopia, south slope of Wallowa Mountains, Baker County, Oreg. *Range.*—Wallowa Mountains, Strawberry Mountains, and southern portion of Blue Mountains, northeastern Oregon. Vertical range approximately from 5,000 to 10,000 feet.

Ochotona princeps taylori Grinnell*


*Type Locality.*—Warren Peak, Warner Mountains, Modoc County, Calif. Altitude, 9,000 feet. *Range.*—Portions of Modoc plateau of northeastern California, west at north from Warner Mountains, Modoc County, to Goose Nest Mountains, Siskiyou County, and south to near Termo, Lassen County (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 197, Sept. 26, 1933); and northward in Oregon to northern end of Steens Mountains (V. Bailey, North Amer. Fauna No. 55 (June), p. 113, Aug. 27, 1936).

Ochotona princeps schisticeps (Merriam)†*


*Type Locality.*—Donner [= Summit], Placer County, Calif. *Range.*—Boreal Zones of northern Sierra Nevada, from Mount Shasta, Siskiyou County, south to Donner Pass, Placer County, Calif.; vertical range, from 4,800 feet (Battle Creek Meadows, Tehama County) up at least to 9,500 feet on Lassen Peak and to nearly 10,000 feet on Mount Shasta (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 197, Sept. 26, 1933); and northwestern Nevada east to Pine Forest Mountains (Hall, Mammals of Nevada, p. 590, July 1, 1946).
Ochotona princeps muiri Grinnell and Storer


*Type Locality.*—Near Ten Lakes, Yosemite National Park, Tuolumne County, Calif. Altitude, 9,300 feet. *Range.*—Central Sierra Nevada from Mount Tallac, Eldorado County, south at least to vicinity of Mammoth Pass, Mono County, Calif.; vertical range, from 7,700 feet up to 12,120 feet (both extremes within Yosemite National Park); zonal range, chiefly Hudsonian, but locally also Canadian and Arctic-Alpine (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 198, Sept. 26, 1933); and Sierra Nevada in region of Lake Tahoe, Nev. (Hall, Mammals of Nevada, p. 593, July 1, 1946).

Ochotona princeps albata Grinnell


*Type Locality.*—Cottonwood Lakes, near Mount Whitney, Sierra Nevada, Inyo County, Calif. Altitude, 11,000 feet. *Range.*—Southern Sierra Nevada south from vicinity of Kearsarge Pass, in Inyo and Fresno Counties, to near Mineral King and to Cottonwood Pass (near Whitney Meadows), in Tulare County; vertical range, from 7,500 feet (Little Onion Valley, Inyo County) up to at least 12,000 feet (near Mount Langley); zonal range, chiefly Arctic-Alpine and Hudsonian, locally in Canadian (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 198, Sept. 26, 1933).

Ochotona princeps sheltoni Grinnell


*Type Locality.*—Near Big Prospector Meadow, White Mountains, Mono County, Calif. Altitude, 11,000 feet. *Range.*—White Mountains in Mono and Inyo Counties, Calif., and Mineral County, Nev.; vertical range, 8,000 to 13,000 feet; zonal range, Transition to Canadian.

Ochotona princeps tutelata Hall


Ochotona princeps nevadensis A. H. Howell


Type Locality.—Ruby Mountains, southwest of Ruby Valley Post Office, Elko County, Nev. Altitude, 10,500 feet. Range.—Known from Ruby Mountains, Nev.

Ochotona princeps clamosa Hall and Bowlus


Ochotona princeps goldmani A. H. Howell†*


Type Locality.—Echo Crater, 20 miles southwest of Arco, Snake River Desert, Craters of the Moon National Monument, Butte County, Idaho. Range.—Known only from Echo Crater and Fissure Crater, Craters of the Moon National Monument, Butte and Blaine Counties, Idaho.

Ochotona princeps howelli Borell*


Type Locality.—Summit of Smith Mountain, near head of Bear Creek, south end of Seven Devils Mountains, Adams County, Idaho. Altitude, 7,500 feet. Range.—Known only from Smith Mountain and Blake Lake, Seven Devils Mountains, Adams County, in west-central Idaho.

Ochotona princeps lemhi A. H. Howell†*


Type Locality.—Timber Creek, Lemhi Mountains, 10 miles west of Junction, Lemhi County, Idaho. Range.—Mountains of south-central Idaho—the Lemhi, Lost River, Salmon River, and Sawtooth Ranges; eastward to Beaverhead Mountains, east of Leedore; northern limits of range imperfectly known (Davis, The Recent mammals of Idaho, p. 348, Apr. 5, 1939).

Ochotona princeps ventorum A. H. Howell†*


Ochotona princeps uinta Hollister†*


*Type Locality.*—Uinta Mountains, near head of east fork of Bear River, Summit County, Utah. *Range.*—Uinta and Wasatch Ranges, in Utah.

Ochotona princeps moorei Gardner†*


*Type Locality.*—One mile northeast of Baldy Ranger Station, Manti National Forest, Sanpete County, Utah. Altitude, 10,000 feet. *Range.*—Known from type locality only.

Ochotona princeps cinnamomea J. A. Allen*  


Ochotona princeps fusiceps A. H. Howell†*


Ochotona princeps utahensis Hall and Hayward


Ochotona princeps figginsi J. A. Allen*


*Type Locality.*—Pagoda Peak, Rio Blanco County, Colo. *Range.*—Western Colorado, from Gunnison County north to Hahn’s Peak in eastern Routt County and to Mount Zirkel on Continental Divide; and to Bridger Peak, Wyo.
Ochotona princeps saxatilis Bangs*
Type Locality.—Montgomery, near Mount Lincoln, Park County, Colo. Range.—Easterly mountain ranges of middle Colorado from Medicine Bow Range south to Sangre de Cristo Range; northward to Medicine Peak, Wyo.; westward in southern Colorado to San Juan Range and to La Sal Mountains in eastern Utah; vertical range approximately from 9,000 to 13,500 feet.

Ochotona princeps nigrescens V. Bailey†*
Type Locality.—Goat Peak at head of Santa Clara Creek, Jemez Mountains, Sandoval County, N. Mex. Altitude, 10,000 feet. Range.—Jemez Mountains, N. Mex., north to southern end of San Juan Mountains, Colo.

Ochotona princeps incana A. H. Howell†*
Type Locality.—Pecos Baldy, Santa Fe County, N. Mex. Altitude, 12,000 feet. Range.—High mountains of northern New Mexico, from Pecos Baldy north to Culebra Mountains (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 64, Mar. 1, 1932) and probably to Sierra Blanca, Colo.

Family LEPORIDAE (hares and rabbits)

Subfamily PALAEOLAGINAE

Genus ROMEROLAGUS Merriam

Romerolagus diazi (Diaz) * (volcano rabbit)

Type Locality.—Eastern slope of Mount Iztaccíhuatl, Puebla, México. Range.—Middle slopes of Popocatépetl and Iztaccíhuatl, mainly on north and west sides, fronting Valley of México; vertical range from about 10,000 to 12,000 feet; zonal range Canadian. Recorded also from Monte Río Frio, 45 kilometers east-southeast of city of México (Davis, Journ. Mamm., vol. 25, No. 4, p. 401, Dec. 12, 1944).

Subfamily LEPORINAE

Genus LEPUS \(^{18}\) Linnaeus

1758. Lepus Linnaeus, Systema naturae, ed. 10, vol. 1, p. 57. (Type, Lepus timidus Linnaeus.)

1904. Lagos Palmer,\(^{59}\) North Amer. Fauna No. 23, p. 361, Jan. 23, 1904. (Type, Lepus arcticus Ross.)


Subgenus LEPUS Linnaeus

Lepus arcticus arcticus \(^{60}\) Ross* (arctic hare)

1819. Lepus arcticus Ross, A voyage of discovery ... in H.M.S. Isabella and Alexander ... , ed. 2 (8vo.), vol. 2, Appendix 4, p. 151.

1819. Lepus glacialis Leach, in Ross, A voyage of discovery ... in H. M. S. Isabella and Alexander ... ed. 2 (8vo.), vol. 2, Appendix 4, p. 170.


Type Locality.—Possession Bay, Bylot Island, lat. 73°27' N., Franklin District, Northwest Territories, Canada. (See Ross, op. cit., orig. ed. (4to.), 1819, p. 179; and ed. 2 (8vo.), 1819, vol. 2, p. 151.) Range.—From Bylot Island and northern Baffin Island (Pond Inlet region, Tulukane (18 miles west), Egiksuak (8 miles east), James Creek) south for an undetermined distance on east coast; south in western Baffin Island along east side of Foxe Basin in rocky highlands to about lat. 67°30' N., where grassy tundra land begins; west side of Foxe Basin along coast of Melville Peninsula (Fury and Hecla Strait, Igloolik, and Ahadzar Islands and mainland in vicinity); southern and western limits of range

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\(^{59}\) Brookes, J., A catalogue of the anatomical and zoological museum of Joshua Brookes, pt. 1, p. 54, July 1828. (Nomen nudum.)

not definitely known; hares known to occur in northern Keewatin and interior islands of Canadian Arctic Archipelago (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 97, Jan. 24, 1947).

**Lepus arcticus labradorius** Miller†*


*Type Locality.—*Fort Chimo, Quebec, Canada. *Range.—*Region around Hudson Strait and northern part of Hudson Bay, on east side from Great Whale River north to Hudson Strait, Ungava Bay (Chimo), and northern coastal region of Labrador south to Davis Inlet (Cape Mugford, Nain, Ramah, Solomon's Island), and on west side from Churchill, Manitoba, north to Cape Fullerton and Southampton Island, and southern Baffin Island at least to north side of Cumberland Sound (Blacklead Island, Kingua Fiord, Netting Fiord, Pangnirtung) on east coast, and on west coast from Cape Dorset north to Bowman Bay; western limits of range not determined, but presumably intergrades with *arcticus* in northeast Keewatin west of Melville Peninsula, and with *ander soni* farther southward (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 98, Jan. 24, 1947).

**Lepus arcticus bangsii** Rhoads*


*Type Locality.—*Codroy, Newfoundland. *Range.—*Newfoundland and treeless coast belt of Labrador from Strait of Belle Isle north to about lat. 55° N. (Hopendale, Makkovik, Pomialuk); now restricted to bare hilltops in Newfoundland and exterminated in parts of Labrador coast (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 97, Jan. 24, 1947).

**Lepus arcticus andersoni** Nelson*


*Type Locality.—*Cape Barrow, lat. 67° 59' 32'' N., long. 110° 06' 15'' W., Coronation Gulf, Mackenzie District, Northwest Territories, Canada. *Range.—*Arctic drainage of Mackenzie District, Northwest Territories, from north side of Great Slave Lake (Fort Rae), Hanbury Lake, and Aylmer Lake, and to Arctic coast and southern parts of Victoria Island (Cambridge Bay, Mackenzie Creek) and Banks Island (Cape Kellett, about lat. 72° N., long. 125° W.); specimens not available from east of Bathurst Inlet and Beechey Lake on upper Back River in Mackenzie District, but probably occurs farther east to meet range of *labradorius* on west side of Hudson Bay; westward along Arctic coast and to edge of scattered timber at northern edge of Hudsonian Zone to Coronation Gulf (Cape Barrow, Gray Bay, Port Epworth at mouth of Tree River, lower Coppermine River at Sandstone Rapids, Cape Kendall, and Cape Krusenstern), Dismal Lake northeast of Great Bear Lake, Dolphin and Union Strait (Bernard Harbor, Liston Island), Cape Parry, Langton Bay near south end of Franklin

Lepus arcticus hubbardi Handley†*


Type Locality.—Near Cherie Bay, 5 miles northeast of Mould Bay Station, Prince Patrick Island, Franklin District, Northwest Territories, Canada. Altitude, 350 feet. Range.—Known only from Prince Patrick Island; probably inhabits islands to the east and northeast.

Lepus arcticus monstrabilis Nelson†*


Type Locality.—Buchanan Bay, Ellesmere Island, Northwest Territories, Canada. Range.—All of Ellesmere and Devon Islands and probably also Axel Heiberg Island of Sverdrup Island group just west of Ellesmere Island; limits of range westward unknown; presumably occurs sporadically and intergrading with groenlandicus on coast of northwest Greenland (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 99, Jan. 24, 1947).

Lepus arcticus groenlandicus Rhoads*


1902. Lepus variabilis var. glacialis Winge, Medd. om Grønland, vol. 21, pt. 2, p. 375. (Not of Leach, 1819.)


Type Locality.—Robinson’s Bay [= Robertson Bay], northwestern Greenland, about lat. 76° 45' N., long. 70° 10' W., about 60 miles southeast of Etah. Range.—Coastal belt and adjacent islands of northern Greenland on west coast from about Disko Bay, south of which it intergrades with porsildi, north to extreme northern tip of Greenland at about lat. 83° 40' N., and to a little beyond Cape Dalton south of Scoresby Sound, approximately lat. 70° N. (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 98, Jan. 24, 1947).

Lepus arcticus porsildi Nelson†*


Type Locality.—Near Julianehaab, lat. 61° 21' N., southern Greenland. Range.—From extreme southern Greenland north to about Disko Bay (about lat. 69° N.); intergrading with groenlandicus from Sukkertoppen (about lat. 66° N.) to Disko Bay (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 99, Jan. 24, 1947).
Lepus othus othus Merriam†*

Type Locality.—St. Michael, Norton Sound, Alaska. Range.—Tundras of northern and northwestern Alaska, exclusive of the Peninsula and Bristol Bay section; south to Kuskokwim River region; east to upper Colville River and possibly farther (A. H. Howell, op. cit., p. 333).

Lepus othus poadromus Merriam†*

Type Locality.—Stepovak Bay, Alaska Peninsula, Alaska. Range.—Alaska Peninsula and Bristol Bay district of Alaska (A. H. Howell, loc. cit.).

Lepus townsendii townsendii Bachman* (white-tailed jackrabbit)

Type Locality.—Fort Walla Walla, near present town of Wallula, Walla Walla County, Wash. Range.—Great Basin region, including eastern slopes of Cascade Range, and thence eastward to Rocky Mountains; formerly on grasslands of eastern Washington, but now restricted or scarce except in Okanogan Valley (Dalquest, Univ. Kansas Publ. Mus. Nat. Hist., vol. 2, p. 380, Apr. 9, 1948); north into Okanogan Valley (Oliver, Osoyoos, north to Fairview), British Columbia (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 99, Jan. 24, 1947); south in open country of Oregon east of Cascades (V. Bailey, North Amer. Fauna No. 55 (June), p. 97, Aug. 29, 1936) to higher parts of northeastern Great Basin area of California, south along crests and eastern slopes of Sierra Nevada to Mount Whitney region in Tulare and Inyo Counties, and in winter descending to a lower level on eastern side of Sierra Nevada (Orr, op. cit., p. 38); eastern slope of Sierra Nevada and northern Nevada (Hall, Mammals of Nevada, p. 598, July 1, 1946); east through southern half of Idaho (Davis, The recent mammals of Idaho, p. 354, Apr. 5, 1939); and most of Utah to extreme southwestern Wyoming and summit of Rocky Mountains in Colorado (Warren, The mammals of Colorado, . . ., p. 256, 1942). Vertical range, from about 1,000 feet in eastern Washington to 12,000 feet in Colorado; zonal range, mainly Upper Sonoran and Transition, but extends up to Hudsonian in mountains of Colorado.
Lepus townsendii campianus Hollister*


*Type Locality.*—Plains of the Saskatchewan, Canada (probably near Carlton House).

Lepus americanus americanus Erxleben* (American varying hare)

1777. [*Lepus*] *americanus* Erxleben, Systema regni animalis . . . , p. 330.

*Type Locality.*—Hudson Bay, Canada. (Restricted to Fort Severn, Ontario, Canada, by V. Bailey, North Amer. Fauna No. 49 (1926), p. 138, Jan. 3, 1927.)
*Range.*—Region about southern end of Hudson Bay, including southern Keewatin; most of Saskatchewan; Manitoba; east through northern Ontario (including Isle Royale and Michipicoten Island, Lake Superior); northern Quebec; all of Ungava except extreme northern part; Labrador; southward through forested parts of North Dakota (V. Bailey, loc. cit.).

Lepus americanus struthopus Bangs*


Lepus americanus virginianus Harlan*  
1825. Lepus virginianus Harlan, Fauna Americana; . . ., p. 196.  


Lepus americanus phaeonotus J. A. Allen*  

Type Locality.—Hallock, Kitson County, Minn. Range.—Upper and Lower Peninsulas of Michigan (Burt, Mammals of Michigan, p. 245, 1946), northern Wisconsin, northern Minnesota south to Elk River (Swanson, Minnesota Dept. Conserv. Techn. Bull. 2, p. 97, 1945); and northward into extreme western Ontario, and southern Manitoba (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 102, Jan. 24, 1947); vertical range, from about 900 to 2,000 feet on Upper Peninsula of Michigan; zonal range, Canadian.  

Lepus americanus macfarlani Merriam†*  
1900. Lepus saliens Osgood†, North Amer. Fauna No. 19, p. 39, Oct. 6, 1900. (Caribou Crossing, between Lake Bennett and Lake Tagish, Yukon, Canada.)  

Type Locality.—Fort Anderson, near mouth of Anderson River, Mackenzie district, Northwest Territories, Canada. Range.—Wooded parts of Alaska, from upper Yukon region southwest to Cook Inlet and base of Alaska Peninsula, all of Yukon, western Mackenzie (Nelson, North Amer. Fauna No. 29, p. 98, Aug. 31, 1909); northern British Columbia (Peace River and Alaska Highway), and northwestern Alberta (Wood Buffalo Park), Canada; northern limit coincides with that of trees; vertical range, in Mackenzie River region, from near sea level up to over 2,000 feet; zonal range, mainly Hudsonian (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 101, Jan. 24, 1947).
Lepus americanus dalli Merriam†*
Type Locality.—Nulato River, Alaska. Range.—Wooded parts of western Alaska from below Fort Yukon to coast of Bering Sea at mouth of Yukon, and from Bristol Bay north to tree limit; vertical range, from near sea level on lower Yukon up to about 2,000 feet on adjacent mountains; zonal range, mainly Hudsonian.

Lepus americanus pallidus Cowan*
Type Locality.—Chezacut Lake, Chilcotin River, British Columbia, Canada. Range.—Central British Columbia from Indianpoint region north to Hazelton, and from Coast Range east to Rocky Mountains (Mount Robson); northeastern extent of range unknown (Dalquest Journ. Mamm., vol. 23, No. 2, p. 182, May 14, 1942).

Lepus americanus cascadensis Nelson*
Type Locality.—Rob's ranch, near Hope, British Columbia, Canada. Range.—Cascade Mountains of Washington and British Columbia, from Mount Adams, Washington, on the south, to Jervis Inlet, British Columbia, on the north; bordered on west, south of Fraser River, by range of wakeningi, on north by range of pallidus, and on east by range of columbiensis and eastern Washington desert (Dalquest, Journ. Mamm., vol. 23, No. 2, p. 176, May 14, 1942).

Lepus americanus columbiensis Rhoads*

Lepus americanus wakeningi Baird†*
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*Lepus americanus oregonus* Orr*  


*Type Locality.*—Twelve miles south of Canyon City, Grant County, Oreg. Altitude, 5,500 feet. *Range.*—Eastern Oregon, from Wallowa County southward to Harney County; bounded on north by range of *pineus*, on east by Snake River and range of *bairdii*, and on west and south by desert regions (Dalquest, Journ. Mamm., vol. 23, No. 2, pp. 179, 180, May 14, 1942).

*Lepus americanus klamathensis* Merriam†*  


*Type Locality.*—Head of Wood River, near Fort Klamath, Klamath County, Oreg. *Range.*—Cascade Mountains from Mount Hood, Oreg. (V. Bailey, loc. cit.), south to higher mountains of extreme northern California; from Trinity County north and also east, to and including Warner Mountains of Modoc County, Calif. (Orr. Occ. Pap. California Acad. Sci., No. 19, p. 50, May 25, 1940); in Oregon bounded on west by range of *washingtonii* and on east by Upper Sonoran Zone desert; vertical range, from 3,000 to 5,000 feet; zonal range, Canadian, occasionally high Transition and low Hudsonian.

*Lepus americanus tahoensis* Orr*  


*Type Locality.*—One-half mile south of Tahoe Tavern, Placer County, Calif. *Range.*—Along Sierra Nevada of California from region of Mount Lassen, south, at least to Niagara Creek, Tuolumne County; vertical range, from 4,800 to 7,000 feet; zonal range, mainly Canadian (Orr, Occ. Pap. California Acad. Sci., No. 19, p. 53, May 25, 1940).
Lepus americanus pineus Dalquest*

_Type Locality._—Cedar Mountain (Moscow Mountain), Latah County, Idaho. Range.—Panhandle of northern Idaho, and through extreme Washington from Blue Mountains in southeastern Washington north to near Washington–British Columbia international boundary in Pend-d'Oreille, Stevens, and Ferry Counti- es and west to Kettle River Mountains; intergradation between pineus and colombiensis in Kettle River Mountains of Washington and Kootenay Valley of British Columbia; intergradation between pineus and bairdii to the east of Panhandle of Idaho (Dalquest, loc. cit.).

Lepus americanus bairdii Hayden†*

_Type Locality._—Near Fremont Peak, Wind River Mountains, Fremont County, Wyo. Range.—Higher parts of Rocky Mountains from San Juan and Jemez Ranges of New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 45, Mar. 1, 1932) northward through Colorado, western Wyoming, central Utah, mountainous portions of Idaho north and east of Snake River plains (Davis, The Recent mammals of Idaho, p. 355, Apr. 5, 1939) and western Montana to extreme southwestern Alberta (Waterton Lakes National Park) and to Elko and Newgate near international boundary east of Kootenay River in extreme southeastern British Columbia (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 100, Jan. 24, 1947); vertical range, from about 8,000 to 11,000 feet (timber line) in northern New Mexico and Colorado; zonal range, Canadian and Hudsonian.

Lepus americanus seclusus Baker and Hankins*

_Type Locality._—Twelve miles east and two miles north of Shell, Bighorn Mountains, Bighorn County, Wyo. Altitude, 7,900 feet. Range.—Bighorn Mountains of north-central Wyoming.

Lepus europaeus europaeus Pallas* (European hare)

_Type Locality._—Burgundy, France. Range.—Introduced in Ontario, Can- ada (Anderson, Canadian Field-Nat., vol. 37, No. 4, pp. 75–76, Apr. 21, 1923); well established and slowly spreading in southern Ontario north of Lake Erie (St. Thomas and Woodstock), west and north of Lake Ontario (Toronto) to Goderich on east side of Lake Huron (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 100, Jan. 24, 1947); and Upper and Lower Peninsulas of Michigan (Burt, Mammals of Michigan, p. 247, 1946).
Lepus europaeus hybridus Desmarest*  
1822. Lepus hybridus Desmarest, [in Encyclopédie méthodique . . .] Mammalogie, . . ., pt. 1, p. 349. (Name based on "Russac" of Pallas, Novae species quadrupedum e glirum ordine, . . ., p. 5, 1778.)  

Subgenus MACROTOLAGUS Mearns (black-tailed jackrabbits)  

Lepus alleni alleni Mearns*  

Lepus alleni palitans Bangs*  
Lepus allenii tiburonensis Townsend†*


*Lepus gaillardi gaillardi* Mearns†*

*Type Locality.*—West Fork of the Playas Valley, near monument No. 63, Mexican boundary line, Hidalgo County, N. Mex. *Range.*—Playas and Animas River Valleys in extreme southwestern New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 53, Mar. 1, 1932) southward, along eastern base of Sierra Madre, through adjacent parts of northern Chihuahua; vertical range, from about 4,500 feet to 7,000 feet in northwestern Chihuahua; zonal range, mainly Upper Sonoran extending into lower part of Transition (Nelson, North Amer. Fauna No. 29, p. 120, Aug. 31, 1909).

*Lepus gaillardi battyi* J. A. Allen


*Lepus callotis* Wagler*

*Type Locality.*—Southern end of Mexican tableland. *Range.*—Open plains of southern half of Mexican tableland from central Durango, northern Zacatecas, and central San Luis Potosí south through Aguascalientes, most of Jalisco,
northern Michoacán, Guanajuato, Querétaro, State of México, Distrito Federal Hidalgo, Puebla, Morelos, northwestern half of Oaxaca, and northern half of Guerrero; vertical range, from about 2,500 feet in Morelos to 3,500 feet in northern Puebla; zonal range, Upper and Lower Sonoran and into upper border of Arid Tropical (Nelson, North Amer. Fauna No. 29, p. 122, Aug. 31, 1909).

Lepus flavicularis Wagner*


Type Locality.—México (probably near the city of Tehuantepec, Oaxaca).

Range.—Coastal plains and bordering foothills on southern end of Isthmus of Tehuantepec, in southern Oaxaca, and thence along Pacific coast to beyond Tonalá, Chiapas; vertical range, from sea level up to about 2,000 feet in southern Oaxaca; zonal range, Arid Tropical (Nelson, loc. cit.).

Lepus californicus californicus Gray*


Type Locality.—"St. Antoine," Calif. (probably on coastal slope west of Mission of San Antonio, Jolon, Monterey County). Range.—Almost whole of northern California west of main Cascade and Sierran Divides, from Oregon line south along seacoast to about Point Conception, Santa Barbara County, and along west flank of Sierra Nevada to northern Tulare County; includes whole of Sacramento Valley and south into northern end of San Joaquin Valley as far as Merced and Madera Counties; recorded east at north to Shasta Valley, Siskiyou County, Cassel, Shasta County, and Mineral, Tehama County; vertical range, from sea level (Grizzly Island, Solano County) up at least to 5,700 feet (South Fork Mountain, Humboldt County); zonal range, mainly Upper Sonoran, but invades Transition and also Canadian in northwestern California, and occupies Lower Sonoran in Sacramento Valley (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 200, Sept. 26, 1933); and northward through open country of Rogue, Umpqua, and Willamette Valleys to vicinity of Salem, Oreg. (V. Bailey, North Amer. Fauna No. 55 (June), p. 99, Aug. 29, 1936).

Lepus californicus richardsonii Bachman*


**Type Locality.**—California (exact locality unknown, but probably on interior slope of mountains near Jolon, Monterey County). **Range.**—Southern (upper) portion of San Joaquin Valley and surrounding foothills, west to include Carrizo Plain, Cuyama Valley, and upper (southern) two-thirds of Salinas Valley; recorded northwest to Huron, Fresno County, and to Soledad, Monterey County, south to Tchachapi and Tejon Passes, Kern County, and west as far as near Chalk Peak, southern Monterey County, Calif.; vertical range, from below 200 feet (along San Joaquin River, Fresno County) up to 6,500 feet (on slopes of Mount Pinos, Ventura County near Kern County line); zonal range, mainly Lower Sonoran, locally Upper Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 200, Sept. 26, 1933).

*Lepus californicus bennettii* Gray*


**Type Locality.**—San Diego, San Diego County, Calif. **Range.**—Southern California west of summit of Coast Range from near Gaviota Pass, Santa Barbara County, to Mexican border and south along coast to San Quintín, Baja California; vertical range, from sea level at San Diego up to about 6,000 feet on Cuyamaca mountains; zonal range, mainly Upper Sonoran (Nelson, loc. cit.).

*Lepus californicus deserticola* Mearns*


**Type Locality.**—Western edge of Colorado Desert, at east base of Coast Range [near Mexican boundary], Imperial County, Calif. **Range.**—Arid desert areas of northeastern Baja California, east of Sierra San Pedro Mártir and Laguna Hanson Mountains, south to Calamajue Bay, and extreme northwestern Sonora in México; and thence north east of Coast Range through Colorado and Mohave Deserts at least to Fairmont, Los Angeles County, and to Bodfish, Kern County (see Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 201, Sept. 26, 1933), and along east side of Sierra Nevada to Alpine County, Calif., through most of Nevada, except northwestern part north of Pyramid Lake, most of Utah and southern Idaho, to Pahsimeroi Valley, and east to Phoenix and San Francisco Mountains in Arizona; vertical range, from below sea level in Colorado Desert to 7,500 feet in border of pine forest on Mogollon plateau of northern Arizona, and to 9,000 feet in San Bernardino Mountains, Calif.; zonal range, mainly Upper and Lower Sonoran (Nelson, loc. cit.).
Lepus californicus martirensis Stowell*


Type Locality.—Sierra San Pedro Mártir, Baja California, México. Range.—Middle Baja California, from San Rafael Valley, and southern part of Laguna Hanson Mountains, south through Sierra San Pedro Mártir to La Purísima in the interior, and along both coasts of peninsula from San Simon River to Scammon Lagoon on Pacific side, and from Calamajue Bay to Muleje on Gulf coast; vertical range, from sea level at San Quintín to 7,000 feet in Sierra San Pedro Mártir; zonal range, from Lower Sonoran up through Upper Sonoran and into Transition (Nelson, loc. cit.).

Lepus californicus xanti Thomas*


Type Locality.—Santa Anita, Baja California, México. Range.—Southern part of Peninsula of Baja California from Loreto on Gulf coast, Scammon Lagoon on Pacific Coast, and Comondú in interior, south to Cape San Lucas; vertical range, from sea level up to about 4,000 feet in Cape region; zonal range, mainly Lower Sonoran and upper part of Arid Tropical (Nelson, North Amer. Fauna No. 29, p. 155, Aug. 31, 1909).

Lepus californicus magdalenae Nelson†*


Type Locality.—Magdalena Island, Baja California, México. Range.—Magdalena and Margarita Islands, near southern end of Baja California; vertical range, from sea level to about 1,000 feet altitude; zonal range, Lower Sonoran (Nelson, North Amer. Fauna No. 29, p. 154, Aug. 31, 1909).

Lepus californicus sheldoni Burt


Type Locality.—Carmen Island, lat. 26° N., long. 111° 12' W., Gulf of California, Baja California, México. Range.—Carmen Island.

Lepus californicus wallawalla Merriam†*


Type Locality.—Touchet, Plains of the Columbia, Walla Walla County, Wash. Range.—Northeastern California, northwestern Nevada, and north through eastern Oregon into Yakima Valley area and Columbian Plateau (Moses Coulee) of southeastern Washington; vertical range, from about 1,000 feet in eastern Washington to 6,000 feet in northeastern California; zonal range, mainly Upper Sonoran extending into lower part of Transition (Nelson, loc. cit.).
Lepus californicus eremicus J. A. Allen*


*Lepus californicus texianus* Waterhouse*


*Type Locality.*—Unknown, but probably in western Texas. *Range.*—Northern Durango, México, north through Chihuahua, arid western Texas (except northern Panhandle), New Mexico west of and including lower part of Pecos River Valley (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 48, Mar. 1, 1932), northeastern Arizona (valley of Little Colorado River), southeastern Utah (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 6, p. 30, Aug. 10, 1952), and southwestern Colorado; vertical range, from about 1,500 feet above Del Río, Tex., to 7,500 feet on mountains of New Mexico; zonal range, mainly Upper Sonoran, but extending down into Lower Sonoran and up in summer into lower border of Transition (Nelson, loc. cit.).

*Lepus californicus melanotis* Mearns*


*Type Locality.*—Independence, Montgomery County, Kan. *Range.*—Great Plains from east central and northern Texas, northern part of Pecos River Valley and northeastern New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 52, Mar. 1, 1932) northward through Oklahoma, extreme southwestern Missouri, all of Kansas and Nebraska, except perhaps extreme eastern
parts, southwestern South Dakota, southeastern Wyoming, and all of Colorado east of Rocky Mountains; vertical range, from less than 1,000 feet near Independence, Kansas, to over 6,000 feet on east base of mountains in Colorado; zonal range, mainly Upper Sonoran (Nelson, loc. cit.).

**Lepus californicus merriami** Mearns†*


_Type Locality._—Fort Clark, Kinney County, Tex. _Range._—All of southern Texas from coast prairies near Trinity River west to a little above Del Rio on Río Grande, near to Mason and Antioch, and south across Río Grande through northern parts of Tamaulipas, Nuevo León, and Coahuila, México; vertical range, from sea level in southern Texas up to about 5,000 feet in mountains of Coahuila; zonal range, mainly Lower Sonoran and into lower border of Upper Sonoran in Coahuila (Nelson, loc. cit.).

**Lepus californicus curti** Hall*


_Type Locality._—Island, 38 miles south and 10 miles west of Matamoros, Tamaulipas, México. _Range._—Islands along coast of Tamaulipas, México.

**Lepus californicus altamirae** Nelson†*


_Type Locality._—Altamira, Tamaulipas, México. _Range._—Coastal plains of southern Tamaulipas, extreme northern Veracruz, and eastern border of San Luis Potosí, México; vertical range, from sea level to at least 500 feet in Tamaulipas; zonal range, Arid Tropical (Nelson, loc. cit.).

**Lepus californicus asellus** Miller†*


_Type Locality._—San Luis Potosí, State of San Luis Potosí, México. _Range._—Central eastern part of Mexican tableland from southern Coahuila, Nuevo León, and extreme western Tamaulipas southwest through San Luis Potosí,
Zacatecas, and Aguascalientes to northeastern Jalisco; vertical range, from about 3,500 to 7,500 feet altitude in San Luis Potosí; zonal range, Upper and Lower Sonoran.

**Lepus californicus festinus** Nelson*†*


*Type Locality.*—Irolo, Hidalgo, México. *Range.*—Southeastern part of Mexican tableland in States of Tlaxcala, northern Puebla, Hidalgo, northern part of State of México, Querétaro, Guanajuato, and probably northeastern Jalisco; vertical range, from about 6,000 feet to 8,500 feet in Hidalgo; zonal range, mainly Upper Sonoran, extending into upper border of Lower Sonoran (Nelson, loc. cit.).

**Lepus insularis** Bryant*


*Type Locality.*—Espíritu Santo Island, Gulf of California, Baja California, México. *Range.*—Espíritu Santo Island; vertical range, from sea level up to about 1,000 feet; zonal range, Lower Sonoran and upper border of Arid Tropical (Nelson, North Amer. Fauna No. 29, p. 156, Aug. 31, 1909).

**Genus SYLVILAGUS**


**Subgenus SYLVILAGUS** Gray (cottontails)


**Sylvilagus floridanus floridanus** (J. A. Allen) *


*Type Locality.*—Sebastian River, Brevard County, Fla. *Range.*—All of peninsular Florida (including coastal islands) south of Sebastian River and thence northward to San Mateo, Putnam County, on east side, and to an unknown distance on west side; vertical range, from sea level up to about 100 feet; zonal range, mainly Lower Austral (Nelson, North Amer. Fauna No. 29, p. 164, Aug. 31, 1909).

*Sylvilagus floridanus mallurus* (Thomas) *


*Type Locality.*—Raleigh, Wake County, N. C. *Range.*—Mainly east of Allegheny Mountains from Long Island and lower Hudson Valley in extreme southeastern New York south through New Jersey, Delaware, eastern Pennsylvania, eastern West Virginia, Maryland, Virginia, North and South Carolina, Georgia (except northwestern part), and west along Gulf Coast to near Mobile Bay, and northward through Alabama into Tennessee (Kellogg, Proc. U. S. Nat. Mus., vol. 36, p. 289, Feb. 14, 1939) : also northwestern and north-central Florida south to about Lake Julian, Polk County; vertical range, from near sea level in North Carolina to about 6,000 feet on Roan Mountain; zonal range, from Lower Austral up through Transition, mainly Upper Austral (Nelson, North Amer. Fauna No. 29, p. 166, Aug. 31, 1909). Recorded also from Litchfield County, Conn. (Goodwin, Journ. Mamm., vol. 13, No. 1, p. 38, Feb. 9, 1932).

*Sylvilagus floridanus hitchensi* Mearns† *


*Sylvilagus floridanus ammophilus* A. H. Howell† *


*Type Locality.*—Oak Lodge, East peninsula, opposite Micco, Brevard County, Fla. *Range.*—Known from type locality only.

*Sylvilagus floridanus mearnsii* (J. A. Allen) *


*Type Locality.*—Fort Snelling, Hennepin County, Minn. *Range.*—From north side of St. Lawrence River and Lake Ontario (Montreal, Ottawa, Kingston, and Toronto) in southern Ontario, Canada (Anderson, Nat. Mus. Canada,
Bull. 102 (1946), p. 103, Jan. 24, 1947) southward west of Allegheny Mountains in central New York, central Pennsylvania, western West Virginia, and eastern Kentucky; west through Lower Peninsula and southwestern part of Upper Peninsula of Michigan (Burt, Mammals of Michigan, p. 250, 1946) and Wisconsin to western Minnesota; and south through Iowa to Kansas (Neosho Falls and Marion County), northern Missouri, Illinois, Indiana, and Ohio; vertical range, from about 500 feet in western New York to about 2,000 feet in mountains of western Pennsylvania; zonal range, mainly Upper Austral, but extending into lower part of Transition (Nelson, North. Amer. Fauna No. 29, p. 169, Aug. 31, 1909).

Sylvilagus floridanus similis Nelson†*


Sylvilagus floridanus alacer (Bangs) *


Sylvilagus floridanus llanensis Blair*


*Type Locality.*—Old “F” Ranch headquarters, Quitaque, Briscoe County, Tex. Range.—Southwestern fourth of Kansas (Hibbard, Trans. Kansas Acad. Sci.,
Sylvilagus floridanus chapmani (J. A. Allen) *


_Type Locality._—Corpus Christi, Nueces County, Tex. _Range._—Arid parts of middle and southern Texas from east of Corpus Christi to mouth of Pecos River and from near Abilene south across Rio Grande into northeastern México to central Tamaulipas, most of Nuevo León, and northeastern Coahuila; vertical range, from sea level near Corpus Christi up to about 1,000 feet altitude near Fort Clark, Tex.; zonal range, mainly Lower Sonoran (Nelson, North Amer. Fauna No. 29, p. 176, Aug. 31, 1909).

Sylvilagus floridanus robustus (V. Bailey) †*


_Type Locality._—At altitude of 6,000 feet in Davis Mountains, Jeff Davis County, Tex. _Range._—Davis, Chinati, and Chisos Mountains in southwestern Texas; vertical range, mainly above 6,000 feet in Davis Mountains; zonal range, mainly Transition (Nelson, loc. cit.).

Sylvilagus floridanus cognatus Nelson;* *


_Type Locality._—Tajique, near summit of Manzano Mountains, Torrance County, N. Mex. Altitude, about 10,000 feet. _Range._—Known from four isolated mountain ranges (Manzano, Capitan, Datil, and Gallinas Mountains) in central New Mexico; vertical range, from 7,300 feet on Mesa de la Yegua to 10,000 feet near summit of Manzano Mountains (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 62, Mar. 1, 1932).

Sylvilagus floridanus holzneri (Mearns) ‡*


*Sylvilagus floridanus subcinctus* (Miller) †


**Type Locality.**—Hacienda El Molino, near Negrete, Michoacán, México. **Range.**—Mainly arid plains of southwestern part of Mexican tableland and from western Guanajuato to northern Michoacán and southeastern Jalisco; vertical range, from about 3,500 to 6,000 feet in Jalisco; zonal range, mainly Upper and Lower Sonoran, but extends down into upper border of Arid Tropical (Nelson, North Amer. Fauna No. 29, p. 180, Aug. 31, 1909).

*Sylvilagus floridanus restrictus* Nelson†


**Type Locality.**—Zapotlán, Jalisco, México. **Range.**—Mainly oak and pine forested slopes of Sierra Madre in Michoacán, southern and western Jalisco, and southeastern Nayarit, México; vertical range, from about 4,000 to 9,500 feet in Michoacán; zonal range, mainly Upper Sonoran and Transition, but ranging down on south slope of Sierra Madre through Lower Sonoran to border of Arid Tropical (Nelson, North Amer. Fauna No. 29, p. 181, Aug. 31, 1909).

*Sylvilagus floridanus orizabae* (Merriam) †


**Type Locality.**—Volcán de Orizaba, Puebla, México. Altitude, about 9,500 feet. **Range.**—Most of high mountains and bordering plains on southeastern part of Mexican tableland, from Volcán de Orizaba and Cofre de Perote on western border of central Veracruz through northern half of Puebla, all of Tlaxcala, most of State of México, Distrito Federal, Hidalgo, Guanajuato, San Luis Pot-
osí, and southern Coahuila; vertical range, from about 7,000 to over 14,000 feet in eastern Puebla; zonal range, from Upper Sonoran through Transition to Arctic-Alpine division of Boreal, but mainly Transition (Nelson, loc. cit.).

**Sylvilagus floridanus connectens** (Nelson) †*


*Type Locality.*—Chichicastle, central Veracruz, México. *Range.*—Coastal plain and eastern slope of adjacent mountains of eastern México from Altamira, in southern Tamaulipas, through eastern San Luis Potosí to Pinal de Amoles, in northeastern Querétaro, south to Río Papaloápar in Veracruz, and through eastern Puebla to Mount Zempoaltepec in eastern Oaxaca; vertical range, from sea level near Veracruz up to about 9,000 feet on Mount Zempoaltepec; zonal range, mainly Arid and Humid Tropical, extending up through Upper Sonoran (Nelson, North Amer. Fauna No. 29, p. 185, Aug. 31, 1909).

**Sylvilagus floridanus russatus** (J. A. Allen) *


*Type Locality.*—Pasa Nueva, southern Veracruz, México. *Range.*—Coast lowlands of southern Veracruz and thence east into adjacent part of Tabasco and south to lower slopes of the Cordillera; vertical range, from sea level to about 3,000 feet in southern Veracruz; zonal range, Humid and semihumid Tropical (Nelson, loc. cit.).

**Sylvilagus floridanus azteicus** (J. A. Allen) *


*Type Locality.*—Tehuantepec, Oaxaca, México. *Range.*—Coastal plain and adjacent foothills of southern Oaxaca and extreme western Chiapas nearly or quite to border of Guatemala; vertical range, from sea level to about 2,000 feet in southern Oaxaca; zonal range, Arid and semihumid Tropical (Nelson, North Amer. Fauna No. 29, p. 187, Aug. 31, 1909).

**Sylvilagus floridanus chiapensis** (Nelson) †*


*Type Locality.*—San Cristóbal, Chiapas, México. *Range.*—Interior of Chiapas, mainly in highlands, and adjacent highlands of Guatemala; vertical range, from about 2,000 to over 10,000 feet in Chiapas and Guatemala; zonal range, mainly Upper Sonoran and Transition, but ranging down to upper border of Tropical (Nelson, North Amer. Fauna No. 29, p. 189, Aug. 31, 1909).
Sylvilagus floridanus yucatanicus (Miller)†*


Sylvilagus floridanus hondurensis Goldman‡*


Sylvilagus floridanus costaricensis Harris


Sylvilagus transitionalis (Bangs) *


Sylvilagus nuttallii nuttallii (Bachman) *


Sylvilagus nuttallii pinetis (J. A. Allen) *


Sylvilagus nuttallii grangeri (J. A. Allen) *


Type Locality.—Hill City, Black Hills, Pennington County, S. Dak. Range.—Southern Alberta from Cardston east to western escarpment of Cypress Hills, and north at least to Red Deer Valley (Steveville), and in southeastern Saskatchewan from Cypress Hills eastward to Eastend, Frenchman River, Val Marie, Lonesome Butte, south of Wood Mountain, the easternmost record being Waniska Coulee at Big Muddy Lake (Anderson, Nat. Mus. Canada, Bull. 102 (1946), p. 105, Jan. 24, 1947); extreme western North Dakota (V. Bailey, North Amer. Fauna, No. 49 (1926), p. 137, Jan. 8, 1927); western South Dakota; most of Montana east of Continental Divide; Wyoming except northwestern part; extreme northwestern Colorado; southern half of Idaho (Davis, The Recent mammals of Idaho, p. 361, Apr. 5, 1939); most of Utah; northern two-thirds of Nevada except northwestern corner (Hall, Mammals of Nevada, p. 612, July 1, 1946); and mountainous and plateau areas of California, east of crest of Sierra Nevada, from Alpine County.
Sylvilagus audubonii audubonii (Baird) *

Type Locality.—San Francisco, San Francisco County, Calif. Range.—From Tehama County at northern end of Sacramento Valley, south to northeastern Merced County in northern San Joaquin Valley, also including lower Salinas Valley in northern Monterey County; mainly inland in distribution, reaching coast only in vicinity of San Francisco Bay and Monterey Bay; zonal range, Lower and Upper Sonoran; vertical range, from sea level to approximately 1,500 feet (Orr, Occ. Pap. California Acad. Sci. No. 19, pp. 98–99, May 25, 1940).

Sylvilagus audubonii vallicola Nelson†

Type Locality.—San Emigdio ranch (25 miles southwest of Bakersfield), Kern County, Calif. Range.—From central Monterey County south through upper Salinas Valley to Cuyama Valley; inland, inhabiting southern half of San Joaquin Valley from southwestern Merced County to Tehachapi and San Emigdio Ranges; zonal range, mostly Lower Sonoran, extending locally into Upper Sonoran; vertical range, from near sea level up to approximately 4,000 feet (Orr, Occ. Pap. California Acad. Sci. No. 19, p. 116, May 25, 1940).

Sylvilagus audubonii sanctidiegi (Miller) †

Type Locality.—Mexican boundary monument No. 258, shore of Pacific Ocean, San Diego County, Calif. Range.—Coastal southern California, west of crests of coast ranges, from Ventura County south to Baja California (Orr, Occ. Pap. California Acad. Sci. No. 19, p. 119, May 25, 1940); and Baja California from coast to western base of Laguna Hanson and San Pedro Mártir mountains and from northern boundary south to El Rosario River; vertical range, from sea level at San Diego up to over 4,000 feet on mountains to the east; zonal range, mainly Upper Sonoran (Nelson, loc. cit.).

Sylvilagus audubonii confinis (J. A. Allen) *

Type Locality.—Playa María, Baja California, México. Range.—Baja California from Rosario River on west coast and Santa Rosalía on east side south to
Cape San Lucas; vertical range, from sea level on west coast up to about 3,500 feet in interior of peninsula; zonal range, mainly Lower Sonoran, reaching upper border of Arid Tropical (Nelson, loc. cit.).

**Sylvilagus audubonii arizonae** (J. A. Allen) †*


**Sylvilagus audubonii goldmani** (Nelson) †*


*Type Locality.*—Culiacán, Sinaloa, México. *Range.*—Coastal plain and adjacent foothills from Guaymas, southern Sonora (Burt, Univ. Michigan Mus. Zool. Misc. Publ. 39, p. 70, Feb. 15, 1938), south to Culiacán in central Sinaloa, and Chacala in extreme western Durango, México; vertical range, from near sea level on west coast of Sinaloa up to about 2,500 feet; zonal range, Lower Sonoran and upper part of Arid Tropical (Nelson, loc. cit.).

**Sylvilagus audubonii minor** (Mearns) †*


*Sylvilagus audubonii cedrophilus* Nelson†*


*Sylvilagus audubonii warreni* Nelson†*


*Type Locality.*—Coventry, Montrose County, Colo. *Range.*—Southwestern Colorado (Warren, The mammals of Colorado, p. 273, 1942), southeastern Utah, northwestern New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 59, Mar. 1, 1932), and northeastern Arizona (west to Holbrook and Winslow in valley of Little Colorado River); vertical range, from about 5,000 to 8,500 feet in northwestern New Mexico; zonal range, mainly Upper Sonoran, extending into Transition and Lower Sonoran (Nelson, North Amer. Fauna No. 29, p. 231, Aug. 31, 1909).

*Sylvilagus audubonii baileyi* (Merriam)†*


*Type Locality.*—Spring Creek, east side of Bighorn Basin, Bighorn County, Wyo. *Range.*—Plains and valleys of eastern Montana, most of Wyoming, northeastern Utah, northwestern and eastern Colorado (east of foothills), extreme western North Dakota (along Little Missouri River; V. Bailey, North Amer. Fauna No. 49 (1926), p. 137, Jan. 8, 1927), western South Dakota, western Nebraska, and northwestern Kansas; vertical range from about 3,000 feet in Kansas to 7,000 feet in Colorado; zonal range, mainly arid Upper Sonoran, but ranging into lower part of Transition (Nelson, loc. cit.).
Sylvilagus audubonii neomexicanus Nelson†*


*Type Locality.—*Fort Sumner, De Baca County, N. Mex. *Range.*—From Pecos County (Fort Stockton), northern Brewster County (28 miles south of Alpine; Borell and Bryant, Univ. California Publ. Zool., vol. 48, No. 1, p. 39, Aug. 7, 1942), and Jeff Davis and Culberson Counties in southwestern Texas northward through Pecos River Valley to about Fort Sumner, New Mexico, and eastward to Abilene and Wichita Falls, Tex.; north through eastern New Mexico, western Texas, and western Oklahoma (Blair, Amer. Midl. Nat., vol. 22, No. 1, p. 129, July 1939) to southwestern Kansas (eastward to Clark County; Hibbard, Trans. Kansas Acad. Sci., vol. 47, p. 86, September 1944); vertical range, from about 2,500 feet in western Texas to 5,000 feet in eastern New Mexico; zonal range, Lower Sonoran and lower part of Upper Sonoran (Nelson, North Amer. Fauna No. 29, p. 234, Aug. 31, 1909).

Sylvilagus audubonii parvulus (J. A. Allen) *


*Type Locality.—*Apam, Hidalgo, México. *Range.*—Eastern and southeastern part of Mexican tableland from Puebla north to Río Grande Valley of Texas (from Río Grande City to mouth of Pecos River) and northward in Texas at least to San Diego (Duval County) and Cotulla (LaSalle County); vertical range, from below 500 feet on Río Grande to over 8,000 feet on southern end of tableland in México; zonal range, Upper and Lower Sonoran (Nelson, loc. cit.).

Sylvilagus cunicularius cunicularius (Waterhouse) *


*Type Locality.—*Zacualpan (probably in State of México), México. *Range.*—Mountains about extreme southern end of Mexican tableland and bordering slopes and valleys on both sides from Cofre de Perote and Mount Orizaba in central-western Veracruz and Mount Zempoaltepec, eastern Oaxaca, west through southern Hildalgo, Puebla, Tlaxcala, México, northern Michoacán, Morelos, northern Guerrero, and northern Oaxaca; vertical range, from about 2,000 feet in Guerrero up to over 11,000 feet on Mount Orizaba and on mountains about Valley of México; zonal range, from upper part of Arid Tropical up through Sonoran and Transition into Canadian (Nelson, loc. cit.).
Sylvilagus cunicularius pacificus (Nelson)†*  

Sylvilagus cunicularius insolitus (J. A. Allen)†*  
*Type Locality.*—Plains of Colima, Jalisco, México. *Range.*—Coastal plains of western México from Michoacán north through Colima and Nayarit to Mazatlán, Sinaloa; vertical range, from sea level in Colima to about 3,500 feet on west base of Volcán de Colima; zonal range, Arid Tropical (Nelson, loc. cit.).

Sylvilagus graysoni (J. A. Allen)†*  

Sylvilagus idahoensis (Merriam)†*  
*Type Locality.*—Pahsimeroi Valley, near Goldburg, Custer County, Idaho (see Davis, The Recent mammals of Idaho, p. 363, Apr. 5, 1939).* Range.*—From Bannack, Beaverhead County, southwestern Montana (Davis, Murrelet, vol. 18, Nos. 1–2, p. 27, Sept. 4, 1937), south through eastern and southern Idaho to southwestern Utah (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 6, p. 51,

**Sylvilagus bachmani bachmani** (Waterhouse) *


*Type Locality.*—California, probably between Monterey and Santa Barbara; later, fixed as near San Luis Obispo (Nelson, North Amer. Fauna No. 29, p. 247, Aug. 31, 1909). *Range.*—From vicinity of Monterey, Monterey County, south along coast to northern Santa Barbara County; zonal range, Upper Sonoran and Transition; vertical range, from sea level to probably over 3,000 feet in Santa Lucia Mountains (Orr, Occ. Pap. California Acad. Sci. No. 19, p. 146, May 25, 1940).

**Sylvilagus bachmani ubericolor** (Miller) †*


*Type Locality.*—Beaverton, Washington County, Oreg. *Range.*—From near Columbia River (Beaverton) south through humid coast belt of Oregon (V. Bailey, North Amer. Fauna No. 55 (June), p. 109, Aug. 29, 1936) and northwestern California to Marin County (Orr, Occ. Pap. California Acad. Sci. No. 19, p. 151, May 25, 1940); vertical range, from sea level to at least 1,800 feet; zonal range, mainly humid Transition.

**Sylvilagus bachmani tehamae** Orr


*Type Locality.*—Dale's on Paine Creek, Tehama County, Calif. *Range.*—From northern Shasta and Trinity Counties (possibly Siskiyou County), south along inner northern coast ranges to Lake and Yolo Counties, and south along western slopes of Sierra Nevada to Placer County; south in Sacramento Valley at least to Butte County; vertical range, from 100 to 5,500 feet; zonal range, mostly Upper Sonoran and Transition (Orr, Occ. Pap. California Acad. Sci. No. 19, p. 153, May 25, 1940).
Sylvilagus bachmani mariposae Grinnell and Storer


*Type Locality.*—McCauley Trail, near El Portal, Mariposa County, Calif. Altitude, 4,000 feet. *Range.*—Along western slopes of Sierra Nevada from Eldorado County south to Piute Mountains in Kern County; vertical range, from 600 to 6,700 feet; zonal range, Upper Sonoran and low Transition (Orr, Occ. Pap. California Acad. Sci. No. 19, p. 157, May 25, 1940).

*Sylvilagus bachmani riparius* Orr


*Type Locality.*—West side of San Joaquin River, two miles northeast of Ver- nalis, Stanislaus County, Calif. *Range.*—Known by specimens and observation only from west side of San Joaquin River in extreme southern San Joaquin and northern Stanislaus Counties; it seems probable that this form inhabits river bottom area, at least on western side of San Joaquin River, north to delta region and likewise some distance to southward of where specimens have been obtained; zonal range, probably Lower and Upper Sonoran (Orr, Occ. Pap. California Acad. Sci. No. 19, p. 159, May 25, 1940).

*Sylvilagus bachmani macrorhinus* Orr


*Type Locality.*—Alpine Creek Ranch, 3 1/2 miles south of and 2 1/2 miles east of Portola, San Mateo County, Calif. Altitude, 1,700 feet. *Range.*—West-central California from San Francisco south along coast to and including Santa Cruz County; inland from southwestern Solano County south to Santa Clara County; vertical range, from sea level to nearly 4,000 feet; zonal range, Upper Sonoran and Transition (Orr, Occ. Pap. California Acad. Sci. No. 19, p. 161, May 25, 1940).

*Sylvilagus bachmani virgulti* Dice*


*Type Locality.*—Soledad, Monterey County, Calif. *Range.*—South in Salinas Valley from central Monterey County to San Luis Obispo County, occurring also on adjacent ranges to west and on Gabilan and Mount Diablo Ranges to east as far south as Tem pla Mountains; vertical range, as known from specimens collected, from 182 to 1,850 feet, although probably extending considerably higher in Mount Diablo Range according to statements made by residents; zonal range, mostly Upper Sonoran, but extending down to Lower Sonoran locally (Orr, Occ. Pap. California Acad. Sci. No. 19, p. 164, May 25, 1940).

*Sylvilagus bachmani cinerascens* (J. A. Allen) *


Type Locality.—San Fernando, Los Angeles County, Calif. Range.—From Ventura County, south along coast to Baja California, extending inland at northern limits to San Emigdio Range, Kern County (Orr, Occ. Pap. California Acad. Sci. No. 19, p. 166, May 25, 1940), and along coast of Baja California from northern border south to Ensenada and east to summit of Laguna Hanson Mountains; vertical range, from sea level up to 6,000 feet in northern Baja California; zonal range, through Upper Sonoran up into Transition (Nelson, North Amer. Fauna No. 29, p. 252, Aug. 31, 1909).

Sylvilagus bachmani rosaphagus Huey


Type Locality.—Two miles west of Santo Domingo Mission, lat. 30°45' N., long. 115°58' W., Baja California, México; or, precisely, near huge red cliff that marks entrance of Santo Domingo River Canyon from coastal plain. Range.—San Quintín south to El Rosario on west coast of Baja California.

Sylvilagus bachmani howelli Huey*


Type Locality.—Ten miles southeast of Alamo, lat. 31°35' N., long. 116°03' W., Baja California, México. Range.—So far as known, Sierra Juárez, and vicinity of Alamo, Baja California.

Sylvilagus bachmani exigus Nelson†*


Type Locality.—Yubay, central Baja California, México. Range.—From approximately lat. 31° N. in interior of Baja California southward to vicinity of Comondú (Nelson, North Amer. Fauna No. 29, p. 254, Aug. 31, 1909).

Sylvilagus bachmani peninsularis (J. A. Allen) *


Type Locality.—Santa Anita, Baja California, México. Range.—Southern part of Baja California on both coasts, and interior from about Comondú and Loreto south to Cape San Lucas; vertical range, from sea level up to about 2,000 feet in region near Comondú; zonal range, Lower Sonoran and border of Arid Tropical (Nelson, loc. cit.).

Sylvilagus bachmani cerrosensis (J. A. Allen)


Type Locality.—Cerros [=Cedros] Island, Baja California, México. Range.—Cerros Island; vertical range, from sea level up to an undetermined altitude on low mountains; zonal range, Upper Sonoran (Nelson, loc. cit.).
Sylvilagus mansuetus Nelson†*

_Type Localities._—San José Island, Gulf of California, Baja California, México. _Range._—San José Island; vertical range, from sea level up to an undetermined altitude on low mountains; zonal range, Lower Sonoran and upper border of Arid Tropical (Nelson, North Amer. Fauna No. 29, p. 256, Aug. 31, 1909).

*Sylvilagus insonus* (Nelson) †*

_Type Localities._—Omitlteme, Guerrero, México. _Range._—Heavily forested parts of Sierra Madre del Sur, Guerrero; vertical range, from about 7,000 to 10,000 feet; zonal range, Upper Sonoran and Transition (Nelson, North Amer. Fauna No. 29, p. 264, Aug. 31, 1909).

*Sylvilagus aquaticus aquaticus* (Bachman) * (swamp-rabbit)


*Sylvilagus aquaticus littoralis* Nelson†*

_Type Localities._—Houma, Terrebonne Parish, La. _Range._—A narrow belt of swamps and marshes along Gulf coast, nearly if not entirely within upper limits of tidewater, from west side of Mobile Bay, Alabama (A. H. Howell, North
Amer. Fauna No. 45, p. 73, Oct. 28, 1921), west through coastal Louisiana to Matagorda Bay, Tex.; vertical range, below 50 feet; zonal range, Lower Austral (Nelson, loc. cit.).

Subgenus TAPETI Gray


Sylvilagus brasiliensis truei (J. A. Allen) *


Type Locality.—Mirador, Veracruz, México. Range.—Heavily forested mountain slopes and adjacent coastal plain of eastern México from San Luis Potosí (Rancho Apetsco, near Xilitla; Dalquest, Occ. Pap. Mus. Zool. Louisiana State Univ. No. 23, p. 4, July 10, 1950), Veracruz, eastern Puebla, northeastern Oaxaca, Tabasco, Campeche, Yucatán, interior and Pacific coast of Chiapas; vertical range, from a little above sea level to about 5,000 feet in Veracruz; zonal range, Humid Tropical (Nelson, loc. cit.).

Sylvilagus brasiliensis gabbi (J. A. Allen) †*


Sylvilagus brasiliensis dicei Harris


Type Locality.—El Copey de Dota, 15 miles south of Cartago, Cordillera de Talamanca, Cartago, Costa Rica. Altitude 6,000 feet. Range.—Mountain re-

**Sylvilagus brasiliensis messorius** Goldman


**Type Locality.**—Cana (Santa Cruz de Cana), upper Río Tuyra, Darién, eastern Panamá. Altitude, 1,800 feet. **Range.**—Río Tuyra drainage basin, humid tropical region of eastern Panamá.

**Sylvilagus brasiliensis consobrinus** Anthony


**Type Locality.**—Old Panamá (near city of Panamá), Panamá. **Range.**—Known from type locality only.

**Sylvilagus brasiliensis incitatus** (Bangs)


**Type Locality.**—Isla del Rey (San Miguel Island), Archipiélago de las Perlas, Golfo de Panamá. **Range.**—Isla del Rey; vertical range, near sea level; zonal range, Humid Tropical (Nelson, loc. cit.).

**Subgenus PALUDILAGUS** Hershkovitz


**Sylvilagus palustris palustris** (Bachman) * (marsh-rabbit)


**Type Locality.**—Near coast of South Carolina. **Range.**—Lowlands along rivers and coast of southeastern United States from Dismal Swamp, Va., south to extreme northern Florida, and west through southern Georgia and Gulf coast of northwestern Florida to east side of Mobile Bay, Ala.; vertical range, from sea level to an undetermined altitude (probably less than 500 feet); zonal range, Lower Austral (Nelson, loc. cit.).

**Sylvilagus palustris paludicola** (Miller and Bangs) *


**Type Locality.**—Fort Island, near Crystal River, Citrus County, Fla. **Range.**—Peninsular Florida and adjacent coast islands, north along east coast at least to San Mateo, Putnam County, and on west side to Manatee Spring, Levy County, and to Gainesville, Alachua County (Blair, Journ. Mamm., vol. 17, No. 3, p. 197, Aug. 17, 1936); vertical range, from sea level up to about 100 feet; zonal range, extreme Lower Austral and upper border of Humid Tropical (Nelson, loc. cit.).

**Order RODENTIA**

**Suborder SCIUROMORPHA**

**Superfamily APLODONTOIDEA**

**Family APLODONTIIDAE**

**Genus APLODONTIA** Richardson (mountain-beavers)


*Aplodontia rufa rufa* (Rafinesque) *


Aplodontia rufa rainieri Merriam†*


*Type Locality.*—Paradise Creek, south side of Mount Rainier, Pierce County, Wash. Altitude, 5,200 feet. *Range.*—Cascade Mountains in southwestern British Columbia, from Skagit on western slope near international boundary north to Hope; only two records from drier eastern slope of Cascades—east side of summit of Hope—Princeton Trail at 5,600 feet, and Stirling Creek near Hedley in middle Similkameen Valley at 1,700 feet (Anderson, loc. cit.) ; southward through higher Cascade Mountains of Washington (Dalquest, loc. cit.) and Oregon to Siskiyou and Trinity Mountain regions of northwestern California, and thence southwest as far as Rio Dell, Eel River, Humboldt County (regarded as *rufa* by Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 194, Sept. 26, 1933).

*Aplodontia rufa pacifica* Merriam†*


*Type Locality.*—Newport, mouth of Yaquina Bay, Lincoln County, Oreg. *Range.*—Coast region of Oregon from Columbia River (Astoria) southward to near Smith River, Del Norte County, Calif. (Finley, Murrelet, vol. 22, No. 3 (December 1941), pp. 46, 48-49, Jan. 20, 1942).

*Aplodontia rufa humboldtiana* Taylor*


*Type Locality.*—Carlotta, Humboldt County, Calif. *Range.*—Extreme northern humid coast belt, from Requa, Del Norte County, south to vicinity of Carlotta Humboldt County, and interiorly to vicinity of Weitzpek [Weitchpec], Humboldt County; vertical range, below 1,000 feet; zonal range, Canadian and Transition (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 195, Sept. 26, 1933).

*Aplodontia rufa californica* (Peters) *


Type Locality.—Assumed to be the Sierra Nevada of California (Grinnell, Proc. California Acad. Sci., ser. 4, vol. 3, p. 344, Aug. 28, 1913); specimens from Blue Canyon, Placer County, in central Sierra Nevada may be regarded as typical (Taylor, Univ. California Publ. Zool., vol. 17, No. 16, p. 474, May 29, 1918; see also Hall, Murrelet, vol. 22, No. 3 (December 1941), p. 51, Jan. 20, 1942). Range.—Sierra Nevada, north to Mount Shasta and south as far as Clover Creek, Sequoia National Park, Tulare County; vertical range, from 4,600 feet (Blue Canyon, Placer County) up to 10,000 feet (in head of Lyell Canyon, Tuolumne County); zonal range, Canadian and Hudsonian (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 194, Sept. 26, 1933). Recorded also eastward to Washoe and Ormsby Counties, Nev. (Hall, Mammals of Nevada, p. 575, July 1, 1946).

Aplodontia rufa nigra Taylor


Type Locality.—Point Arena, Mendocino County, Calif. Range.—Known only from type locality, where it is found within an area of approximately 24 square miles.

Aplodontia rufa phaea Merriami†*


Type Locality.—Point Reyes [probably somewhere near present town of Inverness], Marin County, Calif. Range.—Humid coast belt of Marin County, from 5 miles west of Inverness east to Lagunitas and south to four miles south of Olema; area inhabited, approximately 110 square miles; vertical range below 1,000 feet; zonal range, Transition (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 195, Sept. 26, 1933).

Superfamily SCIUROIDEA

Family SCIURIDAE

Subfamily SCIURINAE

Genus MARMOTA Blumenbach (woodchucks)

1779. Marmota Blumenbach, Handbuch der Naturgeschichte, vol. 1, p. 79. (Type, Marmota alpina Blumenbach = Mus marmota Linnaeus.)


Subgenus MARMOTOPS *t Pocock


monax—group

Marmota monax monax (Linnaeus) *


Type Locality.—Maryland. Range.—Middle eastern United States from Pennsylvania, New Jersey (?), Ohio, Indiana, Illinois, Lower Peninsula of Michigan, and eastern Iowa, south to northern parts of South Carolina, Georgia, Alabama, and Arkansas.

Marmota monax rufescens A. H. Howell†*


Type Locality.—Elk River, Sherburne County, Minn. Range.—Eastern North Dakota, central and southern Minnesota, Wisconsin, and Upper Peninsula of Michigan, southern Ontario (north to Ottawa River, intergrading to some extent with canadensis on Quebec side of river near Ottawa (see Anderson, Nat. Mus. Canada Bull. 102 [1946], p. 106, Jan. 24, 1947), greater part of New York (including Long Island), higher parts of western Massachusetts, and all of Vermont (Osgood, Journ. Mamm., vol. 19, No. 4, p. 438, Nov. 14, 1933).

Marmota monax bunkeri Black


Marmota monax preblorum A. H. Howell†*


Type Locality.—Wilmington, Middlesex County, Mass. Range.—Southern New England, from Connecticut to New Hampshire and southern Maine.

Marmota monax ignava (Bangs) *


Marmota monax canadensis (Erxleben)*

1777. [Glis] canadensis Erxleben, Systema regni animalis . . ., p. 363. (Based primarily on the Quebec marmot of Pennant.)

1778. Mus canpeira Pallas, Novae species quadrupedum e glirum ordine, . . . , p. 75. (Based primarily on the Quebec marmot of Pennant.)


Marmota monax johnsoni Anderson


Type Locality.—Percé, Gaspé County, Quebec, Canada. Range.—Gaspé Peninsula from Percé at sea level up to about 1,500 feet in upper branches of Grand Cascapedia River.

Marmota monax petrensis A. H. Howell†*


Type Locality.—Revelstoke, British Columbia, Canada. Range.—Interior ranges of southern British Columbia and adjacent parts of United States, from Barkerville, British Columbia, south to Thompson Pass, Idaho.

Marmota monax ochracea Swarth*


Type Locality.—Forty-mile Creek, Alaska. Range.—West of continental divide in northern British Columbia (Liard River) and southern Yukon (Babine Mountains, Takla Lake, Atkin, and Teslin Lake) north to Forty-mile Creek in eastern Alaska (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 106, Jan. 24, 1947).
**flaviventris—group**

Marmota flaviventris flaviventris (Audubon and Bachman) *


Marmota flaviventris avara (Bangs) *


Marmota flaviventris sierrae A. H. Howell† *


*Type Locality.*—Head of Kern River, Mount Whitney, Tulare County, Calif. Altitude, 9,300 feet. *Range.*—Southern Sierra Nevada, north to include Yosemite section; recorded south as far as Cannell Meadow, Tulare County, and at north intergrades with flaviventris in region of Tuolumne and Alpine Counties (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 120, Sept. 26, 1933).

Marmota flaviventris fortirostris Grinnell *


Marmota flaviventris parvula A. H. Howell† *

Type Locality.—Jefferson, Nye County, Nev. (in Toquima Range, about 10 miles north of Belmont). Range.—Toyabe, Toquima, and Hot Creek Ranges of central Nevada (Hall, Mammals of Nevada, p. 239, July 1, 1946).

Marmota flaviventris engelhardti J. A. Allen*


Marmota flaviventris nosophora A. H. Howell†*


Type Locality.—Willow Creek, 7 miles east of Corvallis, Ravalli County, Mont. Altitude, 4,000 feet. Range.—Rocky Mountain region from Flathead Lake, Mont., south through Idaho (west in Snake River Valley as far as Hagerman; Davis, The Recent mammals of Idaho, p. 159, Apr. 5, 1939) to northeastern Nevada (Hall, Mammals of Nevada, p. 237, July 1, 1946) and Wasatch and Uinta Mountains of northeastern Utah (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 19, Feb. 15, 1951) ; east to Bighorn Mountains, Wyo.

Marmota flaviventris dacota (Merriam) †*


Type Locality.—Custer, Custer County, Black Hills, S. Dak. Range.—Black Hills, S. Dak., and Bear Lodge Mountains, Wyo.

Marmota flaviventris luteola A. H. Howell†*


Type Locality.—Woods Post Office, Medicine Bow Mountains, Albany County, Wyo. Altitude, 7,500 feet. Range.—Laramie Mountains of southeastern Wyoming south through mountains of Colorado to La Plata, Archuleta and Conejos
Counties, and presumably northwestern New Mexico; southeastern Utah in Grand and San Juan Counties (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 21, Feb. 15, 1951).

Marmota flaviventris notioros Warren


*Type Locality.*—Near Marion Reservoir or Lake, Wet Mountains, Custer County, Colo. Altitude, 10,600 feet. *Range.*—Wet Mountains and Greenhorn Range, in Custer, Pueblo, and Huerfano Counties, Colo.

Marmota flaviventris obscura A. H. Howell†*


*Type Locality.*—Wheeler Peak, 5 miles south of Twining, Taos County, N. Mex. Altitude, 11,500 feet. *Range.*—Upper slopes of high peaks in northern New Mexico from Pecos Baldy, Sangre de Cristo Range, north to Costilla and Saguache Counties in southwestern Colorado (Warren, Journ. Mamm., vol. 17, No. 4, p. 397, Nov. 16, 1936); occurs in Hudsonian and upper Canadian Zones from about 9,600 feet altitude to summits of the peaks (13,300 to 13,700 feet).  

*caligata*—group 68

Marmota caligata caligata (Eschscholtz) *


*Type Locality.*—Near Bristol Bay, Alaska. *Range.*—Alaska and Yukon, from Portland Canal north on coast to Bristol Bay, and in interior to Endicott Range and mountains lying westward of Fort Good Hope, Mackenzie.

Marmota caligata broweri Hall and Gilmore*


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*68 Reviewed by Anderson, Canadian Field-Nat., vol. 48, No. 4, pp. 61–63 (map, p. 60), Apr. 2, 1934.*
Marmota caligata sheldoni A. H. Howell†*


*Type Locality.*—Montague Island, Alaska. *Range.*—Known from type locality only.

Marmota caligata oxytona Hollister†*


Marmota caligata okanagana (King) *


Marmota caligata nivaria A. H. Howell†*


Marmota caligata cascadensis A. H. Howell†*


Type Locality.—Mount Rainier, Pierce County, Wash. Range.—Cascade Range (at and above timberline) from Mount Rainier, Wash., north to southern British Columbia (Mount Baker Range and Howe Sound, a little north of Vancouver); intergrading with okanagana on east side of Cascade Mountains on south bank of Thompson River near Spences Bridge, British Columbia (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 107, Jan. 24, 1947).

Marmota caligata raceyi Anderson*


Type Locality.—Itcha Mountains, Chilcotin Plateau, south of Isacha Lake, range III, coast district, British Columbia; lat. 52° 45' N., long. 125° W. Altitude, 6,500 feet. Range.—From Chilcotin Plateau between middle Fraser River and Coast Mountains, west to upper Bella Coola Valley, British Columbia (see distribution map, Anderson and Hall, Canadian Field-Nat., vol. 48, p. 60, Apr. 2, 1934).

Marmota caligata vigilis Heller*


Type Locality.—West shore of Glacier Bay, Alaska. Range.—Known from type locality only.

Marmota olympus (Merriam) †*


Type Locality.—Timberline at head of Soleduc River, Olympic Mountains, Clallam County, Wash. Range.—Upper slopes of Olympic Mountains, Wash., above timberline (from about 4,000 feet altitude to near summits of peaks).

Marmota vancouverensis Swarth*


Type Locality.—Mount Douglas, Vancouver Island, British Columbia, Canada. Range.—Vancouver Island; apparently not generally distributed, and known at present only from "the mountains at the head of China Creek, some 20 miles south of Alberni, in the Golden Eagle Basin, and King Solomon Basin, and on the surrounding slopes and ridges."

Genus Cynomys Rafinesque (prairie-dogs)

1817. Cynomys Rafinesque, Amer. Monthly Mag. vol. 2, No. 1, p. 45, November 1817. (Type, Cynomys socialis Rafinesque = Arctomys ludoviciana Ord.)

* Revised by Hollister, North Amer. Fauna No. 40, June 20, 1916.
Subgenus CYNOMYS Rafinesque

Cynomys ludovicianus ludovicianus (Ord) *


Type Locality.—Upper Missouri River ("vicinity of the Missouri, and throughout the greater part of Louisiana"). Range.—Great Plains region, south from Frenchman River, southern Saskatchewan, Canada (Soper, Journ. Mamm., vol. 25, No. 1, p. 47, Feb. 18, 1944), to west-central Texas (Mason County to eastern Pecos Valley); east to about long. 97° W. in Nebraska, Kansas, and Oklahoma; west to Rocky Mountains in central Montana, Wyoming, and Colorado, and in extreme eastern New Mexico. Zonal range, chiefly Upper Sonoran, but also ranging into Transition and Lower Sonoran. Introduced colonies exist, or have been reported as formerly existing, in Sac County and at Burlington, Iowa; near Monroe, La.; at Seneca, S. C.; and on Nantucket Island, Mass.

Cynomys ludovicianus arizonensis Mearns*


Type Locality.—Point of Mountain, near Willcox, Cochise County, Ariz. Range.—Southeastern Arizona, southern and central New Mexico, southwestern Texas, and adjacent portions of Sonora and Chihuahua, México. North to San Pedro and Santa Rosa, N. Mex.; east to Pecos Valley; west to Huachuca, Ariz.; south to San Diego and Casas Grandes, Chihuahua, and to Presidio County, Tex.

Cynomys mexicanus Merriam†*


Type Locality.—La Ventura, Coahuila, México. Range.—Southeastern Coahuila and northern San Luis Potosí, México; north to Saltillo; south to Vanegas.

Subgenus LEUCOCROSSUROMYS Hollister

1916. Leucocrossuromys Hollister, North Amer. Fauna No. 40, p. 23, June 20, 1916. (Type, Spermophilus gunnisoni Baird.)

Cynomys leucurus Merriam†*


from the “shores of the Columbia River”; see Hollister, North Amer. Fauna No. 40, p. 26, June 20, 1916.)


Cynomys parvidens J. A. Allen*


Cynomys gunnisoni gunnisoni (Baird) †*


1890. Cynomys gunnisoni Merriam, North Amer. Fauna No. 3, p. 58, Sept. 11, 1890. (See also Merriam, North Amer. Fauna No. 5, p. 40, July 30, 1891.)

Type Locality.—Cochetopa Pass, Saguache County, Colo. Range.—Rocky Mountain region of central and central-southern Colorado and northern New Mexico. North into South Park, Colo.; east to El Paso, Fremont, and Huerfano Counties, Colo.; south into Sangre de Cristo and Jemez Mountains, N. Mex.; west to western Gunnison and Hinsdale Counties, Colo., and to western Rio Arriba County, N. Mex. Zonal range, chiefly Transition, but also in Upper Sonoran and lower parts of Canadian.

Cynomys gunnisoni zuniensis Hollister†*


Type Locality.—Wingate, McKinley County, N. Mex. Range.—Southwestern Colorado, southeastern Utah, northwestern and west-central New Mexico, and north-central Arizona. North in western Colorado to Montrose County; west in eastern Utah to Colorado River (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 25, Feb. 15, 1951); northeast in New Mexico in Rio Grande Valley to Espanola and east to Pecos and Manzano Mountains; south on west side of Rio Grande Valley to Sierra and Socorro Counties, New Mexico; west in central Arizona to Prescott and Hualpai Indian Reservation. Zonal range, chiefly Upper Sonoran, but also in Transition.
Genus CITELLUS* Oken (ground-squirrels)


1825. *Spermophilus* F. Cuvier, Des dents des mammifères, . . . , p. 255, Table méthode.  (Type, *Mus citellus* Linnaeus.)

Subgenus CITELLUS Oken

townsendii—group

*Citellus townsendii townsendii* (Bachman) *


Type Locality.—"On the Columbia River, about 300 miles above its mouth"; therefore, near the site of the present town of Wallula, Walla Walla County, Wash.  Range.—South-central Washington, between Columbia River and Cascade Range, north to Ellensburg, Kittitas County.  Zonal range, Upper Sonoran.

*Citellus townsendii mollis* (Kennicott) †*


Type Locality.—Camp Floyd, near Fairfield, Utah County, Utah.  Range.—Western Utah, Idaho south and east of Snake River from near Murphy east at


least to Blackfoot (Davis, Journ. Mamm., vol. 20, No. 2, p. 187, May 15, 1939), Nevada (except northwestern corner; Hall, Mammals of Nevada, p. 301, July 1, 1946), and southeastern Oregon; north to Rome, Oreg.; east to Salt Lake City and Manti, Utah; south to Cedar City, Utah; west to Honey Lake and Owens Valley, Calif. Zonal range, Upper Sonoran.

Citellus townsendii artemesiae Merriam†*

Citellus townsendii vigilis Merriam†*

Citellus townsendii canus (Merriam)†*
*Type Locality.*—Antelope, Wasco County, Oreg. *Range.*—Eastern Oregon and extreme northwestern Nevada; west to Warm Springs, Bend, and Summer Lake; south to Summit Lake, Nev.; east to Catlow Valley and Cedar Mountains, Oreg. Zonal range, Upper Sonoran.

Citellus townsendii idahoensis Merriam†*
Citellus washingtoni—group

Citellus washingtoni washingtoni A. H. Howell†*


Type Locality.—Touchet, Walla Walla County, Wash. Range.—Southeastern Washington and northern Oregon; north to southern Adams County, Wash., east at least to Idaho—Washington boundary; south to Heppner, Oreg.; west to Willows, Oreg. Zonal range, Upper Sonoran.

Citellus washingtoni loringi A. H. Howell†*


Type Locality.—Douglas, Douglas County, Wash. Range.—Plains of east-central Washington, south and east of Columbia River, including most of Douglas, Grant, Lincoln, and Adams Counties; east to Spokane County. Zonal range, Upper Sonoran.

Citellus brunneus A. H. Howell†*


Type Locality.—New Meadows, Adams County, Idaho. Range.—West-central Idaho; in Washington, Adams and Valley Counties; limits of range unknown. Zonal range, Transition and Upper Sonoran.

Citellus richardsonii—group

Citellus richardsonii richardsonii (Sabine) *


Type Locality.—Carlton House, Saskatchewan, Canada. Range.—Plains of southern Alberta, southern Saskatchewan, southwestern Manitoba, northern and central Montana, North Dakota (except southwestern part), and northeastern South Dakota; north to North Saskatchewan River; east to Red River Valley, N. Dak., Big Stone Lake, S. Dak., and western edge of Minnesota; south to east-central South Dakota (Jerauld County) and southwestern Montana (Gallatin and Park Counties); west to foothills of Rocky Mountains in Alberta and Montana. Zonal range, Transition.

Citellus richardsonii elegans (Kennicott) †*


Type Locality.—Fort Bridger, Uinta County, Wyo. Range.—Southeastern Idaho, southern Wyoming, and northwestern Colorado; north to northwestern Converse County, Wyo.; east to extreme southeastern Wyoming; and south to Leadville, Colo. Zonal range, mainly Transition.

Citellus richardsonii aureus Davis*


Type Locality.—Double Springs, 16 miles northeast of Dickey, Custer County, Idaho. Range.—The Lost River country, including Big Lost River, Pahsimeroi, Lemhi, and Birch Creek Valleys, and east probably to Henry Lake, northeastern Idaho; occurs also in southwestern Montana (Madison and Beaverhead Counties).

Citellus richardsonii nevadensis A. H. Howell†*


Type Locality.—Paradise, Humbolt County, Nev. Range.—Northeastern Nevada west to Winnemucca and south to Diamond Valley (Hall, Mammals of Nevada, p. 303, July 1, 1946), extreme southeastern Oregon; and Riddle, Owyhee County, southwestern Idaho (Davis, The Recent mammals of Idaho, p. 177, Apr. 5, 1939). Zonal range, Upper Sonoran and Transition.

Citellus armatus (Kennicott) †*


Type Locality.—Foothills of the Uinta Mountains, near Fort Bridger, Uinta County, Wyo. Range.—Mountains and foothills of western Wyoming, extreme southwestern Montana, southeastern Idaho, and northern and central Utah; north to Gallatin and Park Counties, Mont.; east to foothills of Shoshone and Wind River Mountains, Wyo.; south to Fish Lake Plateau, Utah (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 26, Feb. 15, 1951); west to Donovan, Mont., to Albion, Cassia County, south of Snake River, and to Big Lost River and Pahsimeroi Val-
leys north of Snake River in Idaho (Davis, The Recent mammals of Idaho, p. 170, Apr. 5, 1939), and to Raft River Mountains, Utah. Zonal range, Canadian and Transition.

**Citellus beldingi beldingi** (Merriam) †*


*Type Locality.*—Donner [=Summit], Placer County, Calif. *Range.*—High mountain meadows in central Sierra Nevada, from Nevada County (Independence Lake) south to headwaters of Kings River, Fresno County, Calif.; and Sierra Nevada and adjoining Carson Valley in vicinity of Lake Tahoe in central western Nevada (Hall, Mammals of Nevada, p. 309, July 1, 1946). Zonal range, Hudsonian and Canadian (6,500 to 11,800 feet).

**Citellus beldingi creber** Hall*  


**Citellus beldingi oregonus** (Merriam) †*


*Type Locality.*—Swan Lake Valley, Klamath Basin, Klamath County, Oreg. *Range.*—Eastern Oregon (except southeastern corner), southern Oregon (east of Cascade Divide), northeastern California, and northwestern Nevada; north to Heppner and Elgin, Oreg.; south to Plumas County, Calif., and Washoe County, Nev.; west to Klamath Lake, Oreg., and Goose Nest Mountain, Calif. Zonal range, Upper Sonoran and Transition.

parryii—group

**Citellus columbianus columbianus** (Ord) *


*Type Locality.*—Camas prairie between forks of Clearwater or Kooskooskie River [along Jim Ford Creek about 7 miles northeast of mouth of Lolo Fork of Clearwater River], Idaho (see Merriam, op. cit., p. 41; and V. Bailey, North Amer. Fauna No. 55 (June), p. 147, Aug. 29, 1936). **Range.**—Rocky Mountain region of western Montana, Idaho, northeastern Washington, southeastern British Columbia and western Alberta; also plains of eastern Washington and mountains of east-central Oregon (exclusive of Blue Mountains); north to headwaters of South Pine River and mountains on east side of lower Parsnip River, British Columbia; in Alberta on eastern slopes of Rocky Mountains north at least to Smoky River Valley 50 miles north of Jasper (Anderson, loc. cit.); south to Craters of the Moon, Butte County, Idaho, and Harney County, Oreg.; east to Cutbank and Townsend, Mont.; west to Shuswap and Okanagan Lake, British Columbia, Oroville, Washington, and Snow Mountain, head of Silver Creek, Harney County, Oreg. **Zonal range,** Canadian and Hudsonian.

*Citellus columbianus ruficaudus* A. H. Howell†*


*Type Locality.*—Wallowa Lake, Wallowa County, Oreg. **Range.**—The Blue Mountains region of Oregon and Washington, from Prescott and Dayton, Wash., south to Dixie Butte, Grant County, Oreg.; east to Wallowa Mountains, Oreg. **Zonal range,** Canadian and Hudsonian.

*Citellus parryii parryii* (Richardson) *


1861. *A[retomys]* *kennicotti* Ross, Canadian Nat. Geol., vol. 6, p. 434, 1861. (Fort Good Hope, Mackenzie District, Northwest Territories, Canada.)


1938. *Citellus parryii parryii* A. H. Howell, North Amer. Fauna No. 56 (April), p. 91, May 18, 1933. ( *Citellus undulatus* Pallas (1779) is available as a specific name for the *eversmanni* and *parryii* groups which are regarded as conspecific by Ognev, The mammals of Russia (U.S.S.R.) and

**Type Locality.**—Five Hawser Bay, Lyon Inlet, Melville Peninsula, Franklin, Canada. **Range.**—Barren Grounds of northern Canada from Melville Peninsula, and western shores of Hudson Bay south to a point about 25 miles south of Cape Eskimo, Hudson Bay; west to Artillery Lake, Mackenzie District, and northwest to Great Bear Lake and Rampart House on Alaska–Yukon boundary; south to Canol Road, Mile 45E and Sekwi River, east slope of Mackenzie Mountains in Northwest Territories (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 110, Jan. 24, 1947). Zonal range, Arctic.

**Citellus parryii barrowensis** (Merriam)†*


**Type Locality.**—Point Barrow, Alaska. **Range.**—Arctic coast of Alaska from Point Hope eastward at least to Point Barrow; limits of range not known. Recorded south to Umiat and to near Tolugak Lake, Alaska (Rausch, Journ. Mamm., vol. 31, No. 4, p. 466, Nov. 21, 1950). Zonal range, Arctic.

**Citellus parryii plesius** (Osgood)†*


**Type Locality.**—Bennett City, head of Lake Bennett, British Columbia, Canada. **Range.**—Northwestern British Columbia, greater part of Yukon (except extreme northern part) and mountainous parts of Mackenzie (west of Mackenzie River); north to Ogilvie Range (head of Coal Creek), Yukon; east to Fort Liard and Nahanni Hills, Mackenzie; south to vicinity of Tatletuey Lake, British Columbia; west to White Pass, British Columbia, and Delta River (Ober Creek), Alaska. Zonal range, Hudsonian.

**Citellus parryii ablusus** Osgood†*


**Type Locality.**—Nushagak, Alaska. **Range.**—Alaska, mainly south of Yukon Valley; north on coast to Eschscholz Bay; west on Alaska Peninsula to its tip;
south to base of Kenai Peninsula; east to headwaters of Tanana River; introduced on Unalaska, Umnak, and Kavalga Islands. Zonal range, Hudsonian and Arctic.

**Citellus parryii nebulicola** Osgood†*


**Citellus parryii lyratus** Hall and Gilmore*


*Type Locality.*—Iviktook Lagoon (about 35 miles northwest of Northeast Cape), Saint Lawrence Island, Bering Sea, Alaska. *Range.*—Saint Lawrence Island. Zonal range, Arctic.

**Citellus kodiacensis** (J. A. Allen) †*


**Citellus osgoodi** (Merriam) †*


*Type Locality.*—Fort Yukon, Alaska. *Range.*—The Yukon Valley, from a point about 25 miles above Circle to Yukon Flats, west of Fort Yukon and possibly to mouth of Tanana River. Zonal range, Hudsonian.

*Subgenus ICTIDOMYS* J. A. Allen


213756—55——14
Citellus tridecemlineatus—group


*Type Locality.*—Central Minnesota (See J. A. Allen, Bull. Amer. Mus. Nat. Hist., vol. 7, p. 333, Nov. 8, 1895). *Range.*—Parts of southern Alberta, Saskatchewan, and Manitoba; northeastern Montana; eastern parts of North Dakota; South Dakota and Nebraska; northeastern Kansas; northern Missouri; all of Iowa; most of Minnesota and Wisconsin; Upper and Lower Peninsulas of Michigan (Burt, Mammals of Michigan, p. 179, 1946) ; northern parts of Illinois and Indiana; southwestern Ohio; north to Athabaska Landing, Alberta; east to Fairfield and Knox Counties, Ohio (Leedy, Journ. Mamm., vol. 28, No. 3, p. 290, June 2, 1947) ; south into northeastern Kansas; west to Red Deer, Alberta; and St. Mary Lake, Mont. Zonal range, Transition and Upper Austral.

Citellus tridecemlineatus pallidus (J. A. Allen) †


*Type Locality.*—Plains of the lower Yellowstone River, Mont. (See J. A. Allen, Bull. Amer. Mus. Nat. Hist., vol. 7, p. 333, Nov. 8, 1895. Specimen from mouth of the Yellowstone River designated as lectotype by A. H. Howell, North Amer. Fauna No. 56 (April), p. 112 (footnote), May 18, 1938.) *Range.*—Through drier parts of southwestern Saskatchewan (Cypress Hills) and extreme southern parts of Alberta to edge of foothills of Rocky Mountains in Waterton Lakes National Park (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 111, Jan. 21, 1947); plains of Montana east of Rocky Mountains, eastern Wyoming, northeastern Colorado, northwestern Kansas, western parts of Nebraska and South Dakota, and southwestern North Dakota; east to Missouri River in North Dakota, and to about long. 100° W. in Nebraska and Kansas; south to Ellis and Trego Counties, Kans., and Colorado Springs, Colo.; west to Casper and Laramie, Wyo., and to Canadian Creek (North Park) and Como (South Park), Colo. Zonal range, Upper Sonoran and Transition.
Citellus tridecemlineatus allenii (Merriam)†*


*Type Locality.*—Near head of Canyon Creek, west slope of Bighorn Mountains, Washakie County, Wyo. Altitude, 8,000 feet. *Range.*—The Bighorn Mountains and Bighorn Basin, Wyo.; south to head of Red Canyon, near Miners Delight, Fremont County, and west to New Fork of Green River. Reported also from Franks Butte, near head of Sage Creek, Park County, Wyo. Zonal range, Transition.

Citellus tridecemlineatus hollisteri V. Bailey†*


*Type Locality.*—Elk Valley, Mescalero Indian Reservation, Sacramento Mountains, Otero County, N. Mex. Altitude, 8000 feet. *Range.*—Sacramento Mountains, N. Mex., and mountain valleys of northeastern New Mexico; western limits of range not known. Zonal range, Transition.

Citellus tridecemlineatus monticola A. H. Howell†*


*Type Locality.*—Marsh Lake, White Mountains, Apache County, Ariz. Altitude, 9,000 feet. *Range.*—Known from type locality only. Zonal range, Transition.

Citellus tridecemlineatus parvus (J. A. Allen) *


Citellus tridecemlineatus hoodii (Sabine)


*Type Locality.*—Carlton House (now Carlton), southwest of Prince Albert, Saskatchewan, Canada. *Range.*—Through west-central Manitoba from Riding Mountains and Swan River northwest through central Saskatchewan to Prince Albert National Park, Saskatchewan, Canada.
Citellus tridecemlineatus texensis (Merriam) †*


Type Locality.—Gainesville, Cooke County, Tex. Range.—Prairie region of middle and eastern portions of Texas and Oklahoma; north to south-central (Cairo and Garden Plain) and southeastern Kansas; east to southwestern Missouri (Stotesbury and Golden City); south to Bee County, Tex.; west to Vernon, Tex., and Mount Scott, Wichita Mountains, Okla. Zonal range, Lower Austral.

Citellus tridecemlineatus arenicola A. H. Howell†*


Type Locality.—Pendennis, Lane County, Kans. Range.—Western Kansas (intergrades with pallidus at type locality; see Hibbard, Trans. Kansas Acad. Sci., vol. 47, p. 72, September 1944), eastern Colorado, northwestern Texas, northwestern Oklahoma, and eastern New Mexico; north to Logan County, Colo.; east to Barber County, Kans.; south to Lubbock, Tex., and Roswell, N. Mex.; west to Lincoln County, N. Mex. Zonal range, Upper Sonoran.

Citellus mexicanus mexicanus (Erxleben) *


Type Locality.—Not designated by Erxleben; but the name Sciurus mexicanus was restricted by Lichtenstein to the animal occurring at Toluca, México. (See Mearns, Proc. U. S. Nat. Mus., vol. 18, p. 443, May 23, 1896.) Range.—Central México, from Jalisco and Guanajuato south to southern Puebla. Zonal range, Lower Sonoran.

Citellus mexicanus parvidens (Mearns) †*


Type Locality.—Fort Clark, Kinney County, Tex. Range.—Northeastern Mexico, western Texas, and southeastern New Mexico; north to Roswell, N. Mex., and Borden County, Tex.; east to Austin and Rockport, Tex.; south to southern Tamaulipas; west to central Coahuila and extreme western Texas (El Paso). Zonal range, Lower Sonoran.
RODENTIA: SCIURIDAE

spilosoma—group

Citellus spilosoma spilosoma (Bennett) *


Citellus spilosoma pallescens A. H. Howell† *


Type Locality.—La Ventura, Coahuila, México. Range.—North-central México from southern Chihuahua (Santa Rosalía) southward to extreme northern San Luis Potosí and eastward to southern Nuevo León (Doctor Arroyo). Zonal range, Lower Sonoran.

Citellus spilosoma cabreraei Dalquest *


Type Locality.—10 kilometers north-northeast of Nuñez, San Luis Potosí, México. Range.—Desert areas of central and eastern San Luis Potosí and probably adjacent parts of Guanajuato and Tamaulipas, México.

Citellus spilosoma canescens (Merriam) † *

1890. Spermophilus canescens Merriam, North Amer. Fauna No. 4, p. 38, Oct. 8, 1890.
1890. Spermophilus spilosoma macrospilotus Merriam†, North Amer. Fauna No. 4, p. 38, Oct. 8, 1890. (Oracle, Pinal County, Ariz.)

Type Locality.—Willcox, Cochise County, Ariz. Range.—Extreme northern Sonora, west as far as La Noria, Río Santa Cruz (Burt, Univ. Michigan Mus. Zool. Misc. Publ. 39, p. 37, Feb. 15, 1938); southeastern Arizona and southwestern New Mexico; south to Chihuahua City, Chihuahua, México; west to Altar Valley, Ariz.; north to Gila Valley (Pima), Ariz.; east to Deming, N. Mex., and Fort Hancock, Tex. Zonal range, Lower Sonoran.
Citellus spilosoma marginatus (V. Bailey) †*

1890. *Spermophilus spilosoma major* Merriam†, North Amer. Fauna No. 4, p. 39, Oct. 8, 1890. (Preoccupied by *Citellus major* Pallas, 1778.)


_Type Locality._—Albuquerque, Bernalillo County, N. Mex. _Range._—Eastern New Mexico, western Texas, western Oklahoma, southwestern Kansas, and southeastern Colorado; north to Adams and Yuma Counties, Colo.; east to Kinsley, Kans., Woodward, Okla., and Colorado (city), Tex.; south to Presidio and Brewster Counties, Tex.; west to Saint Augustine Plains, N. Mex. Zonal range, Upper Sonoran.

Citellus spilosoma annectens (Merriam) †*


_Type Locality._—"The Tanks," 12 miles from Point Isabel, Padre Island, Cameron County, Tex. _Range._—Lower Rio Grande Valley, Tex., and Gulf coast section from mouth of the river north to Nueces River; Padre and Mustang Islands. Zonal range, Lower Sonoran.

Citellus spilosoma pratensis (Merriam) †*


1890. *Spermophilus spilosoma obsidianus* Merriam†, North Amer. Fauna No. 3, p. 56, Sept. 11, 1890. (Cedar belt, northeast of San Francisco Mountain, Coconino County, Ariz.)


_Type Locality._—Pine plateau at north foot of San Francisco Mountain, Coconino County, Ariz. _Range._—North-central Ariz., between Grand Canyon and Mogollon Plateau; west to Seligman and Aubrey Valley. Zonal range, Upper Sonoran and Transition.

Citellus spilosoma cryptospilotus (Merriam) †*


_Type Locality._—"Tenebito" [=Dinnebito] Wash, Painted Desert, Coconino County, Ariz. _Range._—Northeastern Arizona, southeastern Utah, southwestern
Colorado and northwestern New Mexico; north to Monticello, Utah; east to Thoreau, N. Mex.; south to Holbrook, Ariz.; west to Little Colorado River. Zonal range, Upper and Lower Sonoran.

**Citellus spilosoma obsoletus (Kennicott)†**


*Type Locality.*—“Fifty miles west of Fort Kearney, Nebraska” (A. H. Howell, op. cit., p. 131); therefore probably in the western half of Dawson County. *Range.*—Sandhill region of Nebraska; north to Todd County, S. Dak.; east to Neligh, Antelope County, Nebr.; south to Tuttle, Kit Carson County, Colo.; and extreme northwestern Kansas (Hibbard, Trans. Kansas Acad. Sci., vol. 47, p. 73, September 1944); west to Platte County, Wyo., and Greeley, Weld County, Colo. Zonal range, Upper Sonoran.

**Citellus perotensis (Merriam)†**


*Type Locality.*—Perote, Veracruz, México. *Range.*—Extreme eastern border of Mexican tableland in vicinity of Perote, Veracruz, at altitudes of from 7,300 to 7,900 feet. Ranges to a point 10 miles south of Perote and eastward to within a few miles of Las Vegas. Recorded also from near San Salvador and Laguna de las Minas, Puebla (Davis, Journ. Mamm., vol. 25, No. 4, p. 333, Dec. 12, 1944). Zonal range, Upper Sonoran.

**Subgenus POLIOCITELLUS A. H. Howell**


**Citellus franklinii** (Sabine)


and South Dakota, to central Nebraska and to eastern Kansas; and from northwestern Indiana, and southern Wisconsin, and southern and western Minnesota south to central Missouri and southeastern Kansas. Zonal range, Transition and Upper Austral.

Subgenus OTOSPERMOPHILUS Brandt


Citellus variegatus variegatus (Erxleben) *


Citellus variegatus rupestris J. A. Allen *


Type Locality.—Río Sestín, northwestern Durango, México. Range.—Eastern and western slopes of Sierra Madre and adjoining plains on eastern side from southern Durango north to west-central Chihuahua (Knobloch, Journ. Mamm., vol. 23, No. 3, p. 297, Aug. 14, 1942); east to city of Chihuahua and Santa Rosalía; west to Sierra de Choix, Sinaloa. Zonal range, Upper and Lower Sonoran and Transition.

Citellus variegatus couchii (Baird) †


Type Locality.—Santa Catarina (a few miles west of Monterrey), Nuevo León, México. Range.—Northeastern México, from southern Coahuila and Nuevo León north to Chisos Mountains, Tex. (Rock squirrel of Davis Mountain region, Tex., regarded as closer to typical couchii by Blair, Univ. Michigan Mus. Zool. Misc. Publ. 46, p. 26, June 28, 1940.) Zonal range, Upper and Lower Sonoran.

Citellus variegatus buckleyi (Slack) *

Type Locality.—Packsaddle Mountain, Llano County, Tex. Range.—Southcentral Texas from upper Nueces River (Rock Springs) east nearly to San Antonio and Austin; north to San Saba River. Zonal range, Upper and Lower Sonoran.

Citellus variegatus grammurus (Say) *

Type Locality.—Purgatory River, near mouth of Chacuaco Creek, Las Animas County, Colo. (See Cary, North Amer. Fauna No. 33, p. 87, Aug. 17, 1911.) Range.—Mountain valleys and foothills in Colorado, New Mexico, Arizona, southwestern Utah, southeastern Utah east of Colorado and Green Rivers, and Book Cliffs west to Carbon County (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 29, Feb. 15, 1951), southern Nevada, northwestern Chihuhua, and eastern Sonora; north to eastern Larimer County, Colo., and northern White Pine County, Nev. (Hall, Mammals of Nevada, p. 310, July 1, 1946); east to Baca County, Colo., and rocky ravines in Oklahoma Panhandle as far east as Beaver County (Blair, Amer. Midl. Nat., vol. 22, p. 110, July 1939); south to southern Texas (Eagle Pass), and southern Sonora; west to Toyabe Mountains, Nev., and Providence Mountains, Calif. Zonal range, Upper Sonoran and Transition (4,200 to 8,500 feet in New Mexico). Recorded also from Kaibab Plateau of northern Arizona (Hall and Kelson, Univ. Kansas Publ. Mus. Nat. Hist., vol. 5, No. 26, p. 346, Dec. 15, 1952).

Citellus variegatus tularosae Benson

Citellus variegatus utah Merriam† *
Type Locality.—Foot of Wasatch Mountains, near Ogden, Weber County, Utah. Range.—Central Utah, from Wasatch Range south to Beaver Mountains. (Limits of range imperfectly known.) Zonal range, Transition and Upper Sonoran.
Citellus beecheyi beecheyi (Richardson) *


Type Locality.—“Neighborhood of San Francisco and Monterey, California” (Richardson, loc. cit., quoting “Mr. Alexander Collie, surgeon of His Majesty’s ship Blossom”); restricted to Monterey, Monterey County, Calif. (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 120, Sept. 26, 1933). Range.—Western California, from San Francisco Bay south to northern San Diego County; eastward through Coast Ranges and San Gabriel Mountains. Zonal range, Upper Sonoran and Transition.

Citellus beecheyi douglasii (Richardson) *


Type Locality.—Banks of the Columbia River, Oreg. Range.—Klickitat and Skamania Counties, Wash., from Stevenson on west and some distance past Goldendale on north, to Alderdale on east (Scheffer and Dalquest, Murrelet, vol. 20, p. 44, Aug. 19, 1939); western Oregon and northern California, from Columbia River Valley south nearly to San Francisco Bay, Calif.; east to Deschutes River Valley, Oreg.; Lake City, Calif., and a line reaching from latter point to Eagle Lake, Lyonsville, Maglia, and Nelson; from there southward occurring only west of Sacramento River. Zonal range, mainly Upper Sonoran and Transition; into Lower Sonoran in Sacramento Valley and into Canadian on Siskiyou Mountains (6,000 feet) and Scott Mountains (6,300 feet).

Citellus beecheyi sierrae A. H. Howell†*


Type Locality.—Emerald Bay, Lake Tahoe, El Dorado County, Calif. Range.—Higher parts of northern Sierra Nevada, from Plumas County south to Mariposa County (upper Merced River). Zonal range, Transition and Canadian.

Citellus beecheyi fisheri (Merriam) †*


Type Locality.—South fork of Kern River, 3 miles above Onyx, Kern County, Calif. (A. B. Howell, Journ. Mamm., vol. 4, No. 4, p. 266, Nov. 1, 1923). Range.—Greater part of central California, including San Joaquin and Sacramento Valleys and the southern Sierra Nevada; north on eastern side of Sacramento River to southern Butte County, then northeastward to Susanville;
east to western side of Pyramid Lake and western Churchill County, Nev., and to Walker Pass, in southern Sierra Nevada, Calif.; south to Tehachapi Moun-
tains; west to Cuyama Valley, Carrizo Plain, and western border of San Joaquin Valley. Zonal range, Upper Sonoran and Transition.

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


*Type Locality.*—Shepherd Canyon, Argus Mountains, Inyo County, Calif. *Range.*—Desert ranges of southern California (except Providence Mountains); north to Owens Valley; south to San Jacinto Mountains. Zonal range, mainly Transition and Upper Sonoran, but extending into Lower Sonoran.

**Citellus beecheyi nudipes** Huey*  


*Type Locality.*—Laguna Hanson, lat. 31°58' N., long. 115°53' W., Sierra Juárez, Baja California, México. Altitude, 5,200 feet. *Range.*—Northern Baja California and extreme southwestern California, including most of western half of San Diego County. Zonal range, Upper and Lower Sonoran and Transition.

**Citellus beecheyi rupinarum** Huey*  


*Type Locality.*—Catavina, lat. 29°54' N., long. 114°57' W., Baja California, México. *Range.*—Deserts of central Baja California, south of Sierra San Pedro Mártir, southern limits of range unknown. Zonal range, Lower Sonoran.

**Citellus beecheyi nesioticus** Elliot*  


**Citellus atricapillus** (Bryant)  


*Type Locality.*—Comondú, Baja California, México. *Range.*—Southern Baja California, from Sierra de San Francisco (lat. 23° N.) south to Comondú (and possibly farther). Zonal range, Lower Sonoran.

*Subgenus NOTOCITELLUS* A. H. Howell


**Citellus annulatus annulatus** (Audubon and Bachman) *  


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


*Type Locality.*—Unknown; probably in western Mexico; “fixed” at Manzanillo, Colima, México (A. H. Howell, loc. cit.). *Range.*—Colima and northern Guerrero, México; probably also coastal region of Michoacán. Zonal range, entirely Tropical.

**Citellus annulatus goldmani** (Merriam)†


*Type Locality.*—Santiago, Nayarit, México. *Range.*—Known at present only from southern part of State of Nayarit on west coast of México. Zonal range, Tropical.

**Citellus adocetus adocetus** Merriam†


**Citellus adocetus arceliae** Villa*


**Subgenus AMMOSPERMOPHILUS***†* Merriam


**Citellus harrisi harrisi** (Audubon and Bachman)*


*Type Locality.*—Not designated by original describers. “Fixed” (A. H. Howell, loc. cit.) in the Santa Cruz Valley, Santa Cruz County, Ariz., at the Mexican boundary line. *Range.*—Greater part of southern, central, and northwestern Arizona; north to Colorado River, west of long. 113° W.; east to south-

western New Mexico (Hidalgo County); south to southern Sonora (Ortiz); west to Quitobaquito, on Mexican border. Zonal range, Lower Sonoran.

Citellus harrisi saxicola (Mearns) †*


Type Locality.—Tinajas Altas, Gila Mountains, Yuma County, Ariz. Range.—Southwestern Arizona and northwestern Sonora, from Colorado River east to about long. 113° W. Zonal range, Lower Sonoran.

Citellus leucurus leucurus (Merriam) †*


Type Locality.—San Gorgonio Pass [east of Banning], Riverside County, Calif. Range.—Desert regions of southeastern Oregon, southwestern Idaho, Nevada, western Utah, southeastern California, and northeastern Baja California; north to northern Malheur County, Oreg., and Snake River Valley, Idaho; south to San Felipe Bay, Baja California; west to Mohave Desert, Calif. Zonal range, Upper and Lower Sonoran.

Citellus leucurus tersus (Goldman) †*


Type Locality.—Lower end of Prospect Valley, Grand Canyon, Hualpai Indian Reservation, Coconino County, Ariz. Altitude, 4,500 feet. Range.—Terraces on southern side of Grand Canyon, in Hualpai Indian Reservation. Zonal range, Upper Sonoran.

Citellus leucurus cinnamomeus (Merriam) †*


Type Locality.—Echo Cliffs, Painted Desert, Coconino County, Ariz. Range.—Northeastern Arizona; Kane, Garfield, Grand, and San Juan Counties in southern and eastern Utah (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 32, Feb. 15,
1951); and southeastern Colorado; north to Coventry, Colo.; south to Taylor, Ariz. Zonal range, mainly Upper Sonoran.

**Citellus leucurus pennipes** (A. H. Howell)  
_Type Locality._—Grand Junction, Mesa County, Colo. **Range.**—The Colorado Valley and its tributaries (except San Juan) in western Colorado, eastern Utah (see Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 32, Feb. 15, 1951), and northwestern New Mexico; north to Vernal, Uintah County, Utah, and Rangely, Rio Blanco County, Colo.; west to Thurber, Wayne County, Utah; south to Socorro Mountains, N. Mex. Zonal range, Upper Sonoran.

**Citellus leucurus peninsularae** (J. A. Allen)  
_Type Locality._—San Telmo, Baja California, México. **Range.**—Western side of Baja California Peninsula; east to base of Sierra San Pedro Mártir; south to San Fernando. Zonal range, Upper Sonoran.

**Citellus leucurus canfieldae** (Huey)  
_Type Locality._—Punta Prieta, lat. 28°56' N., long. 114°12' W., Baja California, México. **Range.**—Desert region of central Baja California, from about lat. 30° N. southward over Vizcaíno Desert to about lat. 23° N. Zonal range, Lower Sonoran.

**Citellus leucurus extimus** (Nelson and Goldman)  
_Type Locality._—Saccaton (15 miles north of Cape San Lucas), Baja California, México. **Range.**—Southern part of Baja California Peninsula from Cape San Lucas north to about lat. 28° N. (except the Vizcaíno Desert); ranging from sea level to about 1,000 feet altitude on slopes of mountains. Zonal range, Lower Sonoran and Tropical.

**Citellus interpres** (Merriam)  
_Type Locality._—El Paso, El Paso County, Tex. **Range.**—Western Texas and south-central New Mexico, north to Manzano Mountains; east to Pecos River.
Valley and Castle Mountains, Tex.; west to eastern side of Río Grande Valley, in New Mexico; south to Jaral, Coahuila. Zonal range, Lower Sonoran.

Citellus insularis (Nelson and Goldman)†


_Type Locality._—Espíritu Santo Island, Gulf of California, Baja California, México. _Range._—Espíritu Santo Island. Zonal range, Tropical.

Citellus nelsoni (Merriam)†


_Type Locality._—Tipton, San Joaquin Valley, Tulare County, Calif. _Range._—San Joaquin Valley, Calif., from Los Banos south to Fort Tejon; west to Carrizo Plain and Cuyama Valley. Zonal range, Lower Sonoran.

_Subgenus XEROSPERMOPHILUS Merriam


Citellus mohavensis (Merriam)†


Citellus tereticaudus tereticaudus (Baird)†


**Type Locality.**—Old Fort Yuma, Imperial County, Calif., on right bank of the Colorado River, opposite present town of Yuma, Ariz. **Range.**—Deserts of southern California and northwestern Baja California; north to Death Valley, Inyo County, Calif., to Clark and southern Nye Counties, Nev. (Hall, Mammals of Nevada, p. 318, July 1, 1946), and to extreme northwestern Arizona; south to San Felipe Bay, Baja California; west to Kramer on Mohave Desert, San Bernardino County, and to La Puerta, San Diego County, on Colorado Desert. Zonal range, Lower Sonoran.

*Citellus tereticaudus neglectus* (Merriam)†*


**Type Locality.**—Dolans Spring, 12 miles northwest of Chloride, Mohave County, Ariz. **Range.**—Western Arizona and western Sonora; north to Detrital Valley, Mohave County, Ariz.; east to Mountain Spring, Pima County; south to Camoa, Rio Mayo, Sonora; west to Colorado River and Gulf of California. Zonal range, Lower Sonoran.

*Citellus tereticaudus chlorus* Elliot*


**Type Locality.**—Palm Springs, Riverside County, Calif. **Range.**—Northwestern arm of Colorado Desert, specifically, Coachella Valley from Mecca northwest to Cabazon. Zonal range, Lower Sonoran.

*Citellus tereticaudus apricus* Huey*


**Type Locality.**—Valle de la Trinidad, lat. 31°20′ N., long. 115°40′ W., Baja California, México. **Range.**—Known from type locality only.

*Subgenus CALLOSPERMOPHILUS* Merriam


*Citellus lateralis lateralis* (Say) *


**Type Locality.**—On the Arkansas River, about 26 miles below Canyon City, in Pueblo County, Colo. (See Merriam, Proc. Biol. Soc. Washington, vol. 18, p. 163, June 29, 1905.) **Range.**—South-central Wyoming; central and western Colorado; Uinta Mountains, Tavaputs Plateau and high plateaus of central and northeastern Utah (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 35, Feb. 15, 1951); northern Arizona and northern New Mexico; north to southern Fremont County, Wyoming; east to foothills of Rocky Mountains in Colorado and New Mexico; south to San Miguel County, N. Mex. (upper Pecos River); west to Kaibab Plateau, Ariz. Zonal range, Transition, Canadian, and Hudsonian.

*Citellus lateralis wortmani* (J. A. Allen)*


**Type Locality.**—Kinney Ranch, Bitter Creek, Sweetwater County, Wyo. **Range.**—Deserts and badlands in south-central Wyoming and northwestern Colorado; north to Steamboat Mountain, Sweetwater County, Wyo.; south to Bear River Valley, Routt County, Colo. Zonal range, Upper Sonoran.

*Citellus lateralis arizonensis* (V. Bailey)†*


**Type Locality.**—Near Little Spring, San Francisco Mountain, Coconino County, Ariz. Altitude, 8,250 feet. **Range.**—Mountains and high plateaus in central and eastern Arizona and west-central New Mexico; north to San Francisco Mountain, Ariz.; east and south to Mimbres Mountains, N. Mex. Zonal range, Transition and Canadian.

*Citellus lateralis caryi* (A. H. Howell)†*


**Type Locality.**—Seven miles south of Fremont Peak, Wind River Mountains, Fremont County, Wyo. Altitude, 10,400 feet. **Range.**—Wind River Mountains, Wyo., and parts of Gros Ventre Range; north (apparently) to Wildcat Ridge, south of Yellowstone Park. Zonal range, Canadian and Hudsonian.

*Citellus lateralis cinerascens* (Merriam)†*


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**Type Locality.**—Helena, Lewis and Clark County, Mont. Altitude, 4,500 feet. **Range.**—Outlying ranges in south-central Montana and northwestern Wyoming, from Helena south to Yellowstone Park and east to Beartooth Mountains. Zonal range, Canadian and Hudsonian.

**Citellus lateralis tescorum** (Hollister) †*


**Citellus lateralis castanurus** (Merriam) †*


**Type Locality.**—Park City, Wasatch Mountains, Summit County, Utah. Altitude, 7,000 feet. **Range.**—Mountains of extreme western Wyoming, southeastern Idaho, and north-central Utah; north to Teton Range, Wyo.; east to Gros Ventre and Salt River Ranges, Wyo.; Wasatch Mountains south to Mount Nebo, Juab County, Utah (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 35, Feb. 15, 1951); west to mountains east of Inkom, Idaho. Zonal range, Canadian and Hudsonian.

**Citellus lateralis chrysodeirus** (Merriam) †*


**Type Locality.**—Fort Klamath [mountains near], Klamath County, Oreg. **Range.**—Interior Oregon and eastern California north to Columbia River; east to foothills of Blue Mountains; south (in the Sierra Nevada) to Tulare County, Calif.; Sierra Nevada in vicinity of Lake Tahoe, west to and including Cascades in Oregon and Mount Shasta in California. Zonal range, Transition, Canadian, and Hudsonian.

**Citellus lateralis connectens** (A. H. Howell) †*


**Citellus lateralis trepidus** (Taylor) *


*Type Locality.*—Head of Big Creek, Pine Forest Mountains, Humboldt County, Nev.  Altitude, 8,000 feet.  *Range.*—Southeastern Oregon, southern Idaho, northern and central Nevada, and northwestern Utah; north in the Snake River Valley to southern Baker County, Oreg.  (Home P. O.) ; west to Mount Warner, Oreg., and Granite Range, Nevada; south to lat. 38° N. in Nevada, and to White and Inyo Mountains, Calif.; east to Bannock County, Idaho (Swan Lake) and the Snake Range, eastern Nevada.  Zonal range, Upper Sonoran, Transition, and Canadian.

**Citellus lateralis certus** (Goldman) †*


*Type Locality.*—North base of Charleston Peak, Charleston Mountains, Clark County, Nev.  *Range.*—Spring Mountains, Clark County, Nev.  Zonal range.  Transition.

**Citellus lateralis bernardinus** (Merriam) †*


**Citellus lateralis mitratus** (A. H. Howell) †*


Type Locality.—South Yolla Bolly Mountain, Tehama County, Calif. Range.—Coast ranges of northern California, from Glenn County north to southern Siskiyou County. Zonal range, Canadian and Transition.

*Citellus lateralis trinitatis* (Merriam) ††


Type Locality.—Trinity Mountains, east of Hoopa Valley, Humboldt County, Calif. Altitude, 5,700 feet. Range.—Trinity Mountains in northern Humboldt County, north through Siskiyou Mountains to southwestern Oregon. Zonal range, Canadian and Transition.

*Citellus saturatus* (Rhoads) *


Type Locality.—Lake Keechelus, Kittitas County, Wash. Altitude, 8,000 feet. Range.—The Cascade Mountain region of western Washington and southern British Columbia; north to Tulameen, British Columbia; south to Columbia River Valley, southern Washington; east to Similkameen River, British Columbia. Zonal range, Canadian.

*Citellus madrensis* (Merriam) †‡


Type Locality.—Sierra Madre, near Guadalupe y Calvo, Chihuahua, México. Altitude, 7,000 feet. Range.—Sierra Madre, México, from northwestern Durango north to lat. 27° N., west to Batopilas, Chihuahua; limits of range not known. Zonal range, Transition.

Genus TAMIAS ‡ Illiger (eastern chipmunks)

1811. *Tamias* Illiger, Prodromus systematis Mammalium et Avium, p. 83. (Type, *Sciurus striatus* Linnaeus.)

*Tamias striatus striatus* (Linnaeus) *

1758. *[Sciurus] striatus* Linnaeus, Systema naturae, ed. 10, vol. 1, p. 64.


**Tamias striatus pipilans** Lowery*


*Type Locality.*—Five miles south of Tunica, West Feliciana Parish, La. *Range.*—Central-southern Louisiana (West Feliciana and Baton Rouge Parishes only), northward through central and western Mississippi, eastward to central northern Alabama.

**Tamias striatus venustus** Bangs


**Tamias striatus griseus** Mearns*


**Tamias striatus ohionensis** Bole and Moulthrop*


*Type Locality.*—Cincinnati, Hamilton County, Ohio. *Range.*—From northern and central Indiana to northeastern Kentucky (Bath County) and middle Ohio, east in last mentioned state at least as far as Adams, Hocking and Seneca Counties. Recorded also from Obion County, northwestern Tennessee (Goodpaster and Hoffmeister, Journ. Mamm., vol. 33, No. 3, p. 366, Aug. 19, 1952).
Tamias striatus rufescens Bole and Moulthrop*
_Type Locality._—Chesterfield Caves, Chester Township, Geauga County, Ohio. _Range._—The Allegheny plateau of northeastern Ohio at least as far south as Columbia County, also east to Crawford County, Pa. Specimens from lower half of Lower Peninsula of Michigan referred to _rufescens_ by Burt (Occ. Pap. Mus. Zool. Univ. Michigan No. 481, p. 5, Nov. 10, 1943).

Tamias striatus peninsulac Hooper*
_Type Locality._—Three miles southeast of Millersburg, Barnhart Lake, Presque Isle County, Mich. _Range._—Northern half of Lower Peninsula of Michigan, from Muskegon and northern Montcalm Counties northward to Straits of Mackinac. Distribution limits essentially those of the sandy “jackpine,” or high plains, region of Michigan.

Tamias striatus quebecensis Cameron
_Type Locality._—St. Félicien, Lake St. John County, Quebec, Canada. _Range._—From Moisie Bay (long. 66° W.), north shore of Gulf of St. Lawrence, Lake St. John and Lake Mistassini in Quebec west to Kapuskasing (long. 83° W.), Ontario; intergrading with _lysteri_ in southern Quebec and northeast of Lake Superior, and with _rufescens_ in southwestern Ontario.

Tamias striatus lysteri (Richardson) *
1829. Sciurus (Tamias) lysteri Richardson, Fauna Boreali-Americana; ..., vol. 1, p. 181, June 1829.
_Type Locality._—Penetanguishene, Georgian Bay, Ontario, Canada. _Range._—From central Ontario near northeastern end of Lake Superior eastward through Quebec south of St. Lawrence River (including Gaspé Peninsula), New Brunswick, Prince Edward Island and Nova Scotia to Cape Breton Island; southward through New England and New York (except southeastern part) and in higher Alleghenies to northwestern Maryland.

Tamias striatus fisheri A. H. Howell†*
_Type Locality._—Merritts Corners, 4 miles east of Ossining (Sing Sing), Westchester County, N. Y. _Range._—Middle Atlantic States, from lower Hudson River Valley, N. Y., south to Virginia and West Virginia.

_Genus_ EUTAMIAS † Trouessart

RODENTIA: SCIURIDAE

Subgenus NEOTAMIAS \(^{74}\) A. H. Howell  (western chipmunks)


\[alpinus\]—group

**Eutamias alpinus** (Merriam) \(\dagger\)*


_Type Locality._—Big Cottonwood Meadows, just south of Mount Whitney, Sierra Nevada, Inyo County, Calif. Altitude, 10,000 feet. _Range._—Highest parts of crest and principal western spurs of Sierra Nevada, in central California, from Mount Conness, Tuolumne County, south to Olancha Peak. Westernmost records of occurrence are Mount Hoffmann, Mount Clark, Horse Corral Meadows, and Mineral King; easternmost records are Warren Fork of Leevining Creek, Mono Pass, Onion Valley, and Little Cottonwood Creek; zonal range, Hudsonian and Arctic-Alpine; locally Canadian (Johnson, Univ. California Publ. Zool., vol. 48, No. 2, p. 73, Dec. 24, 1943).

\[minimus\]—group

**Eutamias minimus minimus** (Bachman) *


**Eutamias minimus silvaticus** White*


_Type Locality._—Three miles northwest of Sundance, Crook County, Wyo. Altitude, 5,900 feet. _Range._—Bear Lodge Mountains in northeastern Wyoming and Black Hills of South Dakota.

**Eutamias minimus pictus** (J. A. Allen) \(\dagger\)*


Type Locality.—Kelton, Box Elder County, Utah. Range.—Dry lower portions of Quaternary Lake Bonneville Basin, Utah, westward to Pine Canyon, 6,600 feet altitude, Box Elder County (Hall and Hatfield, loc. cit.) and in Idaho, north of Snake River north to Lemhi and Pahsimeroi Valleys and west along north side of Snake River at least to Nampa, Canyon County (Davis, The Recent mammals of Idaho, p. 210, Apr. 5, 1939).

Eutamias minimus scrutator Hall and Hatfield*†


Type Locality.—Near Blanco Mountain, White Mountains, Mono County, Calif. Altitude, 10,500 feet. Range.—Southwestern Idaho, south of Snake River and east to about Twin Falls (Davis, The Recent mammals of Idaho, p. 213, Apr. 5, 1939); Nevada, except southern part (Hall, Mammals of Nevada, p. 329, July 1, 1946); and eastern and central Oregon; north to central Washington; west to Klamath Lake, Oregon; northeastern and central eastern parts of California, except near Lake Tahoe, and mainly east of Cascade-Sierran Divide, south to southeastern Tulare County (Chimney Meadow) and Mazourka Canyon, Inyo Mountains, and west to Mount Hebron, Siskiyou County; zonal range, Upper Sonoran; vertical range, 2,000 feet (Yakima County, Wash.) to 10,500 feet (Johnson, Univ. California Publ. Zool., vol. 48, No. 2, p. 79, Dec. 24, 1943).

Eutamias minimus grisescens A. H. Howell†*


Type Locality.—Farmer, Douglas County, Wash. Range.—Coulee region of eastern Washington, east of Columbia River; south to Pasco.

Eutamias minimus caryi Merriam†*


Type Locality.—Medano Ranch, 15 miles northeast of Mosca, San Luis Valley, Alamosa County, Colo. Range.—San Luis Valley; limits of range unknown. Zonal range, Upper Sonoran.

Eutamias minimus pallidus (J. A. Allen)†*


Type Locality.—Camp Thorne, near present town of Glendive, Yellowstone River, Dawson County, Mont. Range.—Plains region of eastern Montana, northern and eastern Wyoming, western North Dakota, western South Dakota, and extreme northwestern Nebraska; north to Missouri River in Montana; east to Missouri River in North Dakota; south to valley of North Platte in eastern Wyoming and to Wind River Basin in western Wyoming; west to Meagher and Sweet Grass Counties, Mont., and to foothills of Wind River Mountains, Wyo. Zonal range, Upper Sonoran and Lower Transition; vertical range, 4,500 to 7,500 feet altitude.

**Eutamias minimus cacodemus** Cary†*


Type Locality.—Sheep Mountain, Big Bad Lands, Fall River County, S. Dak. Range.—Badlands of Cheyenne River in southwestern South Dakota. Zonal range, Upper Sonoran.

**Eutamias minimus confinis** A. H. Howell†*


Type Locality.—Head of Trapper Creek, west slope of Bighorn Mountains, Bighorn County, Wyo. Altitude, 8,500 feet. Range.—Upper slopes of Bighorn Mountains (7,000 to 10,500 feet).

**Eutamias minimus consobrinus** (J. A. Allen) †*


Type Locality.—Parleys Canyon, Wasatch Mountains, near former site of Barclay, Salt Lake County, Utah. Range.—North-central Arizona (Kaibab Plateau) north through southwestern (Long, Journ. Mamm., vol. 21, No. 2, p. 175, May 16, 1940) and central Utah to northeastern and northern Utah (Stanford, Journ. Mamm., vol. 12, No. 4, p. 359, Nov. 11, 1931); northwestern Colorado, east to Grand and Gunnison Counties and south to Sapinero; south-central and northwestern Wyoming, east to Wind River Mountains; mountainous areas in extreme southeastern Idaho north of Bear Lake County (Davis, The Recent mammals of Idaho, p. 213, Apr. 5, 1939); and Beartooth Mountains, southern Montana. Zonal range, Transition and Canadian; vertical range, 6,200 feet (Meeker, Colo.) to 11,800 feet (La Sal Mountains, Utah).
Eutamias minimus operarius Merriam† *


Type Locality.—Gold Hill, Boulder County, Colo. Altitude, 7,400 feet.
Range.—Mountains of southern and eastern Colorado, northern New Mexico, and southeastern Wyoming; north to Laramie and Casper Mountains, Wyo.; south to Pecos River and Gallinas Mountains, N. Mex.; and southeastern Utah south of Green and Colorado rivers (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 38, Feb. 15, 1951). Zonal range, Transition and Canadian; vertical range, 6,500 to 13,300 feet altitude.

Eutamias minimus atristriatus V. Bailey† *


Type Locality.—Penasco Creek, Sacramento Mountains, 12 miles east of Cloudcroft, Otero County, N. Mex. Range.—Sacramento Mountains, southern New Mexico. Zonal range, Transition; vertical range, 7,000 to 8,000 feet altitude.

Eutamias minimus arizonensis A. H. Howell† *


Type Locality.—Prieto Plateau, at south end of Blue Range, Greenlee County, Ariz. Range.—White Mountains and Prieto Plateau, eastern Arizona. Zonal range, Canadian; vertical range, 3,000 to 11,280 feet altitude.

Eutamias minimus oreocetes Merriam† *


Eutamias minimus selkirki Cowan


Type Locality.—Paradise Mine, near Toby Creek, 19 miles west of Invermere, Purcell range, southeastern British Columbia, Canada. Range.—Known from vicinity of type locality only.
Eutamias minimus borealis (J. A. Allen) *


*Range.*—Interior Canada, from southern Mackenzie (Fort Simpson and Great Slave Lake) south over northeastern British Columbia to Banff and Eagle Butte, Alberta, southern Saskatchewan, southeastern Manitoba (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 114, Jan. 24, 1947) and northern North Dakota (Turtle Mountains); west to Tatlatui Lake at head of Finlay branch of Peace River and Babine Mountains, northern British Columbia; also isolated colonies in Black Hills of South Dakota, Bear Lodge Mountains of Wyoming and the Big Snowy, Bear Paw, and other ranges in central Montana. Zonal range, Canadian and Transition (Black Hills, S. Dak.).

Eutamias minimus hudsonius Anderson and Rand*


*Type Locality.*—Bird (Mile 349), Hudson Bay Railway, northern Manitoba, Canada. *Range.*—Northern Manitoba, intergrading with *borealis* in vicinity of The Pas, in western Manitoba. Probably occurs in extreme northwestern Ontario and northeastern Saskatchewan, Canada.

Eutamias minimus caniceps Osgood†*


*Type Locality.*—Lake Laberge, Yukon, Canada. *Range.*—Southern Yukon, southwestern Mackenzie, and northwestern part of British Columbia east of Coast Range; north to Macmillan River, Yukon; east to Nahanni River Mountains, Mackenzie District; south to head of south fork of Stikine River and to near head of Ispatseeza River, northern British Columbia; west to Lake Bennett, northwestern British Columbia and Lake Laberge, southwestern Yukon. Zonal range, Canadian.

Eutamias minimus neglectus (J. A. Allen) *


_Type Locality._—Mouth of Montreal River, eastern end of Lake Superior, Ontario, Canada. _Range._—From southeastern Manitoba (Caddy Lake, Sandilands Forest Reserve, Vivian) across Ontario probably to Lake Abitibi, north at least to Lake Seul and Kapuskasing; southward into northern Michigan, Wisconsin, and northeastern Minnesota, intergrading with borealis in southern Manitoba and probably with hudsonius in northwestern Ontario (Anderson, loc. cit.).

_amoenus_—group

Eutamias amoenus amoenus (J. A. Allen) †*  

_Type Locality._—Fort Klamath, Klamath County, Oreg. _Range._—Central and eastern Oregon (except on deserts and in Blue Mountains), north to Columbia River; in Idaho, mountainous areas south of main Salmon River east to Lemhi Mountains; also, in mountains south of Snake River desert east to Swan Lake, Bannock County (Davis, The Recent mammals of Idaho, p. 216, Apr. 5, 1939); south to Pine Canyon, 6,000 feet, Raft River Mountains, Box Elder County, northwestern Utah (Hall, Univ. California Pub. Zool., vol. 37, No. 1, p. 3, Apr. 10, 1931) and to north-central Elko County and northwestern Washoe County, Nev. (Hall, Mammals of Nevada, p. 334, July 1, 1946); and in mountains of northeastern California, including Cascade-Sierran Divide north of Feather River, Modoc Lava Beds region, and Warner Mountains (Johnson, Univ. California Publ. Zool., vol. 48, No. 2, p. 85, Dec. 24, 1943). Zonal range, Transition and Canadian; vertical range, 4,000 to 9,000 feet altitude.

Eutamias amoenus celeris Hall and Johnson*  
_Type Locality._—Near head of Big Creek, Pine Forest Mountains, Humboldt County, Nev. Altitude, 8,000 feet. _Range._—Transition Zone and higher parts of Pine Forest Mountains in northern Humboldt County.

Eutamias amoenus cratericus Blossom*  
_Type Locality._—Grassy Cone, Craters of the Moon National Monument, 26 miles southwest of Arco, Butte County, Idaho. Altitude, 6,000 feet. _Range._—
Lava beds in and near Craters of the Moon National Monument, Snake River Plains, south-central Idaho.

**Eutamias amoenus ochraceus** A. H. Howell†


**Eutamias amoenus monensis** Grinnell and Storer*


**Eutamias amoenus luteiventris** (J. A. Allen)†

*Type Locality.*—“Chief Mountain Lake” [=Waterton Lake], Alberta (3½ miles north of the U. S.—Canada boundary). *Range.*—Rocky Mountain region of southwestern Alberta, north to Bow River Valley (Banff); south-central and southeastern British Columbia, north to Kinbasket Lake on west slope of Rocky Mountains and west-southwest through mountains to North Thompson River near Kamloops, the Monashee Range on east side of Okanagan Valley, and Revelstoke (Cowan, Proc. Biol. Soc. Washington, vol. 59, p. 108, Oct. 25, 1946); southeast through east side of Kootenay River to extreme northeastern Washington, western Montana (east to Highwood and Crazy Mountains) and northwestern Wyoming (east to Shoshone Range and south to Salt River Mountains); in Idaho along Idaho-Montana and Idaho-Wyoming boundaries south to Caribou County and westward across Idaho mainly north of Salmon River (Davis, The Recent mammals of Idaho, p. 220, Apr. 5, 1939). *Zonal range, Transition and Canadian; vertical range, 4,000 feet (Waterton Lakes, Alberta) to 10,000 feet (Teton Mountains, Wyo.).

**Eutamias amoenus albiventris** Booth†

*Type Locality.*—Wickiup Spring, 23 miles west of Anatone, on the Asotin–Garfield County boundary, Wash. *Range.*—Blue Mountains of Washington and
Oregon; found in Asotin, Columbia, Garfield, and Walla Walla Counties, Wash., and Baker, Union, Umatilla, and Wallowa Counties, Oreg.; southern limit of range not determined.

**Eutamias amoenus vallicola** A. H. Howell†*


*Type Locality.*—Bass Creek, near Stevensville, Ravalli County, Mont. Altitude, 3,725 feet. *Range.*—Known only from Bitterroot Valley, Mont., and foothills on each side. Zonal range, Transition; vertical range, 3,000 to 4,500 feet altitude.

**Eutamias amoenus canicaudus** Merriam†*


**Eutamias amoenus affinis** (J. A. Allen) *


*Type Locality.*—Ashcroft, British Columbia, Canada. *Range.*—Interior of southern British Columbia, north to Clinton, Kamloops and Salmon Arm, and east to Okanagan Lake and Midway (Cowan, Proc. Biol. Soc. Washington, vol. 59, p. 109, Oct. 25, 1946); west to Lillooet, British Columbia; south through eastern slopes of Cascade Range in Washington to Columbia River and east to eastern Okanagan County. Intergradation between *affinis* and *luteiventris* takes place in region of Monashee Range on eastern side of Okanagan Valley (Cowan, op. cit., p. 108). Zonal range, Transition; vertical range, 1,000 feet (Oroville, Wash.) to 6,500 feet (Okanogan County, Wash.).

**Eutamias amoenus septentrionalis** Cowan*


*Type Locality.*—Ootsa Lake Post Office, north shore of Ootsa Lake, British Columbia, Canada. *Range.*—Great plateau area constituting western Cariboo and Chilcotin Districts, west of Fraser River, in west-central British Columbia;
north at least to Babine Lake and Hazelton; south at least to Chezacut Lake; and west to seacoast at head of certain inlets (Dean and Bella Coola Inlets).

**Eutamias amoenus ludibundus** Holister†*


_Type Locality._—Yellowhead (or Cowdung) Lake, British Columbia, Canada. Altitude, 3,700 feet. _Range._—Extreme west-central Alberta (head of Smoky River and Athabaska Valley near Jasper to Kicking Horse Pass); west slope of Rocky Mountains in vicinity of Robson to valley of Fraser River near Quesnel and thence south through eastern Cariboo district to Canim Lake and Lac la Hache, British Columbia (Cowan, Proc. Biol. Soc. Washington, vol. 59, p. 110, Oct. 25, 1946); southward through Lillooet district, British Columbia, and on both slopes of Cascades as far as central Oregon. _Zonal range, Canadian._

**Eutamias amoenus felix** (Rhoads) *


_Type Locality._—Church Mountain, Mount Baker Range, New Westminster district, British Columbia, Canada, near international boundary line. Altitude, 7,000 feet. _Range._—Coast region, from Mount Baker Range, northwestern Washington near United States–Canada boundary, north to Fawn Bluff and Purcell Point on Bute Inlet, southern British Columbia (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 116, Jan. 24, 1947). _Zonal range, Canadian and Transition; vertical range, sea level to 7,000 feet altitude._

**Eutamias amoenus caurinus** Merriam†*


**Eutamias panamintinus panamintinus** (Merriam) †*


Type Locality.—Johnson Canyon [more exactly, near lower edge of piñon belt at about 5,000 feet altitude, in vicinity of Hungry Bills' Ranch as shown on U. S. Geol. Surv. Ballarat Quadrangle, March 1913], Panamint Mountains, Inyo County, Calif. Range.—In California, east side of Sierra Nevada from Rock Creek south to 5 miles southwest of Olanchar; high country at head of Owens Valley (Benton and Antelope Peak); White Mountains and Inyo Mountains, south to Mazourka Canyon; Grapevine, Panamint, Coso, and Argus Ranges; Clark Mountain and Mescal Range; Providence Mountains (including New York Mountains) from vicinity of Ivanpah south to Granite Mountains (Johnson, Univ. California Publ. Zool., vol. 48, No. 2, p. 93, Dec. 24, 1943); in Nevada, piñon—juniper areas along southwestern border of State from Douglas County south to Potosi Mountain at lat. 36° N. (Hall, op. cit., p. 336).

Eutamias panamintinus acrus Johnson


Type Locality.—Near (1.4 miles southeast of) Horse Spring, Kingston Range, northeastern San Bernardino County, Calif. Altitude, 5,000 feet. Range.—Restricted to Kingston Range, in northeastern San Bernardino County.

*quadrivittatus*—group

Eutamias quadrivittatus quadrivittatus (Say)*


Type Locality.—On Arkansas River, about 26 miles below Canyon City, in Pueblo County, Colo. (See Merriam, Proc. Biol. Soc. Washington, vol. 18, p. 163, June 29, 1905.) Range.—Mountains and foothills of central Colorado and northern New Mexico; north to Estes Park, east to Tucumcari, N. Mex., and Kenton, Okla.; south to Manzano Mountains; west to Chuska Mountains, N. Mex., Silverton and Sapinero, Colo. Zonal range, Transition and Canadian; vertical range, 5,000 to 10,800 feet.

Eutamias quadrivittatus hopiensis Merriam†*


_Type Locality._—Keams Canyon, Painted Desert, Navajo County, Ariz. Range.—Northeastern Arizona; yellow pine forests of Chuska Mountains, mesas and canyon rims of San Juan Valley, and Jicarillo Indian Reservation in northwestern New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 84, Mar. 1. 1932); southeastern Utah (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, pp. 44–45, Feb. 15, 1951), and western Colorado; north to White River, Colorado; east to Eagle and western Gunnison Counties, Colo.; south to Keams Canyon, Ariz.; west to Keams Canyon, Ariz., and Bluff City, Utah (probably to Colorado and Green Rivers). Zonal range, Transition; vertical range, 4,500 to 7,000 feet.

**Eutamias quadrivittatus inyoensis** Merriam†


_Type Locality._—White Mountains near head of Black Canyon, Inyo County, Calif. Altitude, about 9,000 feet. Range.—Higher mountains of the Great Basin in eastern California and Nevada; in California, near crest of Sierra Nevada, from Mammoth Pass, Mono County, south to Cirque Peak, Inyo and Tulare Counties; and White Mountains in Mono County south to head of Black Canyon, Inyo County; and Inyo Mountains, Inyo County (Johnson, Univ. California Publ. Zool., vol. 48, No. 2, p. 95, Dec. 24, 1943); in Nevada, Transition Zone and higher in White Mountains of Esmeralda County, and in isolated mountain ranges of central part of State from Desatoya Range eastward and from Ruby Mountains southward to Kawich Mountains and Irish Mountain (Hall, Mammals of Nevada, p. 341, July 1, 1946); and in extreme western Utah in Deep Creek and Raft River Mountains (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 6, p. 145, Aug. 10, 1952).

**Eutamias quadrivittatus nevadensis** Burt


_Type Locality._—Hidden Forest. Sheep Mountains, Clark County, Nev. Altitude, 8,500 feet. Range.—Sheep Mountains, Clark County, in yellow pine, fir, and bristlecone pine associations at an altitude of 8,500 feet and possibly higher. Zonal range, Transition and higher.

**Eutamias quadrivittatus umbrinus** (J. A. Allen) †*


_Type Locality._—Black Fork, Uinta Mountains, Utah. Altitude, 9,500 feet. Range.—Uinta and Wasatch Mountains in northeastern Utah and southwestern...
Wyoming; also mountains of western Wyoming (Salt River, Teton, Wind River, Absaroka, and other Ranges); and Big Hole Mountains east of Idaho Falls and Wasatch, or Bear River, Range in southeastern Idaho (Davis, The Recent mammals of Idaho, p. 224, Apr. 5, 1939); north to Beartooth Mountains, Mont.; southern limits not definitely known. Zonal range, Canadian; vertical range, 7,000 to 11,000 feet.

**Eutamias quadrivittatus adsitus J. A. Allen**


1929. *Eutamias adsitus* A. H. Howell, North Amer. Fauna No. 52, p. 93, Nov. 30, 1929. (Regarded as most nearly related to *umbrinus*.)


**Eutamias speciosus speciosus** (Merriam) †*


**Eutamias speciosus frater** (J. A. Allen) *


**Eutamias speciosus sequoiensis** A. H. Howell†*


Type Locality.—Mineralking, east fork of Kaweah River, Tulare County, Calif. Altitude, 7,300 feet. Range.—Southern Sierra Nevada, on west slope, from Kings River Canyon south to Cannell Meadow and Taylor Meadow, southern Tulare County, and on east slope near headwaters of Cottonwood Creek, Inyo County; intergrades with frater in northeastern Fresno County, Calif. (Johnson, Univ. California Publ. Zool., vol. 48, No. 2, p. 106, Dec. 24, 1943).

Eutamias speciosus callipeplus (Merriam)†*


Type Locality.—Summit of Mount Pinos, Ventura County, Calif. Altitude, 8,800 feet. Range.—Summit and upper slopes of Mount Pinos. Zonal range, Canadian and high Transition.

Eutamias palmeri Merriam†*


Type Locality.—Charleston Peak, Clark County, Nev. Altitude, 8,000 feet. Range.—Known from Charleston Peak only. Zonal range, Transition and higher; vertical range, 7,000 to 12,000 feet.

Eutamias ruficaudus ruficaudus A. H. Howell†*


Type Locality.—Upper St. Marys Lake, Glacier County, Mont. Range.—Eastern slopes of Rocky Mountain divide in western Montana from Deer Lodge County north through Glacier National Park to Canadian boundary; in Canada occurs abundantly at higher levels of Waterton Lakes National Park, in extreme southwestern corner of Alberta, as well as on western side of British Columbia—Alberta boundary in same region (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 116, Jan. 24, 1947). Zonal range, Canadian; vertical range, 4,000 to 8,000 feet.

Eutamias ruficaudus simulans A. H. Howell†*


Eutamias cinereicollis cinereicollis (J. A. Allen)†*


*Type Locality.*—San Francisco Mountain, Coconino County, Ariz. *Range.*—Mountain and plateau region of central Arizona from San Francisco Mountains southward across Mogollon Plateau to White Mountains and Prieto Plateau; east to San Francisco Range, N. Mex. Zonal range, Canadian; vertical range, 6,500 to 11,500 feet.

**Eutamias cinereicollis cinereus** V. Bailey†*


*Type Locality.*—Magdalena Mountains, Socorro County, N. Mex. *Range.*—Mountains of southwestern New Mexico (Magdalena, San Mateo, Mimbres, and Mogollon Ranges). Zonal range, Transition and Canadian; vertical range, 6,700 to 10,000 feet.

**Eutamias cinereicollis canipes** V. Bailey†*


*Type Locality.*—Guadalupe Mountains, El Paso County, Tex. *Range.*—Mountains of southeastern New Mexico and western Texas (Jicarilla, Capitan, White, and Guadalupe Mountains). Zonal range, Canadian and Transition; vertical range, 7,000 to 12,000 feet.

**Eutamias bulleri bulleri** (J. A. Allen) *


*Type Locality.*—Sierra de Valparaiso, Zacatecas, México. *Range.*—Southern end of Sierra Madre, in Zacatecas. Zonal range, Transition; vertical range, 8,000 to 8,700 feet.

**Eutamias bulleri durangae** J. A. Allen *


*Type Locality.*—Arroyo de Bucy, northwest Durango, México. *Range.*—Sierra Madre of México from southern Durango north to southern Chihuahua. Zonal range, Transition; vertical range, 6,500 to 8,500 feet.

**Eutamias bulleri solivagus** A. H. Howell†*


*Type Locality.*—Sierra Guadalupe, Coahuila, México. *Range.*—Known from type locality only. Zonal range, Transition; vertical range, 8,500 to 9,500 feet.
**Eutamias townsendii group**

**Eutamias townsendii townsendii** (Bachman) *


**Eutamias townsendii cooperi** (Baird) †*


*Type Locality.*—Klickitat Pass, Cascade Mountains, Skamania County, Wash. Altitude, 4,500 feet. (See Cooper, Amer. Nat., vol. 2, p. 531, December 1868.)

*Range.*—Cascade Range (both slopes) in Washington and Oregon and higher parts of Olympic Mountains, Wash.; north to southwestern British Columbia (near Hope); south in Cascades to Three Sisters, Oreg., and in western Oregon to southern Douglas County (Glendale); east to Lake Chelan and Wenatchee, Wash., west to Reston, Oreg. Zonal range, Canadian; vertical range, 1,100 feet (Lake Chelan) to 6,500 feet.

**Eutamias townsendii ochrogenys** Merriam†*

Type Locality.—Mendocino, Mendocino County, Calif. Range.—Coastal region of southwestern Oregon and northwestern California, from Port Orford, Oreg., south to Freestone, Sonoma County, Calif. Zonal range, Transition; vertical range, sea level to 2,700 feet altitude.

Eutamias townsendii siskiyou A. H. Howell†*

Type Locality.—Near summit of White Mountain, Siskiyou Mountains, Siskiyou County, Calif. Altitude, 6,000 feet. Range.—In Siskiyou Mountain region of southern Oregon north to southern Douglas County (west base of Three Sisters); in California, three discontinuous areas, including seaward slopes and higher parts of Siskiyou, Marble, and South Fork Mountains of eastern Del Norte and Humboldt and western Siskiyou Counties; intergrading toward west with ochrogenys and toward east with senex (Johnson, Univ. California Publ. Zool., vol. 48, No. 2, p. 115, Dec. 24, 1943). Zonal range, Canadian.

Eutamias townsendii senex (J. A. Allen) †*

Type Locality.—Summit of Donner Pass, Placer County, Calif. Altitude, 7,100 feet. Range.—Central and southern Oregon, including crest, eastern slope, and forested areas immediately east of Cascade Range, north to 20 miles west of Warm Springs and east of Arnold Ice Cave and Warner Mountains; in extreme western Nevada, small area along east shore of Lake Tahoe; in California, mountains of northeastern part of State, including western part of Salmon–Scott Range, Yolla Bolly Range, Snow Mountain, Warner Mountains, Cascade Range, and Sierra Nevada south at least to Shaver Lake, Fresno County (Johnson, Univ. California Publ. Zool., vol. 48, No. 2, p. 115, Dec. 24, 1943).

Eutamias quadrimaculatus (Gray) *

Type Locality.—East of Michigan Bluff, Placer County, Calif. Range.—In California, Sierra Nevada, from vicinity of Lake Almanor, Plumas County, south to vicinity of Bass Lake, Madera County; in Nevada, on eastern shore of Lake Tahoe (Johnson, Univ. California Publ. Zool., vol. 48, No. 2, p. 119, Dec. 24, 1943). Zonal range, Transition and Lower Canadian; vertical range, 3,200 to 7,500 feet.

Eutamias sonomae sonomae Grinnell*


**Type Locality.**—One mile west of Guerneville, Sonoma County, Calif. **Range.**—Inner coastal region of northern California, from Klamath River south to Sonoma, Napa, and Solano Counties; north to Seiag Valley, vicinity of Yreka, and 1½ miles southwest of Edgewood; east to 1 mile south of Weed, Dana, east side of South Yolla Bolly Mountain, Fouts Springs, Rumsey, and 3 miles west of Vacaville; south to Vacaville, Eldridge, and Freestone; west to 7 miles west of Cazadero, Christine, Briceland, and Horse Mountain (Johnson, Univ. California Publ. Zool., vol. 48, No. 2, p. 125, Dec. 24, 1943).

**Eutamias sonomae alleni** A. H. Howell†


**Type Locality.**—Inverness, Marin County, Calif. **Range.**—Restricted to Marin County, Calif., where it is known to range from near Muir Woods north to Nicasio and northwest, on Point Reyes peninsula, to 5 miles west of Inverness (Johnson, Univ. California Publ. Zool., vol. 48, No. 2, p. 126, Dec. 24, 1943).

**Eutamias merriami merriami** (J. A. Allen) *


**Type Locality.**—San Bernardino Mountains [due north of San Bernardino], San Bernardino County, Calif. Altitude, 4,500 feet. **Range.**—In California, Coast Ranges from areas of intergradation with *pricei* in southern Santa Cruz and Santa Clara Counties and Monterey County south on both sides of Salinas Valley to mountains of northern Ventura County; west flank of Sierra Nevada from vicinity of Columbia, Tuolumne County, south to Tulare County; mountains of southwestern California from Mount Pinos through San Gabriel and San Bernardino Ranges at least to Barkers Dam in the Little San Bernardino Mountains, and San Jacinto and Santa Rosa Mountains and mountains of central San Diego County south at least to north end of Nachoguero Valley, in Baja California near California boundary (Johnson, Univ. California Publ. Zool., vol. 48, No. 2, p. 133, Dec. 24, 1943).
Eutamias merriami pricei (J. A. Allen) *


1899. *Eutamias merriami pricei* Trouessart, Catalogus Mammalium ..., fasc. 6 (Appendix), p. 1312 (received June 1899).

*Type Locality.*—Portola, San Mateo County, Calif. *Range.*—Two distinct areas in California; mountains of San Mateo, Santa Cruz, and western Santa Clara Counties, from vicinity of Menlo Park south to Santa Cruz; northern part of Santa Lucia Mountains, from Palo Colorado Canyon south at least to Partment Point and east to include Santa Lucia Peak; both populations intergrade toward southeast with *merriami* (Johnson, Univ. California Publ. Zool., vol. 48, No. 2, p. 132, Dec. 24, 1943).

Eutamias merriami kernensis Grinnell and Storer *


Eutamias merriami obscurus (J. A. Allen) †*


*Type Locality.*—Sierra San Pedro Mártir, Baja California, México. *Range.*—Sierra San Pedro Mártir and Hanson Laguna Mountains, northern Baja California. Zonal range. Transition; vertical range, 7,000 to 8,500 feet.

Eutamias merriami meridionalis Nelson and Goldman†*


*Type Locality.*—Aguaje de San Esteban, about 25 miles northwest of San Ignacio, Baja California, México. *Range.*—Known only from type locality and from San Pablo, Baja California. Zonal range, Lower Sonoran [probably also Upper Sonoran]; vertical range, 1,000 to 1,200 feet.

Eutamias dorsalis dorsalis (Baird) †*


Type Locality.—Fort Webster (copper mines), on the Gila River, near present site of Santa Rita, Grant County, N. Mex. (See V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 91, Mar. 1, 1932.) Range.—Plateau region of Arizona south of Grand Canyon; western New Mexico; south in Sierra Madre to northwestern Durango; east in New Mexico to Rio Grande Valley; west in Arizona to Hualpai Mountains; north to Grand Canyon and Fort Defiance, Ariz. Zonal range, Upper Sonoran; vertical range, 2,500 feet (Ray, Ariz.) to 10,000 feet in Graham Mountains and Santa Catalina Mountains.

Eutamias dorsalis carminis Goldman†*


Type Locality.—Sierra del Carmen, Coahuila, México. Altitude, 7,400 feet. Range.—Known only from type locality in high mountains of northern Coahuila.

Eutamias dorsalis utahensis Merriam‡*


Type Locality.—Ogden, Weber County, Utah. Range.—Northwestern Arizona, north of Grand Canyon; along eastern border of Nevada from Cedar Basin to Mount Moriah (Hall, Mammals of Nevada, p. 349, July 1, 1946); Utah; north to juniper-covered hills east of Raft River Valley in southern Idaho; southwestern Wyoming (Green River Valley) and northwestern Colorado (Snake River Valley). Zonal range, Upper Sonoran; vertical range, 3,000 to 7,000 feet altitude.

Eutamias dorsalis grinnelli Burt


Type Locality.—Mormon Well, Sheep Mountains, Clark County, Nev. Altitude, 6,500 feet. Range.—Among piños and junipers in northeasternmost township of Nevada southward to Sheep Mountains, and in central part of State westward to Toyabe Mountains (Hall, Mammals of Nevada, p. 348, July 1, 1946).

Genus SCIURUS Linnaeus (squirrels)
1758. Sciurus Linnaeus, Systema naturae, ed. 10, vol. 1, p. 63. (Type, Sciurus vulgaris Linnaeus.)

Subgenus NEOSCIURUS 76 Trouessart


Sciurus carolinensis \textsuperscript{76} carolinensis Gmelin (gray squirrels)\textsuperscript{*}


(Near Tuckerton, near Little Egg Harbor, Ocean County, N. J.)


Sciurus carolinensis extimus Bangs\textsuperscript{*}


Sciurus carolinensis matecumbei H. H. Bailey\textsuperscript{*}


Type Locality.—Key Largo, Monroe County, Fla. Range.—Known from type locality only.

Sciurus carolinensis fuliginosus Bachman\textsuperscript{*}


Sciurus carolinensis hypophaeus Merriam†*


Sciurus carolinensis pennsylvanicus Ord*


Sciurus deppei deppei Peters*


Type Locality.—Papantla, Veracruz, México. Range.—Humid Tropical and Austral Zones from Tegucigalpa, Honduras, west, including south, central, and
northwestern Honduras (Goodwin, Bull. Amer. Mus. Nat. Hist., vol. 79, p. 153, May 29, 1942), north along mountains on both coasts of Guatemala and Chiapas to Isthmus of Tehuantepec, and thence along east coast of México to Papantla, Veracruz. Vertical range, below 6,000 feet, sporadically up to 9,000 feet.

**Sciurus deppei matagalpae** J. A. Allen


*Type Locality.*—San Rafael del Norte, Jinotega, Nicaragua. *Range.*—North-central Nicaragua.

**Sciurus deppei miravallensis** Harris


**Sciurus deppei vivax** Nelson†*


**Sciurus poasensis** † Goodwin


*Type Locality.*—Volcán Poás, Alajuela, Costa Rica. Altitude, 6,700 feet. *Range.*—Known from type locality only.

**Sciurus negligens** Nelson†*


*Type Locality.*—Altamira, Tamaulipas, México. *Range.*—Arid tropical forest of lowlands in extreme northern Veracruz, eastern San Luis Potosí, and southern half of Tamaulipas, México, below 1,000 feet.

**Sciurus aureogaster aureogaster** F. Cuvier*

1829. [Sciurus?] aureogaster F. Cuvier in É. Geoffroy-Saint-Hilaire and F. Cuvier, Histoire naturelle des mammifères, vol. 6, livr. 59, [p. 2], September

1829. (Binomial published at end of work only, vol. 7, table générale et méthodique, p. 4, 1842.)


*Type Locality.*—“California.” (Really eastern México; specimens from Altamira, Tamaulipas, México, regarded as typical. See Nelson, Proc. Washington Acad. Sci., vol. 1, p. 38, May 9, 1899.)

*Range.*—Arid tropical lowlands and adjacent mountains of southern Tamaulipas, northern Veracruz, eastern San Luis Potosi, eastern Querétaro and Puebla, northeastern Hidalgo, and thence south to border of Humid Tropical Zone in central Veracruz, and northern side of Isthmus of Tehuantepec in Oaxaca. Usually below 4,000 feet altitude, but sporadically up to over 8,000 feet in Hidalgo and Querétaro. Recorded also from Nuevo León (Hooper, Journ. Mamm., vol. 28, No. 1, p. 44, Feb. 17, 1947).

**Sciurus aureogaster hypopyrrhus** Wagler* 


*Type Locality.*—México, probably in Veracruz. *Range.*—Humid tropical forests of southern Veracruz, adjacent parts of extreme southeastern Oaxaca, Tabasco, eastern Chiapas, and perhaps extreme northwestern Guatemala, below 4,000 feet.

**Sciurus aureogaster frumentor** Nelson† 


*Type Locality.*—Las Vigas, Veracruz, México. *Range.*—Mixed pine and oak forests of Upper Austral Zone on east and north base of Cofre de Perote and adjacent eastern slope of Cordillera near Las Vigas, Veracruz. Vertical range, 6,000 to 8,000 feet.

**Sciurus poliopus poliopus** Fitzinger* 


Type Locality.—Cerro San Felipe, Oaxaca, México. Range.—Pine and oak forests of Transition and Boreal Zones on mountains north, east, and south of Valley of Oaxaca, México. Vertical range, 7,500 to 11,000 feet.

Sciurus poliopus hernandezi Nelson†*
Type Locality.—Mountains 15 miles west of Oaxaca, State of Oaxaca, México. Range.—Pine and oak forests of Transition and Boreal Zones on mountains west of Valley of Oaxaca and thence to Lower Sonoran Zone in southern Puebla and southeastern Guerrero, México.

Sciurus poliopus perigrinator Nelson†*
Type Locality.—Piaxtla, Puebla, México.

Sciurus poliopus nemoralis Nelson†*
Type Locality.—Pátzcuaro, Michoacán, México. Range.—Pine and oak forests of Transition and Boreal Zones, from Volcán de Toluca, State of México, to Nahuatzen, Michoacán. Vertical range, 7,000 to 12,000 feet.

Sciurus poliopus senex Nelson†*
Type Locality.—La Salada, 40 miles south of Uruapan, southern Michoacán, México.

Sciurus poliopus cervicalis J. A. Allen*
Type Locality.—Hacienda San Marcos, Tonila, Jalisco, México. Range.—Pine and oak forests of Upper Austral and Boreal Zones of El Nevado de Colima, Jalisco, and thence north along high mountains to Ameca, Jalisco, and east into western Michoacán. Vertical range, 6,000 to 12,000 feet; sporadically down to 4,000 feet.

Sciurus poliopus colimensis Nelson†*


*Sciurus poliopus effugius* Nelson†*


*Type Locality.*—High mountains west of Chilpancingo, Guerrero, México. *Range.*—Pine and oak forests of Transition and Boreal Zones along summit of Cordillera in southwestern Guerrero. Vertical range, 7,500 to 9,500 feet.

*Sciurus poliopus tepicanus* J. A. Allen


*Type Locality.*—Rancho Palo Amarillo, near Amatlán de Cañas, Nayarit, México. *Altitude,* 5,000 feet.

*Sciurus yucatanensis yucatanensis* J. A. Allen†*


*Type Locality.*—Mérida, Yucatán, México. *Range.*—Arid tropical forests of Peninsula of Yucatán.

*Sciurus yucatanensis baliolus* Nelson†*


*Sciurus yucatanensis phaeopus* Goodwin


*Sciurus colliae colliae* Richardson*

1839. *Sciurus colliae colliae* Richardson, in Beechey, The zoology of Captain Beechey’s voyage . . . in His Majesty’s ship Blossom . . . . p. 8.

Type Locality.—San Blas, Nayarit, México. Range.—Arid tropical lowlands and lower slopes of adjacent mountains from northern border of Nayarit south to Bay of Banderas, below 2,500 feet.

Sciurus colliae nuchalis Nelson†*

Type Locality.—Manzanillo, Colima, México. Range.—Arid tropical lowlands from border of Michoacán north along coast to Bay of Banderas, Jalisco, and inland to more heavily wooded mountains near San Sebastián, Jalisco, below 3,000 feet.

Sciurus truei Nelson†*


Sciurus sinaloensis Nelson*

Type Locality.—Mazatlán, Sinaloa, México. Range.—Arid Tropical Zone in southern and central Sinaloa, below 2,500 feet.

Sciurus nelsoni nelsoni Merriami†*

Type Locality.—Huitzilac, Morelos, México. Range.—Oak and pine forests of Transition and Boreal Zones in mountains on south and west sides of Valley of México, and south side of Valley of Toluca, in Distrito Federal and States of México and Morelos. Vertical range, 8,000 to 12,000 feet.

Sciurus nelsoni hirtus Nelson†*

Type Locality.—Tochimilco, Puebla, México. Range.—Oak and pine forests of Transition and Boreal Zones on Mounts Popocatepetl and Iztaccíhuatl, in States of México, Puebla, and Morelos. Vertical range, 8,000 to 12,000 feet.

Sciurus socialis socialis Wagner*

Type Locality.—Vicinity of Tehuantepec City, Oaxaca, México. Range.—Arid Tropical Zone lowland forests along Pacific coast from Puerto Angel, Oaxaca, south to Tonalá and Tuxtla, Chiapas, México, and up river valley to Nentón, Guatemala, below 3,000 feet.
Sciurus socialis cocos Nelson†*


*Type Locality.*—Acapulco, Guerrero, México. *Range.*—Arid Tropical Zone lowlands of Pacific coast from Acapulco, Guerrero, south to Jamiltepec, Oaxaca, below 1,500 feet.

Sciurus socialis littoralis Nelson†*


*Type Locality.*—Puerto Ángel, Oaxaca, México.

Sciurus griseoflavus griseoflavus (Gray) *


*Type Locality.*—Guatemala. *Range.*—Oak and pine forests of Transition and Boreal Zones in central and northwestern Guatemala and adjacent high mountains in southeastern Chiapas, México.

Sciurus griseoflavus chiapensis Nelson†*


*Type Locality.*—San Cristóbal, Chiapas, México. *Range.*—Pine and oak forests of Transition and Boreal Zones in mountains of central Chiapas. Vertical range, 7,500 to 9,500 feet.

Sciurus variegatoides variegatoides Ogilby*


Sciurus variegatoides bangsi Dickey*


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Sciurus variegatoides goldmani Nelson†*


Sciurus variegatoides managuensis Nelson†*


_Type Locality._—Río Managua [=Río Motagua, near Lake Izabal], Izabal, Guatemala. _Range._—Department of Izabal, and probably Zacapa, in eastern Guatemala (Harris, loc. cit.).

Sciurus variegatoides boothiae Gray*


_Type Locality._—Honduras (specimens from San Pedro Sula, Cortés, are regarded as typical by Nelson, Proc. Washington Acad. Sci., vol. 1, p. 77, May 9, 1899). _Range._—Mountains on border of central parts of Honduras and Nicaragua, and San Pedro Sula, Honduras (Harris, loc. cit.).

Sciurus variegatoides underwoodi Goldman†*


Sciurus variegatoides adolphei (Lesson) *

1842. Macrouxus adolphei Lesson, Nouveau tableau du règne animal, . . . mammifères, p. 112.


*Type Locality.*—Realejo, Chinandega, Nicaragua. *Range.*—Known only from Corinto and Realejo on west coast of Nicaragua and from Volcán Chinandega (Harris, op. cit., p. 16).

**Sciurus variegatoides belti** Nelson†


*Type Locality.*—Escondido River, 50 miles above Bluefields, Zelaya, Nicaragua. *Range.*—Eastern slopes of mountains of Honduras and Nicaragua to Atlantic coast, including approximately entire eastern halves of these countries (Harris, loc. cit.).

**Sciurus variegatoides dorsalis** Gray*


*Type Locality.*—“Erroneously given as Caracas, Venezuela.” (Specimens from Libería, Guanacaste, Costa Rica, are regarded as typical by Nelson, loc. cit.) *Range.*—Southwestern Nicaragua and northwestern Costa Rica from Lake Managua to Puntarenas, and from Pacific coast eastward to summit of Sierra Tilarán, Costa Rica. In Costa Rica this form is found throughout the Province of Guanacaste (except in extreme southern end of Nicoya Peninsula) and also in northern coastal region of Province of Puntarenas south to Chomes (Harris, Univ. Michigan Mus. Zool. Misc. Publ. 38, p. 20, Sept. 4, 1937).

**Sciurus variegatoides atrirufus** Harris


**Sciurus variegatoides austini** Harris


Sciurus variegatoides rigidus Peters*


*Type Locality.—San José, San José, Costa Rica. Range.—Mountains and valleys of central Costa Rica from Puntarenas east to Juan Viñas, and from Liberia and Zarcero in the north to Cartago in the south, and possibly through Cordillera de Talamanca into Panamá (Harris, Univ. Michigan Mus. Zool. Misc. Publ. 38, p. 22, Sept. 4, 1937).

Sciurus variegatoides thomasi Nelson†


†Type Locality.—Talamanca, Limón, Costa Rica. Range.—Humid Tropical Zone forests of eastern Costa Rica, probably from border of Nicaragua to Panamá, westward in the south to Talamanca, and in the north to Santa Clara, Alajuela (Harris, loc. cit.).

Sciurus variegatoides melania (Gray)*


Sciurus variegatoides helveolus Goldman†


Subgenus HESPEROSCIURUS Nelson


Sciurus griseus griseus Ord*


*Type Locality.*—The Dalles, Wasco County, Oreg. *Range.*—In California, through Sierra Nevada and that portion of coast district north of San Francisco Bay; recorded north from Greenhorn Mountains and Kiavah Mountain, in Kern County, through Lassen and Shasta regions to Oregon line; thence westerly and south, west of Sacramento Valley and chiefly east of redwood belt, to Mount Tamalpais and vicinity, in Marin County, and near Vacaville, Solano County (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 134, Sept. 26, 1933); Transition Zone forests of western Oregon on both sides of Cascade Range (V. Bailey, North Amer. Fauna No. 55 (June), p. 117, Aug. 29, 1936); and in Washington on both sides of Cascades, from Columbia River on south northward to Lake Chelan east of mountains and to projecting fingers of Puget Sound on west side (Scheffer, Murrelet, vol. 6, No. 2, p. 40, May 1925).

*Sciurus griseus anthonyi* Mearns†*


*Sciurus griseus nigripes* Bryant*


*Type Locality.*—Coast region of San Mateo County, Calif. *Range.*—Coast belt south of San Francisco Bay, from north-central San Mateo County south to extreme northwestern San Luis Obispo County; extends east in Santa Clara County to Mount Hamilton Range (Scott Creek, etc.), but apparently absent from Mount Diablo and mountains east of Salinas Valley (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 135, Sept. 26, 1933).

*Subgenus OTOSCIURUS* Nelson


*Sciurus aberti aberti* Woodhouse†*


1852–1853), p. 220. (Substitute for *Sciurus dorsalis* Woodhouse, 1853.)


*Type Locality.*—San Francisco Mountain, Coconino County, Ariz. *Range.*—West-central New Mexico, in yellow pine zone of mountains north of Silver City, both sides of Black or Mimbres Range, east base of Mogollon Peaks, Frisco, and Datil Ranges, and Magdalena Mountains (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 68, Mar. 1, 1932); westward over plateau country of Arizona south of Grand Canyon.

*Sciurus aberti chuscensis* Goldman†*


*Type Locality.*—Chusea Mountains, McKinley County, northwestern New Mexico. *Range.*—Yellow pine forests of Transition Zone from 7,500 to 9,000 feet altitude on high mountains of northeastern Arizona and northwestern New Mexico.

*Sciurus aberti ferreus* True†*


*Type Locality.*—Loveland, Larimer County, Colo. *Range.*—Foothill districts of eastern Colorado, chiefly in yellow pines from 7,000 to 8,000 feet, as far north as near Livermore, Larimer County; thence south along foothills and Arkansas-Platte Divide north of Colorado Springs; Platte Canyon region; eastern slope of Sangre de Cristo Range as far north as Westcliffe; and reported to occur on San Luis side of Sangre de Cristo Range, and Medano and Mosca Passes (Warren, The mammals of Colorado, p. 153, 1942).

*Sciurus aberti navajo* Durrant and Kelson


*Type Locality.*—One mile east of Kigalia Ranger Station, 30 miles west of Blanding, Natural Bridges National Monument Road, San Juan County, Utah. Altitude, 8,000 feet. *Range.*—Recorded also from Verdure, east flank of Abajo Mountains, San Juan County, Utah (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 11, Feb. 15, 1951).

*Sciurus aberti minus* Merriam†*


*Type Locality.*—Hall Peak, at south end of Cimarron Mountains, Mora County, N. Mex. *Range.*—Yellow pine forests on lower slopes of San Juan and La Plata Mountains, in Conejos, Archuleta, Montezuma, and Dolores Counties, Colorado (Warren, The mammals of Colorado, p. 152, 1942); northern New Mexico in yellow pine forests of Sangre de Cristo, San Juan, and Jemez Mountains and

Sciurus aberti barberi J. A. Allen*


Type Locality.—Colonia García, Chihuahua, México. Range.—Mountains of northeastern Sonora and northwestern Chihuahua, México.

Sciurus aberti durangi Thomas*


Type Locality.—Ciudad ranch, 100 miles west of city of Durango, Durango, México. Range.—Pine forests of Transition and lower border of Boreal Zones in Sierra Madre, western Durango and Chihuahua, México. Vertical range, 7,000 to 11,000 feet.

Sciurus aberti phaeurus J. A. Allen


Type Locality.—La Cienega, northwest Durango, México. Range.—Northwestern Durango.

Sciurus kaibabensis Merriam†*


Subgenus PARASCIURUS 79 Trouessart

1880. Parasciurus Trouessart, Le Naturaliste, vol. 2, No. 37, p. 292, October 1880. (Type, Sciurus niger Linnaeus.)

Sciurus niger 80 niger Linnaeus* (fox-squirrel)

1758. [Sciurus] niger Linnaeus, Systema naturae, ed. 10, vol. 1, p. 64. (Based on Catesby’s black fox squirrel.)

1758. [Sciurus] cinereus Linnaeus, Systema naturae, ed. 10, vol. 1, p. 64 (in part; gray phase of niger).

1778. [Sciurus] vulpinus Gmelin, Caroli a Linné systema naturae ... , ed. 13, vol. 1, p. 147. (Based on fox squirrel of Lawson and cat squirrel of Pennant.)


Sciurus niger avicennia A. H. Howell†*


_Type Locality._—Everglades, Collier County, Fla. _Range._—Pine and cypress timbered tracts and mangrove swamps, from Marco Pass, Collier County, to Cape Sable and around southern end of peninsula to shore of Biscayne Bay, Dade County, on east coast.

Sciurus niger bachmani Lowery and Davis*


_Type Locality._—Ten miles northwest of Enon, Washington Parish, La. _Range._—Northern Georgia (possibly a small portion of western South Carolina), all of Alabama (except southeastern part), eastern Tennessee, Mississippi (except extreme western part), and eastern Louisiana east of Mississippi River and north of Lakes Maurepas and Pontchartrain.

Sciurus niger subauratus Bachman*


_Type Locality._—Iberville Parish, La. (restricted by Lowery and Davis, loc. cit.). _Range._—Northeastern, central-eastern, and south-central Louisiana where it is confined almost entirely to alluvial lands of Mississippi, Tensas, Ouachita, and Atchafalaya River systems (Lowery, Occ. Pap. Mus. Zool. Louisiana State Univ. No. 13, p. 240, Nov. 22, 1943); southeastern Arkansas and Yazoo River delta of northwestern Mississippi (Lowery and Davis, loc. cit.).

Sciurus niger ludovicianus Custis*


*Sciurus niger limitis* Baird†


*Sciurus niger rufiventer* É. Geoffroy-Saint-Hilaire*


1825. *Sciurus magnicaudatus* Harlan, Fauna Americana, . . . , p. 178. (Substitute name for *macroura* Say.)


**Sciurus niger vicinus** Bangs*


**Sciurus niger neglectus** (Gray)*


**Type Locality.**—Wilmington, New Castle County, Del. (see Nelson, loc. cit.). **Range.**—East of Chesapeake Bay in Delaware, Maryland, and Virginia; formerly in Chester County, Del., and Lancaster County, Pa. (E. L. Poole, loc. cit.).
Sciurus arizonensis arizonensis Coues†*
*Type Locality.—Fort Whipple, Yavapai County, Ariz. Range.—River valleys of central and southeastern Arizona and southwestern New Mexico, mainly in Upper Sonoran Zone (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 74, Mar. 1, 1932).

Sciurus arizonensis catalinae Doutt*  
*Type Locality.—Near Soldier Camp, Santa Catalina Mountains, Pima County, Ariz. Altitude, 8,000 feet. Range.—Santa Catalina Mountains, southeastern Arizona.

Sciurus arizonensis huachuca J. A. Allen*  
*Type Locality.—Huachuca Mountains, southern Arizona. Range.—Pine and oak forests of Transition Zone, in northeastern Sonora, México, and Huachuca Mountains, southern Arizona.

Sciurus apache J. A. Allen*  

Sciurus chirimahucae Goldman†*  
†Type Locality.—Cave Creek, Chiricahua Mountains, Cochise County, Ariz. Altitude, 5,200 feet. Range.—Chiricahua Mountains, southeastern Arizona.

Sciurus alleni Nelson†*  
†Type Locality.—Monterrey, Nuevo León, México. Range.—Open pecan and other forests of Lower Sonoran Zone near Monterrey, Nuevo León, extending up to oak and pine forests of Transition Zone near Victoria and Miquihuana, Tamaulipas, México. Vertical range, 2,000 to 8,500 feet. Recorded also from Ojo de Agua and Cerro Potosí, Galeana, Nuevo León (Koestner, Great Basin
Sciurus nayaritensis J. A. Allen*


*Type Locality.*—Sierra de Valparaiso, Zacatecas, México. *Range.*—Pine and oak forests of Transition Zone in Sierra Madre and outlying spurs of western Zacatecas, southern Durango, eastern Nayarit and southern Jalisco, México. Vertical range, 6,500 to 9,000 feet.

Sciurus oculatus oculatus Peters*


*Type Locality.*—México, probably near Las Vegas, Veracruz. *Range.*—Pine and oak forests of Transition and Boreal Zones in northern Puebla, western Veracruz (Cofre de Perote, Mount Orizaba), Hidalgo, and eastern Querétaro, México. Vertical range, 6,000 to 12,000 feet.

Sciurus oculatus tolucae Nelson†*


*Type Locality.*—North slope of Volcán de Toluca, State of México, México. *Range.*—Pine and oak forests of Transition and Boreal Zones on tableland slope of Sierra Madre in State of México, from Volcán de Toluca north to border of Michoacán; also arid mountains of southern and western Querétaro, central and eastern Guanajuato, and southern San Luis Potosí, México. Vertical range, 7,500 to 12,000 feet.

Sciurus oculatus shawi Dalquest*


*Subgenus GUERLINGUETUS* Gray


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Sciurus richmondi Nelson†*

*Type Locality.*—Escondido River, 50 miles above Bluefields, Zelaya, Nicaragua.

Range.—Dense Humid Tropical Zone forests of lowlands along Escondido River.

Sciurus granatensis hoffmanni Peters*


Range.—Humid Tropical Zone forests of highlands of Costa Rica.

Sciurus granatensis chiriquensis Bangs*

*Type Locality.*—Divalá, Chiriquí, Panamá.


Sciurus granatensis choco Goldman†*

*Type Locality.*—Cana (Santa Cruz de Cana), upper Río Tuyra, Darién, eastern Panamá. Altitude, 3,500 feet. Range.—Darién region, Panamá.

Sciurus granatensis morulus Bangs*
Type Locality.—Loma del León, Gatún Lake, Canal Zone, Panamá. Range.—Canal Zone.

Genus TAMIASCIURUS * Trouessart
1880. Tamiasciurus Trouessart, Le Naturaliste, vol. 2, No. 37, p. 292, October 1880. (Type, Sciurus hudsonicus Erxleben.)

Tamiasciurus hudsonicus hudsonicus (Erxleben) *


Tamiasciurus hudsonicus preblei A. H. Howell†*


Tamiasciurus hudsonicus kenaiensis A. H. Howell†*

Type Locality.—Hope, Cook Inlet, Alaska. Range.—Kenai Peninsula and base of Alaska Peninsula; south to Yakutat Bay.

Tamiasciurus hudsonicus petulans (Osgood) †*


*Tamiasciurus hudsonicus picatus* (Swarth) *


**Type Locality.**—Kupreanof Island, 25 miles south of Kake Village, at southern end of Keku Straits, southeastern Alaska. **Range.**—Mainland and islands near coast of southeastern Alaska from Lynn Canal southward along northwestern coast of British Columbia for an undetermined distance, intergrading in the north with *petulans* and in the south with *vancouverensis* (Anderson, loc. cit.). Recorded by Swarth (Journ. Mamm., vol. 2, No. 2, p. 93, May 2, 1921) from Kupreanof, Kuiu, Mitkof, Wrangell, Zarembo, Etolin, Revillagigedo, and Sergief Islands, and on adjacent mainland from mouth of Taku River south to mouth of Skeena River.

*Tamiasciurus hudsonicus vancouverensis* (J. A. Allen) *


**Type Locality.**—Duncan Station, Vancouver Island, British Columbia, Canada. **Range.**—The whole of Vancouver Island from Victoria to Cape Scott; also in typical form on some of islands northeast of Vancouver Island from outside of Bute Inlet (Small Gillard Island, Yuculta Rapids) north at least to Calvert Island; intergrading with *picatus* further north (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 121, Jan. 24, 1947.)

*Tamiasciurus hudsonicus columbiensis* A. H. Howell *


**Type Locality.**—Raspberry Creek, about 30 miles southeast of Telegraph Creek, northern British Columbia, Canada. **Range.**—Northern and central British Columbia (Alaska Highway) and southern Yukon, from vicinity of Lake Larche, Yukon, south to Chilcotin River, British Columbia, and eastward to Banff and Jasper National Parks in Rocky Mountains of western Alberta (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 118, Jan. 24, 1947).
Tamiasciurus hudsonicus streatorii (J. A. Allen) *


Tamiasciurus hudsonicus richardsonii (Bachman) *


Type Locality.—Head of Big Lost River, Custer County, Idaho. (Restricted by Merriam, North Amer. Fauna No. 5, p. 50, July 30, 1891.) Range.—Western border of northern Montana (Bitterroot and Coeur d’Alene Mountains), central and northern Idaho (Lost River, Salmon River, Pahsimeroi, and Sawtooth Mountains), west to Powder River and Blue Mountains in eastern Oregon, and Blue Mountains in southeastern Washington (Dalquest, Univ. Kansas Publ. Mus. Nat. Hist., vol. 2, p. 289, Apr. 9, 1948); northward into West Kootenay district of British Columbia east of Columbia River (Creston, Yahk, Cranbrook, Newgate, Fernie), intergrading with streatorii in vicinity of Trail and Rossland; in fairly typical form north of international boundary to Waterton Lakes National Park in extreme southwestern Alberta, intergrading with columbiaensis to the northward of Crownsnest Pass, Alberta (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 120, Jan. 24, 1947).

Tamiasciurus hudsonicus ventorum (J. A. Allen) †* 


Type Locality.—South Pass City, Wind River Mountains, Fremont County, Wyo. Range.—Southwestern Montana, northeast to Big Belt Mountains and west to Ruby Range in Madison County; western Wyoming, south through Yellowstone National Park and Absaroka and Wind River Mountains to southern Fremont County and southern Lincoln County; southeastern Idaho, west as far as Bannock Range and Malad Valley (Davis, loc. cit.); and northeastern Utah in mountains south to Mount Timpanogos, Utah County (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 15, Feb. 15, 1951).
Tamiasciurus hudsonicus wasatchensis Hardy†*


*Type Locality.*—Spruce–fir area along Skyline Drive east of Mount Nebo, Juab County near Juab-Utah County Line, Utah. Altitude, about 10,000 feet. *Range.*—Fir and spruce belts of southern Wasatch Plateau of central Utah, including Sanpete and Emery Counties as well as Mount Nebo area of Utah and Juab Counties; intergrading northward with *ventorum* of northern Wasatch Mountains.

Tamiasciurus hudsonicus dixiensis Hardy*


Tamiasciurus hudsonicus mogollonensis (Mearns)*


*Type Locality.*—Quaking Asp Settlement, between Stoneman Lake and Mormon Lake, near summit of Mogollon Mountains, Coconino County, Ariz. *Range.*—Higher mountains and plateaus of central and eastern Arizona, including Kaibab Plateau, San Francisco Mountains, Lukachukai Mountains, Mogollon Plateau, and White Mountains; western and northern New Mexico in Sangre de Cristo, Gallinas, Jemez, Manzano, Chuska, Mimbres, and Mogollon Mountains.

Tamiasciurus hudsonicus grahamensis (J. A. Allen)*


*Type Locality.*—Graham Mountains, Graham County, Ariz. *Range.*—Fir zone on summit of Graham Mountains.

**Tamiasciurus hudsonicus lychnuchus** (Stone and Rehn) *


1929. \( S[ciurus\ f[remonti] ruido\) Hatt, Roosevelt Wild Life Ann., vol. 2, No. 1, map facing p. 16, March 1929 (Lapsus calami.)


**Tamiasciurus hudsonicus fremontii** (Audubon and Bachman) *

1853. \( Sciuers\ fremontii\ Audubon and Bachman, The viviparous quadrupeds of North America, vol. 3, No. 30, pl. 149, fig. 2; text, vol. 3, p. 237.

1884. \( Sciuers\ hudsonius\ fremonti\ True, Proc. U. S. Nat. Mus., vol. 7 (App., Cir. 29), p. 595, Nov. 29, 1884.


**Tamiasciurus hudsonicus baileyi** (J. A. Allen) †*


*Type Locality.*—Bighorn Mountains, near head of Kirby Creek, Washakie County, Wyo. Altitude, 8,400 feet. *Range.*—Mountains of central Wyoming and central Montana. Its range includes Bighorn Mountains in Wyoming, and Big Snowy, Pryor, Highwood, Moccasin, and Judith Mountains in Montana, and probably other outlying pine-covered buttes and hills.

**Tamiasciurus hudsonicus dakotensis** (J. A. Allen) *

1894. \( Sciuers\ hudsonicus\ dakotensis\ J. A. Allen, Bull. Amer. Mus. Nat. Hist., vol. 6, p. 325, Nov. 7, 1894.
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RODENTIA: SCIURIDAE


Type Locality.—Squaw Creek, Black Hills, Custer County, S. Dak. Range.—Black Hills of western South Dakota, eastern Wyoming, and southeastern Montana; north and west to Musselshell County, Mont.; south in Casper, Shirley and Laramie Mountains, Wyo.

Tamiasciurus hudsonicus pallescens A. H. Howell†


Tamiasciurus hudsonicus minnesota (J. A. Allen)*


Type Locality.—Fort Snelling, Hennepin County, Minn. Range.—Most of timbered area of Minnesota outside of heavy coniferous forests of northeastern part of State, north along Red River Valley in Minnesota and eastern North Dakota to southern Manitoba; east to Wisconsin and southward locally into northern and central Iowa to a little beyond border of southern lobe of Wisconsin glacial drift area (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 119, Jan. 24, 1947).

Tamiasciurus hudsonicus regalis A. H. Howell


Type Locality.—Belle Isle, Isle Royale, Mich. Range.—Isle Royale.

Tamiasciurus hudsonicus loquax (Bangs)*


Type Locality.—Liberty Hill, New London County, Conn. Range.—In Canada principally in eastern and southern Ontario south of Ottawa River and west to Lake Nipissing and Georgian Bay; intergrading with laurentianus in southwestern Quebec (Lièvre River Valley, Labelle County), and with hudsonicus north of Ottawa River in Gatineau and Pontian Counties, and in Algonquin Park region, Ontario (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 119,

**Tamiasciurus hudsonicus ungavensis Anderson***


*Type Locality.*—Lake Waswanipi (“Woswonaby Post,” Hudson’s Bay Company), Abitibi District, Quebec, Canada, about 180 miles southeast of intersection of Quebec-Ontario boundary with James Bay. *Range.*—Wooded areas of western part of Ungava Peninsula (Quebec Nouvelle), Districts of Abitibi and Mistassini, in territory draining into Hudson Strait and east sides of Hudson and James Bays to border of extreme northeastern Ontario (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 121, Jan. 24, 1947); north to Fort Chimo, south of Ungava Bay.

**Tamiasciurus hudsonicus laurentianus** Anderson


*Type Locality.*—Lac Marchant, near Moisie Bay, Saguenay County, north shore of Gulf of St. Lawrence, Quebec, Canada. *Range.*—Laurentian region from Strait of Belle Isle, Labrador, west along north shore of Gulf of St. Lawrence and St. Lawrence River north and northwest to Lake St. John region (Quebec County) and St. Maurice River (Champlain County); intergrading with *loquax* in Lièvre River Valley (Labelle County) and with *gymnicus* south of Montreal (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 118, Jan. 24, 1947).

**Tamiasciurus hudsonicus gymnicus** (Bangs)*


Tamiasciurus hudsonicus abieticola (A. H. Howell)† *


Tamiasciurus douglasii douglasii (Bachman) *


Tamiasciurus douglasii mollipilosus (Audubon and Bachman) *


_Type Localities._—“Northern parts of California.” (Most probably somewhere in Oregon. See Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 133, Sept. 26, 1933.) _Range._—In California, northwest humid coast belt, from Freestone,
Sonoma County, north to Oregon line in Del Norte County; east to South Fork Mountain, Trinity County, and Sherwood, Mendocino County (Grinnell, loc. cit.); north into Curry County (Port Orford, Oreg., and through Cascade Mountain region of Oregon and Washington into British Columbia, including also coast region at mouth of Fraser River, and north to Rivers Inlet (about lat. 51°30' N.), about 60 miles northeast of Vancouver Island, where it meets the range of vancouverensis without intergradation (Anderson, loc. cit.).

**Tamiasciurus douglasii albolimbatus** (J. A. Allen)*


*Type Locality.*—Blue Canyon, Placer County, Calif. *Range.*—Entire Sierra Nevada north from Taylor Meadow (near Kern County line), Tulare County, and north through Lassen and Shasta regions to Oregon line; east at north to Warner Mountains, Modoc County, and west through Siskiyou and Trinity Mountains; thence south through higher, inner Coast Ranges to Sanhedrin Mountains, Mendocino County, and Snow Mountain, Colusa County, Calif. (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 134, Sept. 26, 1933); also northward in Oregon to Paulina and Maury in Crook County and eastward south of John Day River to Strawberry Mountains in Grant County (V. Bailey, North Amer. Fauna No. 55 (June), p. 123, Aug. 29, 1936).

**Tamiasciurus douglasii mearnsi** (Townsend)†*


*Type Locality.*—Sierra San Pedro Mártir, Baja California, México. Altitude, about 7,000 feet. *Range.*—Pine forest of Sierra San Pedro Mártir, Baja California, México; reported as probably occurring also in Hanson Laguna Mountains, Baja California, and in Laguna and Cuyamaca Mountains, San Diego County, Calif. (Mearns, U. S. Nat. Mus. Bull. 56, p. 264, Apr. 13, 1907).

**Genus MICROSCIURUS** J. A. Allen


**Microsciurus alfari alfari** (J. A. Allen)


Microsciurus alfari alticola Goodwin

Microsciurus alfari septentrionalis Anthony
Type Locality.—Sabalos, on Río San Juan, at junction of Río Sabalos, Rivas, Nicaragua. Range.—Low tropical forest lands of extreme south-central Nicaragua and adjacent parts of Costa Rica (Goodwin, loc. cit.).

Microsciurus alfari browni (Bangs)*

Microsciurus alfari venustulus Goldman†*
Type Locality.—Gatún, Canal Zone, Panamá. Range.—From Canal Zone eastward to Mount Tacarcuna and Cana near Colombian frontier (Goldman, Smithsonian Misc. Coll., vol. 69, No. 5, p. 143, Apr. 26, 1920).

Microsciurus boquetensis (Nelson) *

Microsciurus isthmius vivatus Goldman†*
Type Locality.—Cana (Santa Cruz de Cana), upper Río Tuyra, Darién, eastern Panamá. Altitude, 3,500 feet. Range.—Mountains near Colombian frontier (Goldman, Smithsonian Misc. Coll., vol. 69, No. 5, p. 144, Apr. 26, 1920).
Genus SYNTHEOSCIURUS Bangs


Syntheosciurus brochus Bangs


Type Locality.—Boquete, Chiriqui, Panamá. Altitude, 7,000 feet. Range.—Highlands of southwestern Panamá and probably adjacent parts of Costa Rica (Goodwin, loc. cit.).

Subfamily PTEROMYINAE (flying squirrels)

Genus GLAUCOMYS* Thomas


volans—group

Glaucomys volans volans (Linnaeus)*


Type Locality.—Virginia (see Bangs, op. cit., p. 165). Range.—In Canada found only in southern and eastern Ontario, from Essex County (Point Pelee) northward through region between St. Clair River, Lake Erie, and western end of Lake Ontario (Toronto), along part of north shore of Lake Ontario, the most northerly record being at about lat. 45° N. (Clayton) in Lanark County (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 123, Jan. 24, 1947); and from Aitkin and Stearns Counties in central Minnesota (Swanson, Minnesota Dept. Conserv. Techn. Bull. 2, p. 82, 1945), Upper and Lower Peninsulas of Michigan (Burt, Mammals of Michigan, p. 195, 1946), northern New York (Lewis County), and southern New Hampshire south to North Carolina (Raleigh), Tennessee (Nashville), northern Arkansas (Black, Journ. Mamm., vol. 17, No. 1, p. 32, Feb. 17, 1936) and the Boston Mountains in northern Oklahoma (see Blair, Amer. Midl. Nat., vol. 22, p. 113, July 1939); west to eastern Nebraska (Otoe


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


**Glaucomys volans querceti** (Bangs) *


*Type Locality.*—Citronelle, Citrus County, Fla. *Range.*—Peninsular Florida (south at least to Fort Myers) and coast region of Georgia.

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


**Glaucomys volans madrensis** Goldman†*


*Type Locality.*—Sierra Madre, Chihuahua, México. *Range.*—Sierra Madre of Chihuahua; reports suggest a range in mountains as far south as Guerrero, southwestern México.

**Glaucomys volans herreranus** Goldman†*


*Type Locality.*—Mountains of Veracruz, México. *Range.*—Known only from region of type locality where cloud forest conditions tend to prevail.

**Glaucomys volans goldenmani** (Nelson) †*


Glaucomys volans underwoodi Goodwin

*Type Locality.*—Zambrano, a village on main road to Lake Yojoa and north coast, about half way between Tegucigalpa and Comayagua, Francisco Morazán, Honduras. Altitude, 4,500 feet. *Range.*—Known from type locality only.

*Glaucomys sabrinus sabrinus* (Shaw)*


*Glaucomys sabrinus makkovikensis* (Sornborger)*


*Glaucomys sabrinus goodwini* Anderson

*Type Locality.*—Berry Mountain Camp, junction of Berry Mountain Brook and Grand Cascapedia River, Matane County, Quebec, Canada. Altitude, about 1,500 feet. *Range.*—Gaspé Peninsula, Quebec, Canada.

*Glaucomys sabrinus gouldi* Anderson*
Type Locality.—Frizzleton, Inverness County, Cape Breton Island, Nova Scotia, Canada. Range.—Province of Nova Scotia, including Cape Breton Island.

Glaucomyys sabrinus macrotis (Mearns)†*


Type Locality.—Hunter Mountain, Catskill Mountains, Greene County, N. Y. Range.—In Canada, from northern New Brunswick (Gloucester County, Miramichi Road; Madawaska County, Edmundston) through eastern counties of southeastern Quebec south of upper St. Lawrence River and southern parts of counties on north side of Ottawa River (Gatineau County, Blue Sea Lake) where it intergrades with sabrinus; west through east-central Ontario from upper St. Lawrence River to Parry Sound district and Lake Huron, reaching its southern limit about lat. 43°30' N. at altitudes over 1,000 feet in southern Ontario where its range overlaps that of volans (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 126, Jan. 24, 1947); Maine, New Hampshire, Vermont, northern Massachusetts, Boreal Zone portions of New York, northern Pennsylvania (Doutt, Journ. Mamm., vol. 11, No. 2, p. 240, May 9, 1930), Michigan (Burt, Mammals of Michigan, p. 198, 1946), and northeastern Wisconsin; west into east-central Minnesota (Swanson, Minnesota Dept. Conserv. Techn. Bull. 2, p. 82, 1945).

Glaucomyys sabrinus fuscus Miller†*


Glaucomyys sabrinus canescens A. H. Howell*  


Type Locality.—Portage la Prairie, Manitoba, Canada. Range.—In Canada, north to Poplar Point at southern end of Lake Winnipeg, Carberry, Portage la Prairie, and Treesbank, southern Manitoba (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 124, Jan. 24, 1947); timber along Assiniboine River and Moose Mountain, Saskatchewan (Soper, Journ. Mamm., vol. 27, No. 2, p. 143, May 14, 1946); Breckinridge, western Minnesota; Grafton, Pembina, and Portland in eastern North Dakota; Black Hills, S. Dak.; and Bear Lodge Mountains, Wyo.

Glaucomyys sabrinus bangsi (Rhoads) *  


**Type Locality.**—Raymond, Bear Lake County, Idaho.  

*Glaucomys sabrinus lucifugus* Hall


**Type Locality.**—Twelve miles east of Kamas, Summit County, Utah.  
**Range.**—Recorded from Uinta Mountains as far east as junction of Deep and Carter Creeks, Daggett County, and as far south as Boulder Mountain (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, pp. 102–103, Feb. 15, 1951) and Bryce National Park in Garfield County, Utah (Tanner, Great Basin Naturalist, vol. 1, p. 126, June 30, 1940).

*Glaucomys sabrinus alpinus* (Richardson) *


**Type Locality.**—Jasper House, Alberta, Canada (see A. H. Howell, loc. cit.).  
**Range.**—Rocky Mountain region of Alberta and British Columbia from vicinity of Henry House and Jasper National Park, north to Peace River and Lower Liard Crossing, on Alaska Highway; west through mountains (Bowron Lake, Stuart Lake, Babine Lake, and Ootsa Lake) of eastern Cariboo and southeastern Omineca region (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 124, Jan. 24, 1947).

*Glaucomys sabrinus yukonensis* (Osgood) ‡


**Type Locality.**—Camp Davidson, Yukon River, near Alaska–Canada boundary, Yukon, Canada.  
**Range.**—East-central Alaska from Tanana and head of Toklat River, east into Canada in Yukon River region to Camp Davidson and Fortymile (near Alaska–Yukon boundary), Mayo Lake (near head of Stewart River), Selkirk (at junction of Pelly and Lewes Rivers) and Lapie River, Canol Road, Mile

Glaucomys sabrinus zapheaeus (Osgood)†*


Glaucomys sabrinus griseifrons A. H. Howell†*


Glaucomys sabrinus oregonensis (Bachman) *


Glaucomys sabrinus columbiensis A. H. Howell†*


Glaucomys sabrinus reductus Cowan
Type Locality.—Lonesome Lake, on Atarko River, approximately lat. 52° 10' N. and long. 125° 45' W., British Columbia, Canada. Range.—Western central British Columbia from Middle Fraser River (Quesnel) west across Chilcotin Plateau (Chezacut, Anahim Lake) to Atarko River (Lonesome Lake) and Coast Range at head of Bella Coola River (Hagensborg, Nusatsum, and Stuie), and Kimsquit at head of Dean Channel (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 126, Jan. 24, 1947).

Glaucomys sabrinus fuliginosus (Rhoads) *


Type Locality.—Cascade Mountains, near Martin Station, Kittitas County, Wash. Altitude, about 8,000 feet. Range.—Southern British Columbia, north along coast to Jervis Inlet (Cowan, Proc. Biol. Soc. Washington, vol. 50, p. 78, June 22, 1937), north through Selkirk Range at least to Glacier, and along whole of international boundary region (lat. 49° N.) east of coastal belt, from west slopes of Cascades (Lihumiton Park, 4,800 feet); Vancouver district; east slope of Cascades (Princeton, 2,400 feet; Fairview-Keremos summit, 3,800 feet); Monashee Mountains (Osoyoos-Bridesville summit, 3,500 feet; Westbridge, 2,075 feet; Christina Lake, 2,366 feet; Rossland, 5,000 feet); Kootenay district (Creston, 1,800 feet; Goatfell, 2,940 feet; Yahk, Meadow Creek, 3,800 feet; Cranbrook, 3,013 feet; Newgate, 2,371–2,900 feet); Rocky Mountains (west slope, Morrissey, 3,132 feet) in British Columbia; and on eastern slope of Rocky Mountains in extreme southwestern Alberta (Waterton Lakes National Park); intergradation is shown to some extent with oregonensis on west side of Cascades, with columbiensis on Salmon River south of Shuswap Lake, and with bangsi in southeastern British Columbia and southwestern Alberta (Anderson, loc. cit.) south through Cascade Range of western Washington and Oregon to Preston Peak in western Siskiyou County, California (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 135, Sept. 26, 1933); and south to Idaho County, Idaho (Davis, The Recent mammals of Idaho, p. 234, Apr. 5, 1939), and higher mountains of northwestern Montana.

Glaucomys sabrinus olympicus (Elliot) *


Type Locality.—Happy Lake, Clallam County, Wash. Range.—Western Washington, Olympic Peninsula south to Columbia River.
Glaucomys sabrinus klanathensis (Merriam)†‡
Type Locality.—Fort Klamath, Klamath County, Oreg. Altitude, 4,200 feet.
Range.—Yellow pine forest east of Cascade Mountains, north at least to Paulina Mountains and south to Klamath region (V. Bailey, North Amer. Fauna No. 55 (June), p. 165, Aug. 29, 1936).

Glaucomys sabrinus flaviventris A. H. Howell*
Type Locality.—Bear Creek, Trinity County, Calif. Altitude, 6,400 feet.
Range.—Scott, Salmon, and Trinity Mountains, in Trinity and Siskiyou Counties; and also (not typical but intergradent toward a race in Oregon) on Warner Mountains, Modoc County, Calif. (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 136, Sept. 26, 1933).

Glaucomys sabrinus lascivus (Bangs)*
Type Locality.—Tallac, El Dorado County, Calif. Range.—Sierra Nevada, north to Old Fort Crook, Shasta County, and south to Sherman Creek, Sequoia National Park, Tulare County; vertical range from 3,000 feet at Dudley on Smith Creek, Mariposa County, up to 8,100 feet near Porcupine Flat, Yosemite National Park (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 136, Sept. 26, 1933).

Glaucomys sabrinus californicus (Rhoads)*

Glaucomys sabrinus stephensi (Merriam)†‡
Type Locality.—Sherwood, Mendocino County, Calif. Altitude, 2,500 feet. Range.—Northwest coast belt, at least from Eureka and Blocksburg, Humboldt County, and Cecilville, Siskiyou County, south to Sherwood and Dos Rios, Mendocino County, Calif. Life zone, Transition. Inhabits forest where either
Superfamily GEOMYOIDEA

Family GEOMYIDAE (pocket gophers)

Subfamily GEOMYINAE

Genus THOMOMYS* Wied-Neuwied


Subgenus THOMOMYS Wied-Neuwied

bottae—group

Thomomys bottae bottae (Ey doux and Gervais) *


Type Locality.—Coast of California. Name applied by Baird in 1855 to the form occurring in the vicinity of Monterey, and reapplied to the same animal by Miller in 1893. Range.—A relatively narrow strip along seacoast south from San Francisco Bay region to range of sanctidiegi; recorded definitely north to Freestone, southern Sonoma County, and east in San Francisco Bay region through Contra Costa and Alameda Counties as far as Tracy, western San Joaquin County; zonal range, chiefly Upper Sonoran, extending into Transition close to seacoast in northern part of its range; vertical range, from near sea level up to at least 3,000 feet (Chalk Peak, southern Monterey County) (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 137, Sept. 26, 1933).

Thomomys bottae minor V. Bailey†


Type Locality.—Fort Bragg, Mendocino County, Calif. Range.—Narrow northwest coastal strip south from vicinity of Cape Mendocino, Humboldt County, to vicinity of Cazadero, Sonoma County; interiormost station, Guerne-

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Thomomys bottae silvifugus Grinnell


Type Locality.—Near Coyote Peak, 16 miles due east, air line, of ocean at Patricks Point, Humboldt County, Calif. Altitude, 3,000 feet. Range.—Bald Hills, which lie interiorly from redwood belt in northern Humboldt County, Calif. Zonal range, Transition; vertical range, 2,500 to 3,000 feet.

Thomomys bottae laticeps Baird†*


Type Locality.—Humboldt Bay, Humboldt County, Calif. Range.—Coast region of northwestern California from Rio Dell, Eel River, Humboldt County, north to Chetco, extreme southwestern Curry County, Oreg. (V. Bailey, North Amer. Fauna No. 55 (June), p. 253, Aug. 29, 1936).

Thomomys bottae detumidus Grinnell*


Type Locality.—A mile and a half south of town of Pistol River, Curry County, Oreg. Altitude, 250 feet. Range.—Known from type locality only.

Thomomys bottae leucodon Merriam†*


Type Locality.—Grant Pass, Rogue River Valley, Josephine County, Oreg. Range.—In western Oregon from Cottage Grove, Lane County, upper Willamette Valley, south through Umpqua and Rogue River Valleys and the Klamath River Valley west of Lower Klamath Lake (V. Bailey, North Amer. Fauna No. 55 (June), p. 252, Aug. 29, 1936) ; an extensive, though much broken, area in northern California, chiefly west of Sierran divide and east of narrow humid coast strip; south from Oregon line in Shasta Valley through inner Coast Ranges to Salmon–Scott–Trinity Mountain Divide, and along lower western slopes of Sierra Nevada to Placerville, El Dorado County; east, up Pit River Valley, as far as Pit River Forest Service Station, Modoc County; zonal range, Upper Sonoran, but locally also Transition (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 138, Sept. 26, 1933).

Thomomys bottae saxatilis Grinnell


213756—55—19
Type Locality.—One mile north of Susanville, Lassen County, Calif. Altitude, 4,400 feet. Range.—Upper (western) part of valley of east-flowing Susan River, Lassen County, Calif. Zonal range, Upper Sonoran and Lower Transition; vertical range, 4,200 to 4,800 feet.

Thomomys bottae acrirostratus Grinnell

Type Locality.—Valley of Mad River, 7 miles above Ruth, Trinity County, Calif. Altitude, 2,700 feet. Range.—Interior valleys of northwestern California altogether west of Sacramento Valley, south of Salmon–Scott–Trinity Mountain Divide, and interiorly of humid coast belt; most typically, valleys of upper Mad River and Trinity River, in Trinity County. Intergradient to east toward navus, of floor of upper Sacramento Valley, to south toward bottae, of San Francisco Bay region, and to west toward laticeps and minor, of humid coast belt.

Thomomys bottae navus Merriam†

Type Locality.—Red Bluff, Tehama County, Calif. Range.—Floor of Sacramento Valley and immediately adjacent foothills, from Battle Creek, Tehama County, south as far as Tracy Lake, San Joaquin County; vertical range, from near sea level at Davis, Yolo County, up to 1,500 feet at Mokelumne Hill, Calaveras County (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 138, Sept. 26, 1933).

Thomomys bottae agricolaris Grinnell

Type Locality.—Stralock Farm, 3 miles west of Davis, Yolo County, Calif. Range.—Lower west side of Sacramento Valley, inclusive of parts of Yolo and Solano Counties, Calif.; inland from near Sacramento River above flood level west into foothills of Coast Ranges. Zonal range, Lower and Upper Sonoran.

Thomomys bottae awahnee Merriam†

Type Locality.—Yosemite Valley, near old Sentinel Hotel, Mariposa County, Calif. Altitude, 4,000 feet. Range.—Western middle flanks of Sierra Nevada, from Sequoia, Tuolumne County, south to Cannell and Taylor Meadows, Tulare County; thence interruptedly even to Tehachapi Peak, Kern County, Calif.; zonal range, chiefly Transition; vertical range, 3,500 to 8,000 feet (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 142, Sept. 26, 1933).

Thomomys bottae mewa Merriam†

_Type Locality._—Raymond, Madera County, Calif. *Range._—Digger pine belt along western base of Sierra Nevada, from Chinese, western Tuolumne County, south to vicinity of Kernville, Kern County, Calif.; zonal range, characteristically Upper Sonoran, locally Transition; vertical range, from 300 feet at Lagrange, Stanislaus County, up to 5,300 feet at Shaver Ranger Station, Fresno County (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 138, Sept. 26, 1933).

**Thomomys bottae lorenzi** Huey


_Type Locality._—Seven miles north of Boulder Creek, Santa Cruz Mountains, Santa Cruz County, Calif. *Range._—Drainage system of San Lorenzo River on southern slope of Santa Cruz Mountains, Santa Cruz County, Calif.

**Thomomys bottae diaboli** Grinnell*


_Type Locality._—Sweeney’s Ranch [near Sweeney Hill], 22 miles [by road] southwest of Los Banos, Diablo Range, Merced County, Calif. *Range._—Diablo Range (or innermost series of Coast Ranges), from west side of Mount Diablo, Contra Costa County, at 1,750 feet altitude, south to divide, at 3,000 feet altitude, west of McKittrick, Kern County, Calif.; zonal range, Upper Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 140, Sept. 26, 1933).

**Thomomys bottae angularis** Merriam†


_Type Locality._—Los Banos, Merced County, Calif. *Range._—Chiefly west side of floor of San Joaquin Valley, south from vicinity of Tracy (8 miles south), San Joaquin County, to Coalinga, Fresno County; also, less typically, parts of Santa Clara, San Juan, and Salinas Valleys, Santa Clara to San Luis Obispo Counties; zonal range, mainly Lower Sonoran, but also Upper Sonoran in certain valleys among the Coast Ranges; vertical range, from below 100 feet up to 1,500 feet in San Benito County (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 139, Sept. 26, 1933).

**Thomomys bottae pascalis** Merriam†


_Type Locality._—Fresno, San Joaquin Valley, Fresno County, Calif. *Range._—East side and whole southern (upper) end of floor of San Joaquin Valley (excepting bed of Buena Vista Lake), from vicinity of Stockton, San Joaquin County, south to San Luis Obispo County; also, less typically, on mountains
around head of San Joaquin Valley—Tehachapi to Tejon Pass and San Emigdio Canyon, California; zonal range, Lower Sonoran in floor of San Joaquin Valley; upper Sonoran around southern rim of that valley; vertical range, from near sea level at Stockton up to 5,500 feet on north flank of Mount Pinos, Ventura County (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 139, Sept. 26, 1933).

**Thomomys bottae infrapallidus** Grinnell*


_Type Località._—Seven miles southeast of Simmler, Carrizo Plain, San Luis Obispo County, Calif. _Range._—Carrizo Plain, San Luis Obispo County, Calif. Zonal range, Lower Sonoran; vertical range, 1,900 to 2,000 feet.

**Thomomys bottae ingens** Grinnell*


_Type Località._—East side levee (2 miles due west of Millux, as shown on U. S. Geol. Surv. Buena Vista Lake Quadrangle), Buena Vista Lake, Kern County, Calif. Altitude, 290 feet. _Range._—Bed of Buena Vista Lake “sink,” Kern County, Calif.; now known only east of deepest part of sink; zonal range, Lower Sonoran; vertical range, below 300 feet (Grinnell, Univ. California Publ. Zool., vol. 40, p. 139. Sept. 26, 1933).

**Thomomys bottae piutensis** Grinnell and Hill


_Type Località._—French Gulch, Piute Mountains, 2½ miles northwest of Claraville, Kern County, Calif. Altitude, 6,700 feet. _Range._—Recorded from Piute Mountain, Walker Basin, and Kelso Valley (not typical), in Kern County.

**Thomomys bottae melanotis** Grinnell*


_Type Località._—Big Prospector Meadow, White Mountains, Mono County, Calif. Altitude, 10,500 feet. _Range._—In Nevada, Mount Magruder, Esmerelda County (Hall, Mammals of Nevada, p. 475, July 1, 1946); in California, White Mountains and adjacent upper portion of Owens Valley, from vicinity of Big Prospector Meadow and Benton in Mono County, south to Independence, Inyo County; intergradation with _perpes_ thought to take place south of latter point; zonal range, Lower Sonoran to Canadian; vertical range, 3,900 to 14,000 feet (White Mountain Peak; Bole, Journ. Mamm., vol. 19, No. 2, p. 245. May 12, 1938) in California (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 144, Sept. 26, 1933).
Thomomys bottae alpinus Merriam†*

*Type Locality.*—Big Cottonwood Meadows, 8 miles southeast of Mount Whitney Peak, High Sierra, Inyo County, Calif. Altitude, 10,000 feet. *Range.*—Southern high Sierra Nevada, from Sirretta Meadows, Tulare County (toward Kern County Line), north at least to Whitney Creek at 10,650 feet; west to Jordan Hot Springs, Tulare County, and east to Olancha Peak, Calif.; zonal range, Canadian and Hudsonian; vertical range, 6,000 to 11,000 feet (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 142, Sept. 26, 1933).

Thomomys bottae perpes Merriam†*

*Type Locality.*—Lone Pine, Owens Valley, Inyo, County, Calif. *Range.*—Almost continuous along eastern base of southern Sierra Nevada, from Lone Pine Creek (likely also north of there), Inyo County, south past Olancha and Little Lake to vicinity of Freeman and Rosamond, Kern County, Calif.; zonal range, chiefly Lower Sonoran, but also Upper Sonoran; vertical range, 2,500 to 5,000 feet (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 144. Sept. 26, 1933).

Thomomys bottae operarius Merriam†*


Thomomys bottae scapterus Elliot*

*Type Locality.*—Hannopee [= Hanaupah] Canyon, near lower edge of piñons, Panamint Mountains, Inyo County, Calif. Altitude, 7,500 feet. *Range.*—Panamint Mountains, Inyo County; specimens examined from Johnson Canyon north to Cottonwood Canyon and west as far as Lee Mine, 12 miles north of Darwin; zonal range, chiefly Upper Sonoran, extending up into Transition and down into Lower Sonoran only locally; vertical range, 5,200 to 9,500 feet (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 144, Sept. 26, 1933).
Thomomys bottae argusensis Huey
*Type Locality.*—Junction Ranch, Argus Mountains, Inyo County, Calif.  

Thomomys bottae oreoecus Burt
*Type Locality.*—Greenwater, in Black Mountains 8 miles southwest of Ryan, Inyo County, Calif. Altitude, 4,300 feet.  
*Range.*—Black Mountains, Inyo County, Calif.; and Grapevine Mountains, Nye County, Nev. (Hall, Mammals of Nevada, p. 476, July 1, 1946).

Thomomys bottae amargosae Grinnell*
*Type Locality.*—Shoshone, Amargosa River, Inyo County, Calif. Altitude, 1,560 feet.  
*Range.*—Valley of Amargosa “River” (which leads into Death Valley), Inyo County. Zonal range, Lower Sonoran; vertical range, 1,500 to 1,600 feet.

Thomomys bottae providentialis Grinnell*
*Type Locality.*—Purdy, 6 miles southeast of New York Mountains, Providence Range, San Bernardino County, Calif. Altitude, 4,500 feet.  

Thomomys bottae mohavensis Grinnell*

**Thomomys bottae neglectus** V. Bailey†*


**Type Locality.**—Bear Flat Meadows, San Antonio Peak, San Gabriel Mountains, San Bernardino County, Calif. Altitude, 6,400 feet. **Range.**—Higher parts of San Gabriel Mountains, chiefly within Los Angeles County, from vicinity of type locality, as above, west to Boquet Canyon; also on mountains of which Mount Pinos, Ventura County, Calif., is highest point; zonal range, Transition and high Upper Sonoran; vertical range, 3,500 to 8,500 feet (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 140, Sept. 26, 1933).

**Thomomys bottae altivallis** Rhoads*


**Type Locality.**—San Bernardino Mountains, San Bernardino County, Calif. Altitude, 5,000 feet. **Range.**—Upper parts of San Bernardino Mountains, San Bernardino County; represented by specimens taken at localities from Doble south to Dry Lake, and west to Fawnskin Valley and Seven Oaks; zonal range, chiefly Transition but also includes Canadian locally; vertical range, 5,000 to 9,000 feet (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 142, Sept. 26, 1933).

**Thomomys bottae pallescens** Rhoads*


**Type Locality.**—Grapeland, about 10 miles northwest of San Bernardino, San Bernardino Valley, San Bernardino County, Calif. **Range.**—Pacific slopes of Los Angeles, San Bernardino, and Riverside Counties, but more than 10 miles inland from the seacoast, from vicinity of San Fernando southeast to San Bernardino and Riverside; also, in less typical form, up canyons and through passes of Sierra Liebre and San Gabriel Mountains to southern edge of Mohave Desert; zonal range, Lower Sonoran and locally Upper Sonoran; vertical range, 300 feet near Los Angeles to at least 3,800 feet near Cajon Pass (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 140, Sept. 26, 1933).

**Thomomys bottae cabezonae** Merriam†*


Type Locality.—Cabezon, San Gorgonio Pass, Riverside County, Calif. Altitude, 1,791 feet. Range.—San Gorgonio Pass and adjacent foothills, Riverside County; recorded east to Whitewater, west to Banning, and south to Schains Ranch, on lower western slope of San Jacinto Mountains; zonal range, chiefly Upper Sonoran, but also Lower Sonoran toward east end of San Gorgonio Pass; vertical range, 1,100 to 4,900 feet (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 141, Sept. 26, 1933).

Thomomys bottae jacinteus Grinnell and Swarth*


Type Locality.—Round Valley, San Jacinto Mountains, Riverside County, Calif. Altitude, 9,000 feet. Range.—Higher parts of San Jacinto Mountains, Riverside County, extending from 8,000 feet altitude in Tahquitz Valley up to 10,200 feet near summit of San Jacinto Peak; zonal range, high Transition and Canadian (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 141, Sept. 26, 1933).

Thomomys bottae perpallidus Merriam†*


Type Locality.—Palm Springs [formerly Agua Caliente], Riverside County, Calif. (See Stephens, California mammals, p. 138, 1906.) Range.—Northeastern part of Coachella Valley from below Whitewater southeastward to vicinity of Thermal in Riverside County (Chattin, Trans. San Diego Soc. Nat. Hist., vol. 9, No. 27, p. 268, Apr. 30, 1941).

Thomomys bottae rupestris Chattin


Type Locality.—Two miles east of Clements Well, Riverside County, Calif. Altitude, 1,131 feet. Range.—Cottonwood, Orocopia and Chuckwalla Mountains in Riverside County, and Chocolate Mountains in north-central Imperial County, Calif.

Thomomys bottae riparius Grinnell and Hill


Thomomys bottae crassus Chattin
_Type Locality._—A mile and a half west of Niland, Imperial County, Calif. Altitude, 180 feet. _Range._—Northern part of Imperial Valley; vicinity of Niland northeast of Alamo Creek, east side of Salton Sea, 100 feet or more below sea level in Imperial County.

Thomomys bottae albatus Grinnell*

Thomomys bottae boregoensis Huey*
_Type Locality._—Beatty Ranch, Borego Valley, San Diego County, Calif. _Range._—Southern part of Coachella Valley in Riverside County; western quarter of Imperial County, along southwest side of Salton Sea southward at least to vicinity of Coyote Wells; also Borego Valley and vicinity of Carrizo Creek in San Diego County (Chattin, Trans. San Diego Soc. Nat. Hist., vol. 9, No. 27, p. 275, Apr. 30, 1941).

Thomomys bottae puertae Grinnell*
_Type Locality._—La Puerta (Mason’s Ranch), 5 miles west of Vallecitos, at lower end of La Puerta Valley, eastern San Diego County, Calif. _Range._—La Puerta and San Felipe Valleys, on desert side of Cuyamaca Mountain Divide, in eastern San Diego County; zonal range, Lower Sonoran; vertical range, 1,900 to 2,500 feet (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 141, Sept. 26, 1933).
**Thomomys bottae affinis** Huey*


*Type Locality.*—Jacumba, San Diego County, Calif. *Range.*—Jacumba Valley on both sides of Mexican boundary.

**Thomomys bottae nigricans** Rhoads*


*Type Locality.*—Witch Creek, 7 miles west of Julian, San Diego County, Calif. *Altitude,* 2,753 feet. *Range.*—In California, San Diego district, interiorly from seacoast and yet almost altogether on western drainage slope, from Mexican boundary north to west base of San Jacinto Mountains; east to Santa Rosa Mountains, west to Escondido, and, at Mexican boundary, mouth of Tia Juana River (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 141, Sept. 26, 1933); in Baja California, along the international boundary from Nachoguero Valley westward to El Valle de Las Palmas, thence south to Las Cruces, which lies some 15 miles inland from Ensenada; does not at any point reach sea coast (Huey, Trans. San Diego Soc. Nat. Hist., vol. 10, No. 14, p. 253, Aug. 31, 1945). *Zonal range,* largely Upper Sonoran, but invades Transition locally; *vertical range,* from near sea level up to 7,500 feet (Santa Rosa Peak).

**Thomomys bottae sanctidiegi** Huey


*Type Locality.*—Balboa Park, San Diego, San Diego County, Calif. *Range.*—Coastal strip from vicinity of San Diego, Calif., to vicinity of Ensenada, Baja California.

**Thomomys bottae lucidus** Hall


*Type Locality.*—Las Palmas Canyon, 2 miles east of Gaskill’s Tanks, mesquite association, west side of Laguna Salada (north of lat. 32° N.), Baja California, México. *Vertical range,* 200 feet. *Range.*—Known from type locality only.

**Thomomys bottae cunicularis** Huey


*Type Locality.*—Los Palmitos, lat. 31°44’ N., long. 115°36’ W., western end of Pattie Basin, on southeastern base of Sierra Juárez (desert slope), Baja California, México. *Range.*—Known from type locality only.

**Thomomys bottae jaurezensis** Huey*


*Type Locality.*—Laguna Hanson, Sierra Juárez, Baja California, México. *Range.*—Known from forested area on summit of Sierra Juárez.
Thomomys bottae jojobae Huey
_Type Locality._—San Gregorio, lat. 31°52' N., long. 116°06' W., Baja California, México. _Range._—Western foothills of Sierra Juárez in Valle de San Rafael, Baja California.

Thomomys bottae proximarinus Huey
_Type Locality._—Boca la Playa, lat. 31°32' N., long. 116°38' W., mesa bordering the sea, 16 miles west of Santo Tomás, Baja California, México. _Range._—Known from type locality only.

Thomomys bottae aphrastus Elliot*
_Type Locality._—San [ _= Santo] Tomás, 18 miles south of Ensenada, Baja California, México. Altitude, 50–100 feet. _Range._—From Santo Tomás in Santo Tomás Valley eastward to extreme western end of El Valle de la Trinidad, thence south along foothills of Sierra San Pedro Mártir at least to Las Cabras; southward from Santo Tomás, the range of this race reaches coast at Johnson’s Ranch, thence over coastal plain to or below San Quintín, Baja California (Huey, loc. cit.) Recorded also from San Antonio, Baja California (Hall and Kelson, Univ. Kansas Publ. Mus. Nat. Hist., vol. 5, No. 26, p. 357, Dec. 15, 1952).

Thomomys bottae xerophilus Huey
_Type Locality._—Near Diablito Spring, summit of San Matías Pass, between Sierra Juárez and Sierra San Pedro Mártir, Baja California, México. _Range._—San Matías Pass and eastern section of El Valle de la Trinidad, at least to Aguaajita Spring; specimens from western part of El Valle de la Trinidad are not referable to this race, but are intergrades.

Thomomys bottae martirensis J. A. Allen*

Thomomys bottae siccovallis Huey
Type Locality.—El Cajón Canyon, lat. 30°54' N., long. 115°10' W., east base of Sierra San Pedro Mártir, Baja California, México. Altitude, 3,200 feet. Range.—Known only from the type locality, a very secluded canyon on desert side of Sierra San Pedro Mártir. Recorded also from Mattomi, Baja California (Hall and Kelson, Univ. Kansas Publ. Mus. Nat. Hist., vol. 5, No. 26, p. 362, Dec. 15, 1952).

Thomomys bottae abotti Huey*


Type Locality.—One mile east of El Rosario, lat. 30°03' N., long. 115°48' W., Baja California, México. Range.—Known only from environs of river bottom association at type locality, and to southeastward at San Fernando Mission; probably coastwise south from El Rosario, though as yet region is unexplored (Huey, Trans. San Diego Soc. Nat. Hist., vol. 10, No. 14, p. 261, Aug. 31, 1945).

Thomomys bottae catavinensis Huey


Type Locality.—Catavina, lat. 29° 54' N., long. 114° 57' W., Baja California, México. Range.—Known from type locality only.

Thomomys bottae ruricola Huey


Type Locality.—Four miles north of Santa Catarina Landing, lat. 29° 35' N., long. 115° 17' W., Baja California, México. Range.—Known from type locality only.

Thomomys bottae cactophilus Huey*


Type Locality.—Punta Prieta, lat. 28° 56' N., long. 114° 12' W., Baja California, México. Range.—Known from type locality and area near Pacific coast at Santa Rosalía Bay, Baja California, México.

Thomomys bottae borjasensis Huey


Type Locality.—San Borjas Mountains, lat. 28° 52' N., long. 113° 53' W., Baja California, México. Range.—Known from type locality only.

Thomomys bottae rhizophagus Huey


Type Locality.—Las Flores, 7 miles south of Bahía de Los Angeles, lat. 23° 50' N., long. 113° 32' W., Baja California, México. Range.—Known from type locality only.

Thomomys bottae russeolus Nelson and Goldman†*

Type Locality.—San Angel, 16 miles west-southwest of San Ignacio, Baja California, México. Range.—Eastern side of the Vizcaino Desert, Baja California.

**Thomomys bottae homorus** Huey


Type Locality.—One mile east of Rancho Lagunitas, lat. 28° 21' N., long. 113° 15' W., Baja California, México. Range.—Local populations found in suitable localities in hilly sections of extreme northeastern Vizcaino Desert from vicinity of Calmalli (1,200 feet) eastward to summit of peninsular ridge near type locality.

**Thomomys bottae incomptus** Goldman†*


**Thomomys bottae litoris** Burt


Type Locality.—Stearns Point, west side of Magdalena Bay, Baja California, México. Range.—Known from type locality only.

**Thomomys bottae magdalenae** Nelson and Goldman†*


Type Locality.—Magdalena Island, Baja California, México. Range.—Known from type locality only.

**Thomomys bottae imitabilis** Goldman†*


Type Locality.—La Paz, southern Baja California, México. Range.—Known from type locality only. Probably limited to low, basinlike, desert plain bordering southern end of La Paz Bay, and forming a gap between Sierra de la Giganta and high mountains of Cape region of Baja California.

**Thomomys bottae alticolus** J. A. Allen*


Type Locality.—Sierra Laguna, Baja California, México. Altitude, 7,000 feet. Range.—Higher sections of Victoria Mountains in Cape district, Baja California.
Thomomys bottae anitae J. A. Allen*


Type Locality.—Santa Anita, Baja California, México. Range.—Lower levels of Cape district, south of Magdalena Plain, excepting section about La Paz, which is occupied by imitabilis (Huey, Trans. San Diego Soc. Nat. Hist., vol. 10, No. 14, p. 265, Aug. 31, 1945).

Thomomys bottae depauperatus Grinnell and Hill


Type Locality.—East base of Tinajas Altas Mountains, 7 miles south of Raven Butte, Yuma County, Ariz. Altitude, 1,150 feet. Range.—Desert along eastern base of Tinajas Altas Mountains, a southern extension of Gila Mountains, Yuma County.

Thomomys bottae phasma Goldman†*


Type Locality.—Two miles south of Tule Tank, Tule Desert, near Mexican border, Yuma County, Ariz. Altitude, 1,200 feet. Range.—In Arizona, from Wellton, Yuma County, southeast to Tule Tank, Tule Desert, near Mexican border (Goldman, North Amer. Fauna No. 59, p. 20, June 12, 1947).

Thomomys bottae chrysonotus Grinnell*


Type Locality.—Ehrenberg, Yuma County, Ariz. Range.—Alluvial bottoms along east side of Colorado River from near Ehrenberg north to Parker, and adjoining gravelly mesa, Yuma County, Ariz. (Goldman, North Amer. Fauna No. 59, p. 15, June 12, 1947).

Thomomys bottae subsimilis Goldman†*


Type Locality.—Harquahala Mountains, Yuma County, Ariz. Altitude, 3,000 feet. Range.—Harquahala Mountains, Yuma County. Zonal range, Lower Sonoran.
Thomomys bottae growlerensis Huey*  
*Type Locality.*—Seven miles east of Papago Well (or, exactly, along a well-wooded desert wash on southwestern side of a range of hills in southern end of Growler Valley), Pima County, Ariz.  
*Range.*—Desert from southern end of Growler Valley and Quitobaquito north to Bates Well in Growler Pass, between Growler Mountains and Bates Mountains, Pima County (Goldman, North Amer. Fauna No. 59, p. 22, June 12, 1947).  
Zonal range, Lower Sonoran.

Thomomys bottae comobabiensis Huey  
*Type Locality.*—Five miles northwest of Sells, Pima County, Ariz.  
*Altitude,* approximately 2,400 feet.  
*Range.*—Basal slope of Comobabi Mountains, Pima County.

Thomomys bottae pusillus Goldman†*  
*Type Locality.*—Coyote Mountains [Quinlan Mountains, 40 miles west-southwest of Tucson], Pima County, Ariz.  
*Altitude,* 3,000 feet.  
*Range.*—Known from type locality only.  
Zonal range, Lower Sonoran.

Thomomys bottae modicus Goldman†*  
*Type Locality.*—La Osa, southern end of Altar Valley, near Mexican border, Pima County, Ariz.  
*Range.*—In Arizona, Altar Valley, upper part of Santa Cruz River Valley, and neighboring valleys and desert plains as far west as Sells, and east to Fort Huachuca, Cochise County; zonal range, Lower Sonoran; vertical range, 2,500 to 4,500 feet (Goldman, North Amer. Fauna No. 59, p. 28, June 12, 1947); and valleys of north-central Sonora near Sonora-Arizona line; recorded from Cerro Blanco, 35 miles northwest of Magdalena (Burt, Univ. Michigan Mus. Zool. Misc. Publ. 39, p. 40, Feb. 15, 1938).  

Thomomys bottae hueyi Goldman*  
*Type Locality.*—Spud Rock Ranger Station [25 miles due east of Tucson], Rincon Mountains, Pima County, Ariz.  
*Altitude,* 7,400 feet.  
Zonal range, Transition.
Thomomys bottae catalinae Goldman†*


Type Locality.—Summerhaven, Santa Catalina Mountains, Pima County, Ariz. Altitude, 7,500 feet. Range.—Upper slopes of Santa Catalina Mountains, Pima County (Goldman, North Amer. Fauna No. 59, p. 25, June 12, 1947).

Thomomys bottae parvulus Goldman†*


Type Locality.—Pass between Santa Catalina and Rincon Mountains [25 miles east-northeast of Tucson], Pima County, Ariz. Altitude, 4,500 feet. Range.—Gravelly pockets in granitic formation in pass between Santa Catalina and Rincon Mountains, Pima County (Goldman, North Amer. Fauna No. 59, p. 26, June 12, 1947). Zonal range, Upper and Lower Sonoran; vertical range, 4,000 to 4,500 feet.

Thomomys bottae collinus Goldman†*


Type Locality.—Fly Park, Chiricahua Mountains, Cochise County, Ariz. Altitude, 9,000 feet. Range.—Chiricahua Mountains, Cochise County (Goldman, North Amer. Fauna No. 59, p. 27, June 12, 1947). Zonal range, Transition and Canadian; vertical range, 5,000 to 9,700 feet.

Thomomys bottae extenuatus Goldman†*


Type Locality.—Willcox, Cochise County, Ariz. Altitude, 4,000 feet. Range.—Desert plains and basal mountain slopes bordering Sulphur Springs Valley, and adjoining valleys near top of Continental Divide, extending east into San Simon Valley, north to Fort Grant, and west across upper part of San Pedro Valley to Oracle, southwestern Pinal County, Ariz. (Goldman, North Amer. Fauna No. 59, p. 24, June 12, 1947). Zonal range, Upper and Lower Sonoran.

Thomomys bottae grahamensis Goldman†*

**Type Locality.**—Graham Mountains [=Pinaleno Mountains], Graham County, Ariz. Altitude, 9,200 feet. **Range.**—Forested upper slopes of Graham Mountains, Graham County (Goldman, North Amer. Fauna No. 59, p. 23, June 12, 1947). Zonal range, Transition; vertical range, 6,100 to 9,200 feet.

**Thomomys bottae alienus** Goldman†*

**Type Locality.**—Mammoth, San Pedro River, Pinal County, Ariz. Altitude, 2,400 feet. **Range.**—Bottoms of lower San Pedro River Valley near Mammoth, Pinal County, and bottoms of Gila River Valley above confluence of Gila and San Pedro eastward as far as Redrock, Grant County, southwestern New Mexico (Goldman, North Amer. Fauna No. 59, p. 19, June 12, 1947).

**Thomomys bottae pinalensis** Goldman†*

**Type Locality.**—Oak Flat, 5 miles east of Superior, Pinal Mountains, Pinal County, Ariz. Altitude, 3,900 feet. **Range.**—Oak woods on upper slopes of Pinal Mountains, Pinal County (Goldman, North Amer. Fauna No. 59, p. 18, June 12, 1947). Zonal range, Upper Sonoran.

**Thomomys bottae aridicola** Huey*

**Type Locality.**—Ten miles south of Gila Bend (or, exactly, on Ajo Railroad right-of-way, about 2 miles north of Black Gap), Maricopa County, Ariz. Altitude, 900 feet. **Range.**—Desert near Black Gap, 10 miles south of Gila Bend, Maricopa County (Goldman, North Amer. Fauna No. 59, p. 21, June 12, 1947). Zonal range, Lower Sonoran.

**Thomomys bottae cervinus** J. A. Allen*

**Type Locality.**—Phoenix, Maricopa County, Ariz. **Range.**—Salt River and Gila River Valleys, near Phoenix, and southwest along latter watercourse to Gila Bend, where it intergrades with *aridicola* (Goldman, North Amer. Fauna No. 59, p. 17, June 12, 1947). Zonal range, Lower Sonoran; vertical range, 700 to 1,000 feet.

**Thomomys bottae patulus** Goldman†*

**Type Locality.**—Bottomland along Hassayampa River, 2 miles below Wickenburg, Maricopa County, Ariz. Altitude, 2,000 feet. **Range.**—Known from type locality only.
Thomomys bottae mutabilis Goldman†*


Thomomys bottae operosus Hatfield

Type Locality.—Six miles north of Yarnell, Peeples Valley, Yavapai County, Ariz. Altitude, 4,400 feet. Range.—Known from type locality only, perhaps restricted to Peeples Valley, which is somewhat isolated, midway between desert country of southern Arizona and high plateau to north.

Thomomys bottae desitus Goldman†*

Type Locality.—Big Sandy River, near Owen [about 4 miles southeast of Wickieup], Mohave County, Ariz. Altitude, 2,000 feet. Range.—Big Sandy River Valley, Mohave County, east to Kirkland, Yavapai County, Ariz. (Goldman, North Amer. Fauna No. 59, p. 14, June 12, 1947). Zonal range, Lower Sonoran; vertical range, 2,000 to 4,000 feet.

Thomomys bottae hualpaiensis Goldman†*

Type Locality.—Hualpai Peak, Hualpai Mountains, Mohave County, Ariz. Altitude, 7,000 feet. Range.—Slopes of Hualpai Mountains, Mohave County (Goldman, North Amer. Fauna No. 59, p. 14, June 12, 1947). Zonal range, Transition; vertical range, 6,000 to 7,500 feet.

Thomomys bottae desertorum Merriam†*

Type Locality.—Mud Spring [=Muddy], Detrital Valley, Mohave County, Ariz. Range.—Lower Sonoran desert region of broad Detrital Valley and neighboring areas lying mainly at about 3,500 feet altitude in angle formed by bend of Colorado River north and west of Hualpai Mountains in northwestern Arizona; southern limit in Chemehuevis or Mohave Mountains, Mohave County (Goldman, North Amer. Fauna No. 59, p. 12, June 12, 1947).

Thomomys bottae virgineus Goldman†*

Type Locality.—Beaverdam Creek, near confluence with Virgin River, at Littlefield [=Beaverdam], Mohave County, northwestern Arizona. Altitude, 1,500 feet. Range.—Virgin River Valley, below canyon traversed by river in breaking across fault line marked by Beaverdam Mountains on one side and Grand Wash Cliffs on the other, in Mohave County; east of Virgin Valley in extremely arid section near Pakoon Spring, along Grand Wash (Goldman, North Amer. Fauna No. 59, p. 7, June 12, 1947); Virgin River Valley in southeastern Nevada (Hall, Mammals of Nevada, p. 473, July 1, 1946); and extreme southwestern Utah, in Beaverdam Wash, Washington County, Utah (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 1, No. 1, p. 64, Aug. 15, 1946).

Thomomys bottae nicholi Goldman†*


Type Locality.—Twenty miles south of Wolf Hole (on road to Parashonts), Shivwits Plateau, Mohave County, Ariz. Altitude, 5,000 feet. Range.—Shivwits Plateau region, on terrace between Hurricane Ledge on east and Grand Wash Cliffs on west, north of Grand Canyon, Mohave County, northwestern Arizona (Goldman, North Amer. Fauna No. 59, p. 7, June 12, 1947). Zonal range, Upper and Lower Sonoran; vertical range, 4,500 to 5,000 feet.

Thomomys bottae trumbullensis Hall and Davis*


Type Locality.—Three miles south of Nixon Spring, Mount Trumbull, Mohave County, Ariz. Altitude, 6,500 feet. Range.—Lava and cinder area centered about Mount Trumbull on plateau near north rim of Grand Canyon, Ariz. (Goldman, North Amer. Fauna No. 59, p. 9, June 12, 1947). Zonal range, Upper Sonoran and Transition; vertical range, 6,000 to 7,000 feet.

Thomomys bottae fulvus (Woodhouse) †*


Type Locality.—San Francisco Mountain, Coconino County, Ariz. Range.—In Arizona, the whole of elevated Coconino and Mogollon Plateau regions, extending from southern rim of Grand Canyon southeastward to White Mountains, Apache County; a spur from main range reaches south through high country to Bradshaw Mountains west of Verde River Valley, Yavapai County; zonal range, mainly Transition above 5,000 feet, but in Canadian on San Francisco and White Mountains (Goldman, North Amer. Fauna No. 59, p. 13, June 12, 1947); extends

**Thomomys bottae boreorarius** Durham


Type Locality.—Swamp Point, 18 1/2 miles northward of Bright Angel Point, north rim of Grand Canyon, Coconino County, Ariz. Altitude, 7,522 feet. Range.—Known from type locality and vicinity which includes Muav Saddle (6,717 feet), 1/2 mile to the westward, and thence northward 2/3 mile down Saddle Canyon as far as Powell Spring (6,209 feet); also the northeast end of Powell Plateau (7,650 feet), which point is about 1 mile west of type locality.

**Thomomys bottae absonus** Goldman†*


**Thomomys bottae alexandrae** Goldman†*


Type Locality.—Plain 5 miles southeast of Rainbow Lodge, near Navajo Mountain, Coconino County, Ariz. Altitude, 6,200 feet. Range.—Sagebrush-covered mesa south of Navajo Mountain, Coconino County, north to Soldier Spring (altitude, 8,600 feet) on Navajo Mountain in extreme southwestern San Juan County, Utah; in Arizona apparently isolated in a somewhat triangular area between precipitous canyon walls of Navajo and Pinto Creeks, which diverge to Colorado River (Goldman, North Amer. Fauna No. 59, p. 28, June 12, 1947); in Utah probably limited to area enclosed on north by Colorado and San Juan Rivers, on the east and west by Navajo and Piute Canyons, respectively (Durrant, loc. cit.).

**Thomomys bottae muralis** Goldman†*


*Type Locality.*—Lower end of Prospect Valley [about 25 miles west-southwest of Supai], Grand Canyon, Hualapai Indian Reservation, Coconino County, Ariz. Altitude, 4,500 feet. *Range.*—Isolated on terraces along inner gorge below outer rim in Prospect Valley, a lateral pocket within Grand Canyon, near eastern end of Hualapai Indian Reservation (Goldman, North Amer. Fauna No. 59, p. 30, June 12, 1947). Zonal range, Upper Sonoran.

**Thomomys bottae peramplus** Goldman†*


*Type Locality.* Wheatfields Creek [about 27 miles east of Chin Lee], west slope of Tunitcha Mountains, Apache County, northeastern Arizona. Altitude, 7,000 feet. *Range.*—Tunitcha Mountains [=southern Chuska Mountains] from 7,000 feet on Wheatfields Creek up to 8,000 feet on upper slope of the range; occurs at 7,000 feet in Valley of St. Michaels on eastern side of Defiance Plateau, Apache County (Goldman, North Amer. Fauna No. 59, p. 12, June 12, 1937) and Chuska Mountains, San Juan County, N. Mex.

**Thomomys bottae phelleoecus** Burt


*Type Locality.*—Hidden Forest, Sheep Mountains, Clark County, Nev. Altitude, 8,500 feet. *Range.*—Sheep Mountains, Clark County (Hall, Mammals of Nevada, p. 475, July 1, 1946).

**Thomomys bottae nanus** Hall*


*Type Locality.*—South end of Belted Range, 5½ miles northwest of Whiterock Spring, Nye County, Nev. Altitude, 7,200 feet. *Range.*—Quinn Canyon Mountains south to near lat. 37° N.; from Pahute Mesa eastward to Irish Mountain, Lincoln County, Nev. (Hall, Mammals of Nevada, p. 474, July 1, 1946).

**Thomomys bottae brevidens** Hall


*Type Locality.*—Breen Creek, Kawich Range, Nye County, Nev. Altitude 7,000 feet. *Range.*—Central Nye County from Fish Lake south to Cactus Flat and east to western base of Quinn Canyon Mountains (Hall, Mammals of Nevada, p. 470, July 1, 1946).

**Thomomys bottae abstrusus** Hall and Davis

Type Locality.—Fish Spring Valley, 2 miles southeast of Tulle Peak, Nye County, Nev. Altitude, 7,000 feet. Range.—Known only from northern part of Fish Spring Valley, Nye County (Hall, Mammals of Nevada, p. 469, July 1, 1946).

Thomomys bottae concisor Hall and Davis*


Type Locality.—Potts Ranch, Monitor Valley, Nye County, Nev. Altitude, 6,900 feet. Range.—Monitor Valley, Nye County (Hall, Mammals of Nevada, p. 468, July 1, 1946).

Thomomys bottae vescus Hall and Davis*


Type Locality.—South slope of Mount Jefferson, Toquima Range, Nye County, Nev. Altitude, 9,000 feet. Range.—Toquima Range, Nye County (Hall, Mammals of Nevada, p. 467, July 1, 1946).

Thomomys bottae curtatus Hall


Type Locality.—San Antonio, Nye County, Nev. Altitude, 5,400 feet. Range.—Known from type locality only.

Thomomys bottae fumosus Hall


Type Locality.—Milman Ranch, Moores Creek, 19 miles southeast of Millett P. O., Nye County, Nev. Range.—Great Smoky Valley and around southern end of Toyabe Mountain Range to Cloverdale Creek (Hall, Mammals of Nevada, p. 465, July 1, 1946).

Thomomys bottae lacrymalis Hall


Type Locality.—Arlemont [=Chiatovich Ranch], Fish Lake Valley, Esmeralda County, Nev. Altitude, 4,900 feet. Range.—Fish Lake Valley to south end of Walker Lake (Hall, Mammals of Nevada, p. 463, July 1, 1946).

Thomomys bottae solitarius Grinnell


Type Locality.—Finger-Rock Wash, Stewart Valley, Mineral County, Nev. Altitude, 5,400 feet. Range.—Eastern Mineral County and northern Esmeralda County, Nev. (Hall, Mammals of Nevada, p. 464, July 1, 1946).

Thomomys bottae cinereus Hall

Type Locality.—Smith’s Valley, West Walker River, Lyon County, Nev. Altitude, 4,700 feet. Range.—Valleys of West Walker and East Walker Rivers and downstream along Walker River as far as Walker Lake (Hall, Mammals of Nevada, p. 462, July 1, 1946).

Thomomys bottae lucrificus Hall and Durham


Type Locality.—Eastgate, Churchill County, Nev. Altitude, 4,425 feet. Range.—Known only from Eastgate and at an elevation 600 feet higher along creek which flows westward from Desatoya Mountains to Eastgate (Hall, Mammals of Nevada, p. 461, July 1, 1946).

Thomomys bottae depressus Hall*


Type Locality.—Dixie Meadows (at south end of Humboldt Salt Marsh), Churchill County, Nev. Altitude, 3,500 feet. Range.—Area around Carson Sink and Humboldt Salt Marsh (Hall, Mammals of Nevada, p. 460, July 1, 1946).

Thomomys bottae canus V. Bailey†


Type Locality.—Deep Hole, at north end of Smoke Creek Desert, Washoe County, Nev. Range.—Margins of Black Rock Desert from Deep Hole, Washoe County, southward to Carson River Valley, Lyon County; and from near Dayton, Lyon County, eastward to Fallon, Churchill County (Hall, Mammals of Nevada, p. 459, July 1, 1946).

Thomomys bottae centralis Hall*


Type Locality.—Two and one half miles east of Baker (1 1/4 miles west of Nevada–Utah boundary on lat. 39° N.), White Pine County, Nev. Altitude, 5,700 feet. Range.—Extreme western Utah, in Millard, Beaver, and Iron Counties (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 1, No. 1, p. 44, Aug. 15, 1946); in Nevada, from Mount Moriah, White Pine County, southward over eastern Nevada, the Virgin River Valley excepted, across southern Nevada and northward to head of Amargosa River, southwestern Nye County (Hall, Mammals of Nevada, p. 471, July 1, 1946); and into extreme eastern San Bernardino County, Calif., along Colorado River near boundary between California and Nevada (Chattin, Trans. San Diego Soc. Nat. Hist., vol. 9, No. 27, p. 271, Apr. 30, 1941).

Thomomys bottae latus Hall and Davis

Type Locality.—Cherry Creek, White Pine County, Nevada. Altitude, 6,500 feet. Range.—Steptoe Valley, White Pine County (Hall, Mammals of Nevada, p. 471, July 1, 1946).

Thomomys bottae birdseyei Goldman†*

Thomomys bottae planirostris Burt*
Type Locality.—Zion National Park, Washington County, Utah. Range.—In Utah, Virgin River Valley from Zion National Park west to Beaverdam Mountains (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 1, No. 1, p. 66, Aug. 15, 1946); and in Arizona, terrace near Fredonia in extreme northwestern Cocinino County and vicinity of Kanab Wash to the westward; apparently ranges into Arizona through Short Creek Valley along western and southern base of Vermilion Cliffs west of Fredonia (Goldman, North Amer. Fauna No. 59, p. 8 June 12, 1947).

Thomomys bottae dissimilis Goldman†*
Type Locality.—East slope of Mount Ellen, Henry Mountains, Garfield County, Utah. Altitude, 8,000 feet. Range.—Known from type locality only.

Thomomys bottae aureus J. A. Allen*
Type Locality.—Bluff City [=Bluff], San Juan County, Utah (V. Bailey, North Amer. Fauna No. 39, p. 74, Nov. 15, 1915). Range.—Southeastern Utah east of Colorado River except in La Sal, Abajo, and Navajo Mountains (Kelso, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 58, Feb. 15, 1951); Montezuma County (altitude, 3,500 feet) in extreme southwestern Colorado (Warren, The mammals of Colorado, . . . , p. 158, 1942); the San Juan River Valley in extreme northwestern New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931),
Thomomys bottae osgoodi Goldman†*


Thomomys bottae wahwahensis Durrant


Thomomys bottae lenis Goldman†*


Thomomys bottae contractus Durrant*

*Type Locality.*—Scipio, Millard County, Utah. Altitude, 5,315 feet. *Range.*—Extreme eastern Millard and Beaver Counties, Utah.

Thomomys bottae convexus Durrant


Thomomys bottae tivius Durrant

Thomomys bottae sevieri Durrant
_Type Locality._—Swasey Spring, House Mountains, Millard County, Utah. Altitude, 6,500 feet. _Range._—Known from type locality only.

Thomomys bottae levidensis Goldman†

Thomomys bottae bonnevillei Durrant
_Type Locality._—Fish Springs, Juab County, Utah. Altitude, 4,400 feet. _Range._—Known from type locality only.

Thomomys bottae robustus Durrant
_Type Locality._—Orr's Ranch, Skull Valley, Tooele County, Utah. Altitude, 4,300 feet. _Range._—Skull Valley, Tooele County.

Thomomys bottae stansburyi Durrant
_Type Locality._—South Willow Creek, Stansbury Mountains, Tooele County, Utah. Altitude, 7,500 feet. _Range._—Stansbury Mountains, Tooele County.

Thomomys bottae minimus Durrant†
_Type Locality._—Stansbury Island, Great Salt Lake, Tooele County, Utah. _Range._—Known from type locality only.

Thomomys bottae albicaudatus Hall
_Type Locality._—Provo, Utah County, Utah. Altitude, 4,510 feet. _Range._—From area between Great Salt Lake and Wasatch Mountains south along western margin of central mountains of Utah to Sevier River in Juab County, west into Tooele County to Onaqui and Sheeprock Mountains (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 1, No. 1, p. 37, Aug. 15, 1946).

Thomomys bottae nesophilus Durrant*  
Type Locality.—Antelope Island, Great Salt Lake, Davis County, Utah.

Range.—Known from type locality only.

Thomomys bottae aureiventris Hall


Type Locality.—Fehlman Ranch, 3 miles north of Kelton, Box Elder County, Utah. Altitude, 4,225 feet. Range.—Northwestern and extreme western Utah as far south as southern end of Deep Creek Mountains, Juab County (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 1, No. 1, p. 28, Aug. 15, 1946).

Thomomys bottae howelli Goldman†*


Type Locality.—Grand Junction, Mesa County, Colo. Altitude, 4,600 feet. Range.—Grand River Valley, Mesa County, central western Colorado; and between Colorado and Green Rivers south of Book Cliffs in eastern Utah (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 58, Feb. 15, 1951).

Thomomys bottae optabilis Goldman†*


Type Locality.—Coventry, Naturita Creek Valley, Montrose County, Colo. Altitude, 6,500 feet. Range.—Cultivated flats between Naturita Creek and San Miguel River, southern Montrose County, southwestern Colorado.

Thomomys bottae internatus Goldman†*


Type Locality.—Salida, Chaffee County, Colo. Altitude, 7,000 feet. Range.—High valleys along eastern side of Rocky Mountains from upper Arkansas River Valley, Colo., south to northwestern Union County (Folsom) and Colfax County (mouth of Trincheria Pass), northeastern New Mexico.

Thomomys bottae apache V. Bailey†*


Type Locality.—Lake La Jara, on the Jicarilla Apache Indian Reservation, Rio Arriba County, N. Mex. Altitude, 7,500 feet. Range.—Transition Zone at Lake La Jara, Stinking Spring Lake [Burford Lake], and Horse Lake on Jicarilla Apache Indian Reservation, Rio Arriba County (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 241, Mar. 1, 1932); and in Archuleta (Arboles) and La Plata (Bayfield) Counties, southwestern Colorado (Warren, The mammals of Colorado; . . . , p. 160, 1942).
Thomomys bottae pervagus Merriam†


Thomomys bottae connectens Hall*


_Type Locality._—Clawson Dairy, 5 miles north of Albuquerque, Bernalillo County, N. Mex. Altitude, about 4,943 feet. _Range._—Valley of Rio Grande in central New Mexico, probably from northern Socorro County northward to Bernalillo.

Thomomys bottae planorum Hooper


_Type Locality._—One and one-half miles southwest of San Mateo, Valencia County, N. Mex. Altitude, about 7,200 feet. _Range._—Southern McKinley County and northern Valencia County from vicinity of San Mateo westward over plains and slopes of upper San Jose River Valley and southward on east side of Malpais at least to 11 miles south-southeast of Grants, Valencia County.

Thomomys bottae paguatae Hooper


_Type Locality._—One-half mile north of Cebolleta [Seboyeta Post Office], Valencia County, N. Mex. Altitude, about 6,700 feet. _Range._—Known only from vicinity of Cebolleta, but probably ranging southwestwardly toward Rio Puerco; probably inhabits flood plains and alluvial flats lying to the east and southeast of Mount Taylor.

Thomomys bottae collis Hooper


_Type Locality._—Shuman’s Ranch, T. 6 N., R. 10 W., sec. 30, 30 miles south of Grants, Valencia County, N. Mex. Altitude, about 7,500 feet. _Range._—Known only from localities on northeastern part of North Plains and on a western arm of Cebolleta Mesa; probably ranging at altitudes approximately between 7,000 and 9,000 feet on high plains and mesas south of Grants and north of Datil Mountains.

Thomomys bottae morulus Hooper

Type Locality.—Bill Porter’s Ranch, 8 miles southeast of Paxton, Valencia County, N. Mex. Altitude, 7,400 feet. Range.—Known only from areas about 7,500 feet in elevation on southeastern foothills of Zuni Mountains, northwestern New Mexico.

Thomomys bottae cultellus Kelson†*


Type Locality.—Halls Peak, Mora County, N. Mex. Range.—Northern New Mexico and extreme southern Colorado east of Sangre de Cristo Range.

Thomomys bottae actuosus Kelson†*


Type Locality.—Corona, Lincoln County, N. Mex. Range.—Mountainous parts of central New Mexico between Rio Grande and Pecos River from Mora southward to San Andres and Capitan Mountains.

Thomomys bottae ruidosae Hall*


Thomomys bottae opulentus Goldman†*


Type Locality.—Las Palomas, on the Rio Grande, Sierra County, N. Mex. Range.—Rio Grande Valley from Socorro, Socorro County, south at least to Las Cruces, Dona Ana County, southwestern New Mexico.

Thomomys bottae lachuguilla V. Bailey†*


Thomomys bottae scotophilus Davis


Type Locality.—One and one-half miles west of Bat Cave, Sierra Diablo, Hudspeth County, Tex. Range.—Apparently restricted to higher parts of Sierra Diablo Range in Culberson and Hudspeth Counties, Tex.
Thomomys bottae guadalupensis Goldman†*

*Type Locality.*—McKittrick Canyon, Guadalupe Mountains, Culberson County, Tex. Altitude, 7,300 feet. *Range.*—Guadalupe Mountains of southern New Mexico and western Texas.

Thomomys bottae texensis V. Bailey†*

*Type Locality.*—Head of Limpia Creek, at 5,500 feet altitude, Davis Mountains, Jeff Davis County, Tex. *Range.*—Davis Mountains, Jeff Davis County.

Thomomys bottae limpiae Blair*

*Type Locality.*—Limpia Canyon, about one mile north of Fort Davis, Jeff Davis County, Tex. Altitude, 4,700 feet. *Range.*—Known from type locality only.

Thomomys bottae pervarius Goldman†*

*Type Locality.*—Lloyd Ranch, 35 miles south of Marfa, Presidio County, Tex. Altitude, 4,200 feet. *Range.*—Known from type locality only.

Thomomys bottae limitaris Goldman†*

*Type Locality.*—Four miles west of Boquillas, Brewster County, Tex. *Range.*—Northern side of Rio Grande Valley, from the “Big Bend” east at least to Devils River, and north to Castle Mountains, Tex.

Thomomys bottae confinalis Goldman†*

*Type Locality.*—Thirty-five miles east of Rock Springs [north fork of Guadalupe River, 15 miles west of Japonica, Kerr County], Tex. *Range.*—Known from type locality only.
Thomomys bottae toltecus J. A. Allen*
_Type Locality._—Colonia Juárez, Chihuahua, México. Altitude, 4,500 feet. _Range._—Plains and valleys of northwestern Chihuahua, and southwestern New Mexico.

Thomomys bottae divergens Nelson and Goldman†*
_Type Locality._—Four miles west of Huachinera, Río Bavispe, northeastern Sonora, México. Altitude, about 4,000 feet. _Range._—Upper part of Bavispe River Valley and along Aros River Valley into western Chihuahua.

Thomomys bottae basilicae Benson and Tillotson*
_Type Locality._—La Misión, 2 miles west of Magdalena, Sonora, México. _Range._—Known from type locality only.

Thomomys bottae vanrossemi Huey
_Type Locality._—Punta Peñascosa [=Punta Peñasca], Sonora, México. _Range._—Known from type locality only.

Thomomys bottae estanciae Benson and Tillotson
_Type Locality._—La Estancia, 6 miles north of Nacori, Sonora, México. _Range._—Known from type locality only.

Thomomys bottae winthropi Nelson and Goldman†*

Thomomys bottae convergens Nelson and Goldman†*
Type Locality.—Costa Rica Ranch, delta Río Sonora, about 40 miles westsouthwest of Hermosillo, Sonora, México. Range.—Low desert plains of central western Sonora.

**Thomomys bottae camoae** Burt*


Type Locality.—Camoa, Río Mayo, Sonora, México. Range.—Coastal plains of southern Sonora from Yaqui River Valley south probably to Sinaloa, México.

**Thomomys bottae sinaloae** Merriam†*


Type Locality.—Altata, Sinaloa, México. Range.—Coastal plains of central Sinaloa.

**Thomomys suboiles** Goldman†*


Type Locality.—Alluvial bottom at Old Searchlight Ferry, Colorado River, about 40 miles northwest of Kingman (or 28 miles west of Chloride), Mohave County, Ariz. Altitude, 600 feet. Range.—Alluvial bottoms in an embayment of escarpment flanking Colorado River, near Old Searchlight Ferry, above Pyramid Canyon, and northwest of Kingman, Ariz. (Goldman, North Amer. Fauna No. 59, p. 29, June 12, 1947).

**Thomomys harquahalae** Grinnell and Hill*


Type Locality.—Ranegras Plain, 10 miles west of Hope [10 miles west-southwest of Vicksburg], Yuma County, Ariz. Altitude, about 1,250 feet. Range.—Lowest part of broad, open, grassy Ranegras Plain west of Hope, and northwest of Harquahala Mountains, Yuma County (Goldman, North Amer. Fauna No. 59, p. 31, June 12, 1947).

**Thomomys pectoralis** Goldman†*


Type Locality.—Near Carlsbad Cave, Carlsbad Cave National Monument, Eddy County, N. Mex. Range.—Known only from type locality in Pecos River Valley, southeastern New Mexico.

**Thomomys sturgisi** Goldman†*

Rodentia: Geomyidae

Type Locality.—Sierra del Carmen, Coahuila, México. Altitude, 6,000 feet.

Range.—Known from type locality only.

Thomomys baileyi baileyi Merriam†*


Type Locality.—Sierra del Carmen (railway station at junction of Texas Pacific and Southern Pacific Railroads), Hudspeth County, Tex. Range.—Sierra Blanca, Hudspeth County, western Texas.

Thomomys baileyi mearnsi V. Bailey†*


Type Locality.—Gray Ranch, about 20 miles north of Mexican boundary, Animas Valley, Hidalgo County, N. Mex. Altitude, 5,000 feet. Range.—From Animas Valley, southwestern New Mexico, into elevated plains region of southeastern Arizona; recorded at San Bernardino near Mexican boundary and on open plain near Willcox in Sulphur Springs Valley, Ariz. (Goldman, North Amer. Fauna No. 59, p. 31, June 12, 1947).

Thomomys baileyi nelsoni Merriam†*


Type Locality.—[Hidalgo del] Parral, Chihuahua, México. Altitude, 6,000 feet. Range.—Arid interior plains from northern Durango north through central Chihuahua at least to Gallego (Nelson and Goldman, loc. cit.).

Thomomys baileyi spatiosus Goldman†*


Type Locality.—Alpine, Brewster County, Tex. Altitude, about 4,500 feet. Range.—Known from general region of type locality only.

Thomomys baileyi tularosae Hall*  


Type Locality.—Cook Ranch, one-half mile west of Tularosa, Otero County, N. Mex. Range.—Known from type locality only.

Thomomys talpoides talpoides (Richardson) *


_Type Local._—Carlton House, near Fort Carlton, North Saskatchewan River, Saskatchewan, Canada. (See J. A. Allen, Bull. Amer. Mus. Nat. Hist., vol. 5, p. 55, Apr. 28, 1893, and V. Bailey, North Amer. Fauna No. 39, p. 97, Nov. 15, 1915.) _Range._—Northern Great Plains region from western edge of central Manitoba (Riding Mountain and Swan River), through central Saskatchewan north to Prince Albert National Park, and central Alberta (Edmonton, Elk Island National Park, Camrose) north to divide between North Saskatchewan and Athabaska Rivers drainage systems; in Saskatchewan (Indian Head, Moose Jaw, Yorkton) nearly to southern border (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 127, Jan. 24, 1947); south in Montana to Great Falls, Cascade County, and Big Snowy Mountains, Fergus County (V. Bailey, op. cit., p. 96).

Thomomys talpoides andersoni Goldman†*


_Type Local._—Medicine Hat, on South Saskatchewan River, Alberta, Canada. _Range._—Valleys of South Saskatchewan River and Milk River in southern Alberta; probably also in extreme northern Montana south of Milk River (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 128, Jan. 24, 1947).

Thomomys talpoides loringi V. Bailey†*


_Type Local._—South Edmonton, Alberta, Canada. _Range._—Known only from Edmonton and Moose Mountain, Alberta.

Thomomys talpoides rufescens Wied-Neuwied*


_Type Local._—The Minnetaree Village, now Old Fort Clark, about 6 miles south of Stanton, Oliver County, N. Dak. _Range._—Greater part of North Dakota and eastern South Dakota; in Canada east to east side of Red River Valley

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**Thomomys talpoides pierreicolus Swenk**


*Type Locality.*—Wayside, Dawes County, Nebr. *Range.*—Areas of soils of Pierre series, including Pierre clay and loam (Indian Creek, north of Story, Sioux County), Pierre silty clay loam and silt loam (Sand Creek Valley, northeast of Horn and 5 miles northwest of Chadron, Dawes County) and Pierre clay loam (Wayside, Dawes County), in extreme northwestern Nebraska. Probably the form recorded from southwestern and western South Dakota (Corral Draw, Pine Ridge Indian Reservation; Buffalo Gap and Elk Mountain, Custer County; Rapid City, Pennington County; Fort Meade and Smithville, Meade County; and Crow Buttes, Harding County), from the northern half of eastern edge of Wyoming (Newcastle, Weston County, and Moorcroft, Crook County) and from extreme southeastern Montana (Alzada, Carter County).

**Thomomys talpoides cheyennensis Swenk**

1941. *Thomomys talpoides cheyennensis* Swenk, Missouri Valley Fauna, Lincoln, No. 4, p. 5, Mar. 1, 1941.

*Type Locality.*—Two miles south of Dalton, Cheyenne County, Nebr. *Range.*—Areas of soils of Rosebud series, including Rosebud loam, silt loam, gravelly sandy loam and, less extensively, the fine and very fine sandy loams of the short-grass-covered Upper-Sonoran-Zone high plains of Kimball, southeastern Banner and western Cheyenne Counties, in extreme southwestern corner of Nebraska Panhandle. Presumably recorded also under name *clusius* as occurring in soils of Rosebud series in Upper Sonoran Zone of extreme northeastern Colorado, at Avalo and at Chimney Cliffs 30 miles northwest of Sterling (5,100 feet) in northwestern Logan County, and at Pawnee Buttes.

**Thomomys talpoides bullatus** V. Bailey†*


**Thomomys talpoides pryori** V. Bailey†*


Type Locality.—Head of Sage Creek, Pryor Mountains, Carbon County, south-central Montana. Altitude, 6,000 feet. Range.—Pryor Mountains, Montana, east to Bighorn River, near Fort Custer.

Thomomys talpoides kelloggi Goldman†*


Type locality.—West Boulder Creek, Absaroka Mountains, 18 miles southeast of Livingston, Park County, south-central Montana. Range.—Known from type locality only.

Thomomys talpoides trivialis Goldman†*


Type Locality.—Near head of Big Timber Creek, about 15 miles northwest of Big Timber, Crazy Mountains, Sweetgrass County, south-central Montana. Altitude, 5,200 feet. Range.—Outlying ranges along eastern side of Rocky Mountains, including Big Belt, Castle, Crazy and Little Belt Mountains, in central Montana.

Thomomys talpoides saturatus V. Bailey†*


Type Locality.—Silver, near Saltese, Coeur d’Alene Mountains, Missoula (now Mineral) County, northwestern Montana. Range.—Higher parts of Coeur d’Alene Mountains in northwestern Montana; northeastern Idaho from Weippe, Clearwater County, north to Canada (Davis, op. cit., p. 256); and into southern ranges of Selkirks in southeastern British Columbia; recorded from Goatfell (2,940 feet), on eastern base of Moyie Range, near Moyie River; Linklater Creek (about 2,400 feet) in foothills of Purcell Range on west side of Kootenay River northwest of Newgate, British Columbia (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 129, Jan. 24, 1947).

Thomomys talpoides confinis Davis*


Type Locality.—Gird Creek, near Hamilton, Ravalli County, western Montana. Range.—Known only from vicinity of Hamilton; probably occurs throughout most of the Bitterroot Valley, Mont.

Thomomys talpoides tenellus Goldman†*


Type Locality.—Whirlwind Peak, Absaroka Range, Park County, Wyo. Altitude, 10,500 feet. Range.—Mountain region (including Teton Mountains, Absaroka Range, and Yellowstone National Park) of northwestern Wyoming and Beartooth Mountains in adjacent extreme southern Montana.
Thomomys talpoides caryi V. Bailey†*
_Type Locality._—Head of Trapper Creek, Bighorn Mountains, Bighorn County, Wyo. Altitude, 9,500 feet. _Range._—Canadian Zone on Bighorn Mountains, central northern Wyoming.

Thomomys talpoides nebulosus V. Bailey†*
_Type Locality._—Jack Boyden’s Ranch, 5 miles above mouth of Sand Creek Canyon, Black Hills, and 15 miles northeast of Sundance, Crook County, Wyo. Altitude, 3,750 feet. _Range._—Black Hills, S. Dak., and Bear Lodge Mountains, Crook County, northwestern Wyoming (V. Bailey, North Amer. Fauna No. 39, p. 102, Nov. 15, 1915).

Thomomys talpoides clusius Coues†*

Thomomys talpoides meritus Hall*
_Type Locality._—Eight miles north and 19½ miles east of Savery, Carbon County, Wyo. Altitude, 3,800 feet. _Range._—Sierra Madre Mountain Range of southern Wyoming and northern Colorado.

Thomomys talpoides bridgeri Merriam†*
_Type Locality._—Harvey’s Ranch, now Montainview, on Smiths Fork, 4 miles (airline) southeast of Fort Bridger, Uinta County, southwestern Wyoming (see Hooper, Journ. Mamm., vol. 24, No. 4, p. 503, Nov. 17, 1943). _Range._—Extreme southwestern Wyoming; in Idaho south and east of Snake River from near American Falls north to Victor (Davis, The Recent mammals of Idaho, p. 258, Apr. 5, 1939).

Thomomys talpoides oclus Merriam†*


*Type Locality.*—Harvey’s Ranch, now Mountainview, on Smith’s Fork, 4 miles (airline) southeast of Fort Bridger, Uinta County, southwestern Wyoming (see Hooper, Journ. Mamm., vol. 24, No. 4, p. 503, Nov. 17, 1943). *Range.*—Eastern Uintah County in northeastern Utah (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 47, Feb. 15, 1951); and along Henry’s Fork in extreme southwestern Sweetwater County and Uinta County, Wyo. (Durrant, op. cit., p. 19).

*Thomomys talpoides rostralis* Hall and Montague*


*Type Locality.*—One mile east of Laramie, Albany County, Wyo. Altitude, 7,164 feet. *Range.*—Southern Wyoming and south in mountains of Colorado to Arkansas River, but not including Colorado River drainage except in Grand County and part of Routt County.

*Thomomys talpoides attenuatus* Hall and Montague*


*Type Locality.*—Three and one-half miles west of Horse Creek Post Office, Laramie County, Wyo. Altitude, 7,000 feet. *Range.*—Southeastern Wyoming from Niobrara County south into Weld County, Colo.

*Thomomys talpoides retrorsus* Hall†*


*Type Locality.*—Flagler, Kit Carson County, Colo. *Range.*—Western end of Arkansas Divide in Colorado from 8 miles south of Seibert westward to Colorado Springs.

*Thomomys talpoides fossor* J. A. Allen*


*Type Locality.*—Florida, La Plata County, Colo. Altitude, 7,200 feet. *Range.*—In northeastern Arizona, near tops of Tunitcha and Lukachukai Mountains (Goldman, North Amer. Fauna No. 59, p. 33, June 12, 1947); north-central and northwestern New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 229, Mar. 1, 1932); mountains of Colorado, from La Plata, Archuleta, Costilla, and Huerfano Counties north to Colorado River drainage.

*Thomomys talpoides macrotis* F. W. Miller*


*Type Locality.*—D’Arcy Ranch, 2 miles north of Parker, Douglas County, Colo. Altitude, 5,700 feet. *Range.*—Known from type locality only.
Thomomys talpoides agrestis Merriam†*

*Type Locality.*—Medano Ranch, 15 miles northeast of Mosca, San Luis Valley, Alamosa County, Colo. *Range.*—In San Luis Valley, from a few miles north of Moffatt, Saguache County, south as far as Mosca, Alamosa County; and thence south to San Acacio, Costilla County, Colo. (Warren, The mammals of Colorado, . . . , p. 163, 1942).

Thomomys talpoides taylori Hooper

*Type Locality.*—Six miles northeast of the summit of Mount Taylor, near Fernandez summer camp, Valencia County, N. Mex. Altitude, about 8,900 feet. *Range.*—Known only from yellow pine and Douglas fir belts above 8,500 feet in San Mateo Mountains, Valencia County.

Thomomys talpoides kaibabensis Goldman†*

*Type Locality.*—De Motte Park, Kaibab Plateau, Coconino County, Ariz. Altitude, 9,000 feet. *Range.*—Higher parts of well-forested Kaibab Plateau, which rises islandlike from arid plains or broad valleys toward the north and presents a sheer face along north side of deepest part of Grand Canyon, Ariz. (Goldman, North Amer. Fauna No. 59, p. 32, June 12, 1947).

Thomomys talpoides parowanensis Goldman†*


Thomomys talpoides durranti Kelson*


Thomomys talpoides levis Goldman†*

*Type Locality.*—Seven Mile Flat, 5 miles north of Fish Lake, Fish Lake Plateau, Sevier County, Utah. Altitude, 10,000 feet. *Range.*—Fish Lake Mountains in Sevier County south into Garfield County, Utah (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 1, No. 1, p. 24, Aug. 15, 1946).

*Thomomys talpoides moorei* Goldman†*


*Type Locality.*—One mile south of Fairview, Sanpete County, Utah. Altitude, 6,000 feet. *Range.*—Wasatch Mountains and Wasatch Plateau from Mount Timpanogos, Utah County, south to northern Sevier County; eastern Juab County east to western Carbon County and northwestern Emery County (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 47, Feb. 15, 1951).

*Thomomys talpoides uinta* Merriam†*


*Type Locality.*—Black’s Fork, north base of Gilbert’s Peak, Uinta Mountains, Summit County, Utah. Altitude, 10,000 feet. *Range.*—Southern Summit County, south to West Tavaputs Plateau in Carbon County; eastern Utah and Wasatch Counties, east to western Uintah County, Utah (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 47, Feb. 15, 1951).

*Thomomys talpoides ravus* Durrant


*Type Locality.*—Vernal–Manila Highway, 19 miles north of Vernal, Uintah County, Utah. Altitude, 8,000 feet. *Range.*—Uinta Mountains in Daggett, northern Uintah and Summit Counties, Utah.

*Thomomys talpoides oquirrhensis* Durrant


*Thomomys talpoides wasatchensis* Durrant


*Type Locality.*—Midway, Wasatch County, Utah. Altitude, 5,500 feet. *Range.*—Wasatch Mountains and neighboring high valleys as far south as Spanish Fork Canyon, Utah County, Utah.
Thomomys talpoides idahoensis Merriam†
_Type Locality._—Birch Creek, 10 miles south of Nicholia, Lemhi County, Idaho. Altitude, about 6,400 feet (Bailey, North Amer. Fauna No. 39, p. 108, Nov. 15, 1915). _Range._—Northwestern part of Snake River Plains from near Arco, Butte County, and Kaufman east to near Swan Valley, Bonneville County, and south on west side of Snake River to near Blackfoot, Bingham County, Idaho (Davis, loc. cit.).

Thomomys talpoides relicinus Goldman†
_Type Locality._—Twin Springs, 20 miles north of Minidoka, Snake River Desert, Minidoka County, Idaho. _Range._—Known only from Snake River Desert, southern Idaho.

Thomomys talpoides fuscus Merriam†
1891. Thomomys clusius fuscus Merriam, North Amer. Fauna No. 5, p. 69, July 30, 1891.
_Type Locality._—Summit Creek, in mountains at head of Big Lost River, Custer County, Idaho. Altitude, 8,000 feet. _Range._—In Idaho, from Snake River at Acequia and Hagerman northward to drainage of Clearwater River (Davis, loc. cit.); eastern Washington, from Pullman, Whitman County, north to Canadian boundary, and in northern part of State west, north of Columbia River, to Cascade Mountains, and thence south, west of Columbia River, to Wenatchee and Merritt, Chelan County, Washington (Dalquest and Scheffer, Amer. Nat., vol. 78, p. 438, September 1944); and in British Columbia apparently confined to southern parts of Monashee Range near Canadian boundary (lat. 49° N.), from east side of Okanagan Valley (Osoyoos–Bridesville Summit), to Kettle River (Cascade, Midway, Myer’s Creek, Westbridge), and to Rossland, Trail, and near mouth of Pend-d’Oreille River in Columbia River Valley (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 128, Jan. 24, 1947).

Thomomys talpoides falcifer Grinnell*
**Type Locality.**—Bell's Ranch, Reese River Valley, Nye County, Nev. Aditude, 6,890 feet. **Range.**—Central Nevada; north and west of Unionville; south to head of Reese River; and east at least to Toyabe Mountains (Hall, Mammals of Nevada, p. 449, July 1, 1946).

**Thomomys talpoides gracilis** Durrant*


**Type Locality.**—Pine Canyon, 17 miles northwest of Kelton, Raft River Mountains, Box Elder County, Utah. Aditude, 6,600 feet. **Range.**—Mountainous regions of extreme northwestern Utah (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 1, No. 1, p. 6, Aug. 15, 1946); northeastern Nevada west to Santa Rosa Mountains north of Humboldt River and west into Eureka County and Monitor Mountain Range south of Humboldt River (Hall, Mammals of Nevada, p. 448, July 1, 1946); and central extreme southern Idaho.

**Thomomys talpoides pygmaeus** Merriam†*


**Type Locality.**—Montpelier Creek, about 10 miles northeast of Montpelier, Bear Lake County, Idaho. Aditude, 6,700 feet. **Range.**—East side of Snake River from near Idaho Falls south of Blackfoot, thence east into southwestern Wyoming and from there to vicinity of Montpelier, Bear Lake County, Idaho (Davis, loc. cit.). Recorded also from Daggett County, Utah (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 1, No. 1, p. 14, Aug. 15, 1946).

**Thomomys talpoides monoensis** Huey


**Type Locality.**—Kuhlee Ranch, Dexter Creek Meadow, at confluence of Dexter and Wet Creeks, 12 miles northwest of Benton, Mono County, Calif. Aditude, 6,300 feet. **Range.**—Mono County, Calif.; and higher areas along western boundary of Nevada from northern Douglas County south to northern end of White Mountains, Esmeralda County (Hall, Mammals of Nevada, p. 450, July 1, 1946).

**Thomomys talpoides fisheri** Merriam†*


**Type Locality.**—Beckwith, Sierra Valley, Plumas County, Calif. **Range.**—Enters eastern borders of California at several points, from Plumas County, south to range of *monoensis*; vertical range, 5,000 to 9,200 feet; zonal range, Upper Sonoran and Transition (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2,
RODENTIA: GEOEMYIDAE

p. 146, Sept. 26, 1933); southwestern Washoe County and Ormsby County east of range of *monticola*, northwestern Nevada (Hall, Mammals of Nevada, p. 449, July 1, 1946); and southwestern Idaho (Davis, The Recent mammals of Idaho, p. 258, Apr. 5, 1939).

**Thomomys talpoides quadratus** Merriam†*


*Type Locality.*—The Dalles, Wasco County, Oreg.  *Range.*—Sagebrush plains of eastern Oregon (V. Bailey, North Amer. Fauna No. 55 (June), p. 260, Aug. 29, 1936); Modoc region of northeastern California, west to Macdoel, Siskiyou County, south to near Susanville, Lassen County; vertical range, from 4,200 feet (near Susanville) up to at least 8,700 feet (Warren Peak) on Warner Mountains; zonal range, Upper Sonoran, Transition, and Canadian (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 145, Sept. 26, 1933); northwestern Nevada, east to Pine Forest Mountains, south to head of Smoke Creek and Granite Peak, and in an isolated colony on Pahrum Peak (Hall, Mammals of Nevada, p. 447, July 1, 1946).

**Thomomys talpoides wallowa** Hall and Orr*†


**Thomomys talpoides aequalidens** Dalquest*


Thomomys talpoides whitmani Drake and Booth*


*Type locality.*—Whitman National Monument, 6 miles west of Walla Walla, Walla Walla County, Wash. Altitude, 750 feet. *Range.*—Walla Walla County, from Walla Walla and the base of lower foothills, westward to approximately halfway between Lowden and Touchet, northward to base of low rolling hills, and south to Walla Walla River.

Thomomys talpoides columbianus V. Bailey†*


*Type locality.*—Touchet, Walla Walla County, Wash. *Range.*—In Washington, western Walla Walla County west to Columbia River, north to Snake River, eastward along Snake River to boundary between Walla Walla and Columbia Counties, thence southward to about 4 miles west of Prescott, and westward along edge of rolling hills at about 1,000 feet altitude to within about 10 miles of Touchet, then south to Walla Walla River, and thence east and south along Walla Walla River to Milton (Drake and Booth, Walla Walla Coll. Publ. Dep. Biol. Sci. and Biol. Station, vol. 1, No. 3, p. 45, Nov. 25, 1952); and low, hot arid sagebrush country around Great Bend of Columbia River in northern Oregon (V. Bailey North Amer. Fauna No. 55 (June), p. 260, Aug. 29, 1936).

Thomomys talpoides devexus Hall and Dalquest*


*Type Locality.*—One mile west-southwest of Neppel, Grant County, Wash. *Range.*—Columbian plateau of central eastern Washington (Dalquest and Scheffer, loc. cit.).

Thomomys talpoides yakimensis Hall and Dalquest*


*Type Locality.*—Selah, Yakima County, Wash. *Range.*—Yakima Valley area, east to Columbia River, north to Wenatchee Mountains, west to Cascade Mountains, and south probably to Simcoe Range, Wash. (Dalquest and Scheffer, loc. cit.).
Thomomys talpoides limosus Merriam†*

Thomomys talpoides shawi Taylor†*

Thomomys talpoides immulnis Hall and Dalquest*

Thomomys talpoides douglasii (Richardson)*
*Type Locality.*—Near mouth of the Columbia River; probably near Fort Vancouver (now Vancouver), Clark County, Wash. *Range.*—Pleistocene gravel terraces (locally known as plains) of Columbia River near Vancouver, Clark County (Dalquest and Scheffer, Amer. Nat., vol. 78, p. 443, September 1944); and on Oregon side of Columbia River at Scapoose, some 20 miles northwest of Portland (V. Bailey, North Amer. Fauna No. 55 (June), p. 254, Aug. 29, 1936).

Thomomys talpoides louiei Gardner†*
*Type Locality.*—Twelve miles north-northeast of Cathlamet (Crown-Zellerbach’s Cathlamet Tree Farm), Wahkiakum County, Wash. Altitude, 2,500 feet. *Range.*—Known from type locality only.

Thomomys talpoides yelmensis Merriam†*
Type Locality.—Tenino, Yelm Prairie, Thurston County, Wash. Range.—Grand Mound Prairie, near Tenino, Thurston County; Vail Prairie, near Vail, Thurston County; and Rochester Prairie, near Rochester, Thurston County, Wash. (Dalquest and Scheffer, Amer. Nat., vol. 78, p. 446, September 1944).

Thomomys talpoides glacialis Dalquest and Scheffer†*
Type Locality.—Prairie 2 miles south of Roy, Pierce County, Wash. Range.—Known from vicinity of type locality only.

Thomomys talpoides tacomensis Taylor†*
Type Locality.—Six miles south of Tacoma, Pierce County, Wash. Range.—Seemingly restricted to certain prairies near Steilacoom and prairies and some agricultural lands near Tacoma, Pierce County (Dalquest and Scheffer, Amer. Nat., vol. 78, p. 445, September 1944).

Thomomys talpoides tumuli Dalquest and Scheffer†*
Type Locality.—Seven miles north of Tenino, Thurston County, Wash. Range.—Known from type locality only.

Thomomys talpoides pugetensis Dalquest and Scheffer†*
Type Locality.—Four miles south of Olympia, Thurston County, Wash. Range.—Known from prairies in vicinity of type locality only.

Thomomys talpoides couchi Goldman†*
Type Locality.—Four miles north of Shelton, Mason County, Wash. Range.—Isolated prairies at southeastern base of Olympic Mountains; recorded from Scotts Prairie and Lost Lake Prairie, Mason County (Dalquest and Scheffer, Amer. Nat., vol. 78, p. 447, September 1944).

Thomomys talpoides melanops Merriam†*
Type Locality.—Timberline at head of Soleduc River, Olympic Mountains, Clallam County, Wash. Range.—Alpine meadows of high Olympic Mountains in Washington (Dalquest and Scheffer, Amer. Nat., vol. 78, p. 447, September 1944).
Thomomys talpoides incensus Goldman†*

*Type Locality.*—Shuswap, Yale District, British Columbia, Canada. *Range.*—Thompson River Valley (Ashcroft, Kamloops) and South Thompson River (Shuswap); non-typical intergradation shown at north end of Okanagan Lake (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 128, Jan. 24, 1947).

Thomomys talpoides medius Goldman†*

*Type Locality.*—Silver King Mine, summit of Toad Mountain, 6 miles south of Nelson, West Kootenay District, British Columbia, Canada. *Range.*— Vicinity of type locality on southwest arm of Kootenay Lake; limits of range undetermined.

townsendii—group 88

Thomomys townsendii townsendii (Bachman)*


Thomomys townsendii owyhensis Davis*

*Type Locality.*—Castle Creek, 8 miles south of Oreana, Owyhee County, Idaho. *Range.*—Owyhee County south of Snake River from near Murphy east to Indian Cove.

Thomomys townsendii similis Davis*

*Type Locality.*—Pocatello, Bannock County, Idaho. *Range.*—On both sides of Snake River from American Falls northeast to Pingree, and east along Port Neuf River to Pocatello.

Thomomys townsendii elkoensis Davis*

Type Locality.—Evans, Eureka County, Nev.  Range.—Upper part of Humboldt River drainage system downriver to Carlin, Nev. (Hall, Mammals of Nevada, p. 452, July 1, 1946).

Thomomys townsendii nevadensis Merriam†

Type Locality.—Five miles west of Austin, Reese River bottomlands, Lander County, Nev.  Range.—Known from vicinity of type locality only.

Thomomys townsendii bachmani Davis*

Type Locality.—Quinn River Crossing, Humboldt County, Nev.  Altitude, 4,100 feet.  Range.—Quinn River Valley, Little Humboldt River Valley, and Lower Humboldt River Valley from Toulon, upriver, to Battle Mountain in Nevada (Hall, Mammals of Nevada, p. 452, July 1, 1946); northward to Malheur Lake, Oreg.

Thomomys townsendii relictus Grinnell

Type Locality.—Two miles south of Susanville, Susan River Valley, Lassen County, Calif.  Range.—Bed of Honey Lake Valley, Lassen County, where it exists in fine-grained, alluvial, and more or less alkaline soil in borderlands of Honey Lake proper (Wendel, Amedee) and thence up the Susan River as far as Susanville, Calif.; zonal range, Upper Sonoran; vertical range, 3,900 to 4,200 feet (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 137, September 26, 1933).

monticola—group 88

Thomomys monticola monticola J. A. Allen*

Type Locality.—Mount Tallac, El Dorado County, Calif. Altitude, 7,500 feet. Range.—Higher parts of northern Sierra Nevada, from Huntington Lake, Fresno County, north to Butte Creek, northeast of Mount Shasta, Siskiyou County, Calif.; vertical range, from 3,600 feet (near Sisson, Siskiyou County) up to at least 10,350 feet (Vogelsang Lake, Yosemite National Park); zonal range, Canadian and Hudsonian, Transition locally (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 146, Sept. 26, 1933); Sierra Nevada in southwestern Washoe, western Ormsby, and western Douglas Counties, Nev. (Hall, Mammals of Nevada, p. 451, July 1, 1946).

Thomomys monticola mazama Merriam†*


Type Locality.—Anna Creek, near Crater Lake, Mount Mazama, Klamath County, Oreg. Altitude, 6,000 feet. Range.—Cascade Mountains of Oregon from Columbia River south (V. Bailey, North Amer. Fauna No. 55 (June), p. 256, Aug. 29, 1936); and higher parts of Siskiyou, Scott, Salmon, and Trinity Mountains, from Oregon line, Siskiyou County, south to head of Grizzly Creek, Trinity County; zonal range, Canadian and Hudsonian, Transition locally; vertical range, from 4,500 to 7,000 feet (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 146, Sept. 26, 1933).

Thomomys monticola helleri Elliot*


Type Locality.—Gold Beach, mouth of Rogue River, Curry County, Oreg. Range.—Coastal region of southwestern Oregon; recorded from mouth of Rogue River at Gold Beach and Wedderburn (V. Bailey, North Amer. Fauna No. 55 (June), p. 258, Aug. 29, 1936).

Thomomys monticola niger Merriam†*


Type Locality.—Seaton [=Mapleton], near mouth of Umpqua River [=head of tide water on Siuslaw River], Lane County, Oreg. Range.—Known only from near mouth of Umpqua River, at Scottsburg, and in Siuslaw River Valley at Mapleton, Deadwood, and Mercer (V. Bailey, North Amer. Fauna No. 55 (June), p. 256, Aug. 29, 1936).

Thomomys monticola nasicus Merriam†*


213756—55—22
**Type Locality.**—Farewell Bend, Deschutes River, Deschutes County, Oreg. Range.—Yellow pine forest east of Cascade Mountains, from Farewell Bend on Deschutes River to Fort Klamath, in Paulina and Yamsey Mountains, Oregon (V. Bailey, North Amer. Fauna No. 55 (June), p. 259, Aug. 29, 1936).

**Thomomys monticola hesperus** Merriam†


**Thomomys monticola oregonus** Merriam†


**Type Locality.**—Ely, near Oregon City, Willamette Valley, Clackamas County, Oreg. Range.—Northwestern Oregon, from Hillsboro, Washington County, south to Pedee, Polk County, and east to Parkdale, Hood County (V. Bailey, North Amer. Fauna No. 55 (June), p. 254, Aug. 29, 1936).

**Thomomys umbrinus umbrinus** (Richardson) *


**Type Locality.**—Supposed to have been at “Cadadaguios, a town in the southwestern part of Louisiana”; but actually somewhere in southern México, probably in the vicinity of Boca del Monte, Veracruz [probably Puebla], (see V. Bailey, op. cit., pp. 3–6). Range.—Eastern edge of high plateau at Boca del Monte, eastern Veracruz, México; limits of range unknown (Nelson and Goldman, Journ. Mamm., vol. 15, No. 2, p. 106, May 15, 1934).

**Thomomys umbrinus orizabae** Merriam†


**Type Locality.**—Volcán de Orizaba, Puebla, México. Altitude, about 9,500 feet. Range.—Known from upper slopes of Volcán de Orizaba only.

**Thomomys umbrinus martinensis** Nelson and Goldman†


Type Locality.—San Martín Texmelucán, western Puebla, México. Altitude, 7,400 feet. Range.—Elevated plains and lower slopes of hills in vicinity of type locality.

**Thomomys umbrinus peregrinus** Merriam‡*


**Thomomys umbrinus tolucae** Nelson and Goldman‡*


Type Locality.—North slope, Volcán de Toluca, México, México. Altitude, 9,500 feet. Range.—Known from type locality only.

**Thomomys umbrinus vulcanius** Nelson and Goldman‡*


Type Locality.—Volcán de Popocatépetl, México, México. Altitude, 12,900 feet. Range.—Known only from near timberline on Volcán de Popocatépetl, México.

**Thomomys umbrinus albigularis** Nelson and Goldman‡*


Type Locality.—El Chico, Sierra de Pachuca, Hidalgo, México. Altitude, 9,800 feet. Range.—Sierra de Pachuca, eastern Hidalgo.

**Thomomys umbrinus supernus** Nelson and Goldman‡*


Type Locality.—Santa Rosa, about 7 miles northeast of Guanajuato, Guana-juato, México. Altitude, between 9,500 and 10,000 feet. Range.—High mountains of central Guanajuato.

**Thomomys umbrinus pullus** Hall and Villa


Type Locality.—Five miles south of Pátzcuaro, Michoacán, México. Altitude, 7,800 feet. Range.—Known only from 3 to 5 miles south of Pátzcuaro.

**Thomomys umbrinus newmani** Dalquest*


Type Locality.—Seven kilometers northwest of Palma (village 12 km. northwest of Salinas), San Luis Potosí, México. Range.—Known only from desert plains near city of Salinas in western San Luis Potosí.
Thomomys umbrinus potosinus Nelson and Goldman†*

Type Locality.—La Tinaja, about 20 miles northeast of San Luis Potosí, San Luis Potosí, México. Altitude, 6,000 feet. Range.—Open plains of southwestern San Luis Potosí.

Thomomys umbrinus atrodorsalis Nelson and Goldman*

Type Locality.—Alvarez, about 3 miles north-northwest of San Luis Potosí, San Luis Potosí, México. Altitude, 8,000 feet. Range.—Known from type locality only.

Thomomys umbrinus arriagensis Dalquest*

Type Locality.—One kilometer south of Arriaga, San Luis Potosí, México. Range.—Known only from type locality on Plan de Arriaga, a small, high, arid plain near Guanajuato boundary southwest of city of San Luis Potosí.

Thomomys umbrinus zacatecae Nelson and Goldman†*

Type Locality.—Berriozábal, Zacatecas, México. Altitude, 6,600 feet. Range.—High arid plains of southeastern Zacatecas.

Thomomys umbrinus enixus Nelson and Goldman†*

Type Locality.—Sierra Moroni, near Plateado, Zacatecas, México. Altitude, 8,500 feet. Range.—Upper slopes of Sierra Moroni, southern Zacatecas.

Thomomys umbrinus crassidens Nelson and Goldman†*

Type Locality.—Sierra de Valparaiso, about 13 miles west of Valparaiso, western Zacatecas, México. Range.—Known only from upper slopes of Sierra de Valparaiso.

Thomomys umbrinus durangi Nelson and Goldman†*

Type Locality.—Durango, Durango, México. Range.—High plains along eastern base of Sierra Madre, southern Durango.

Thomomys umbrinus goldmani Merriam†*

RODENTIA: GEOMYIDAE

*Type Locality.*—Mapimi, Durango, México. Altitude, 3,800 feet. *Range.*—Arid interior basin, or sink, in northeastern Durango known as Bolsón de Mapimi; probably ranging into adjoining parts of southwestern Coahuila, México.

**Thomomys umbrinus e vexus** Nelson and Goldman


*Type Locality.*—Mount San Gabriel, vicinity of Rosario, 10 miles northwest of Villa Ocampo, Río Florida, northwestern Durango, México. Altitude, between 7,000 and 9,000 feet. *Range.*—Known from type locality only.

**Thomomys umbrinus perditus** Merriam


*Typical Locality.*—Sierra Madre, about 65 miles east of Batopilas, Chihuahua, México. Altitude, 7,000 feet. *Range.*—Sierra Madre in southwestern Chihuahua, México.

**Thomomys umbrinus caliginosus** Nelson and Goldman


*Type Locality.*—Animas Peak, Animas Mountains, Hidalgo County, N. Mex. Altitude, 8,000 feet. *Range.*—Known only from upper slopes of Animas Mountains, southwestern New Mexico.

**Thomomys umbriinus intermedius** Mearns†*


*Type Locality.*—Summit of Huachuca Mountains, Cochise County, southern Arizona. Altitude, 9,000 feet. *Range.*—Known from type locality only.

**Thomomys umbriinus burti** Huey*


*Type Locality.*—Madera Canyon, Santa Rita Mountains, Santa Cruz County, Ariz. Altitude, 6,000 feet. *Range.*—Santa Rita Mountains, southern Arizona (Goldman, North Amer. Fauna No. 59, p. 34, June 12, 1947). Zonal range, Upper Sonoran and Transition; vertical range, 4,500 to 8,000 feet.

**Thomomys umbriinus quercinus** Burt and Campbell*


*Type Locality.*—Peña Blanca Spring, Pajarito Mountains (=Tumacacori Mountains, near Mexican boundary, north of Monument 128), Santa Cruz County, Ariz. *Range.*—From 4,500 feet altitude at type locality in Pajarito Mountains to about 6,000 feet on pass over summit of Patagonia Mountains, Ariz. (Goldman, North Amer. Fauna No. 59, p. 35, June 12, 1947). Zonal range, Upper Sonoran.

**Thomomys umbriinus proximus** Burt and Campbell*


*Type Locality.*—Old Parker Ranch (Pickett’s Ranch on U. S. Geol. Surv. Patagonia Quadrangle, August 1905), 4 miles west of Greaterville, west slope of Santa Rita Mountains, Pima County, Ariz. Altitude, 4,800 feet. *Range.*—Recorded from west slope of Santa Rita Mountains at Empire Ranch, east of these mountains at Fort Huachuca, and at Arivaca, Ariz. (Goldman, North Amer. Fauna No. 59, p. 33, June 12, 1947). Zonal range, Upper Sonoran; vertical range, 4,500 to 4,800 feet.

**Thomomys umbriinus sonoriensis** Nelson and Goldman†*

**Thomomys umbrinus eximius** Nelson and Goldman†*  
*Type Locality.*—Sierra de Choix, about 20 miles northeast of Choix, Sinaloa, México. Altitude, 5,000 feet. *Range.*—Upper slopes of Sierra de Choix, a western spur of Sierra Madre, northern Sinaloa.

**Thomomys umbrinus atrovarius** J. A. Allen*  
*Type Locality.*—Tatemales, near Rosario, Sinaloa, México. *Range.*—Coastal plain from southern Sinaloa south to central Nayarit, México.

**Thomomys umbrinus sheldoni** V. Bailey†*  
*Type Locality.*—Santa Teresa, 40 miles east of Acaponeta, Nayarit, México. Altitude, 6,800 feet. *Range.*—Upper slopes of Sierra Madre from northern Nayarit and extreme western Zacatecas north through western Durango to southwestern Chihuahua, México.

**Thomomys umbrinus musculus** Nelson and Goldman†*  

**Thomomys umbrinus extimus** Nelson and Goldman†*  
*Type Locality.*—Colomo, near Río de Ameca, southern Nayarit, México. Altitude, 600 feet. *Range.*—Arid tropical coastal plains in extreme southern Nayarit; probably intergrading to the northward with *atrovarius.*

**Thomomys simulus simulus** Nelson and Goldman†*  
Thomomys simulus parviceps Nelson and Goldman†*
Type Locality.—Chacala, western Durango, México. Altitude, 3,000 feet. Range.—Subtropical western slope of Sierra Madre in western Durango and probably adjoining parts of Sinaloa, México.

Subgenus MEGASCAPHEUS Elliot

Thomomys bulbivorus (Richardson) *
Type Locality.—Banks of the Columbia River, probably near Portland, Multnomah County, Oreg. Range.—Willamette Valley, Oreg., from Portland and Forest Grove south to Eugene, and west to Grand Ronde Valley (V. Bailey, North Amer. Fauna No. 55 (June), p. 249, Aug. 29, 1936).

Genus GEOMYS Rafinesque
1817. Geomys Rafinesque, Amer. Monthly Mag., vol. 2, No. 1, p. 45, November 1817. (Type Geomys pinetis Rafinesque = Mus tuza Barton.)

pinetis—group

Geomys pinetis pinetis Rafinesque*
Type Locality.—Georgia, in the region of the pines (restricted to Screven County, Ga., by Harper, loc. cit.). Range.—Pine woods of eastern Georgia, from Savannah River south at least to Sterling, Glynn County, and west to western Georgia, where it begins to merge with mobilensis (Bangs, loc. cit.).

Geomys pinetis mobilensis Merriam†*


_Type Locality._—Point Clear, Mobile Bay, Baldwin County, Ala. _Range._—Locally in southern Alabama east of Tombigbee River, and north to Tuscaloosa County east of Warrior River (A. H. Howell, North Amer. Fauna No. 45, p. 59, Oct. 28, 1921); and adjacent part of northwestern Florida (Escambia and Santa Rosa Counties).

**Geomys pinetis floridanus** (Audubon and Bachman) *


**Geomys pinetis goffi** Sherman


_Type Locality._—Eau Gallie, Brevard County, Fla. _Range._—Known only from type locality, which consists of part of strip of Norfolk and St. Lucie fine sands bordering Indian River.

**Geomys pinetis australinus** Bangs *


_Type Locality._—Belleair, Pinellas County, Fla. _Range._—Western part of Florida Peninsula.

**Geomys colonus** Bangs *


_Type Locality._—Arnot Plantation, about 4 miles west of St. Marys, Camden County, Ga. _Range._—Pine woods of Camden County, Ga., probably north to Satilla River.

**Geomys fontanelus** Sherman

Type Locality.—About 7 miles northwest of Savannah, Chatham County, Ga. Range.—Norfolk very fine sand in vicinity of type locality.

*Geomys cumberlandius* Bangs*


Type Locality.—“Stafford Place,” Cumberland Island, Camden County, Ga. Range.—Known from Cumberland Island only.

*Geomys bursarius bursarius* (Shaw) *


Type Locality.—Elk River, Sherburne County, Minn. (restricted by Swenk, Missouri Valley Fauna, Lincoln, No. 1, p. 6, Dec. 5, 1939). Range.—Upper Mississippi Valley, from southeastern Missouri, north through Iowa east of Des Moines River, eastern South Dakota east of James River, and eastern North Dakota east of western beach lines of post-glacial Lake Agassiz (V. Bailey, North Amer. Fauna No. 49 (December 1926), pp. 125–126, Jan. 8, 1927) to extreme southern Manitoba at a point 2 miles north of international boundary and 11½ miles northeast of Emerson (Soper, Canadian Field-Nat., vol. 58, No. 3, pp. 71–72, Aug. 28, 1944) and to Kitson, Cass (Cass Lake), and Carlton Counties in northern Minnesota (Swanson, Minnesota Dept. Conserv. Techn. Bull. 2, p. 83, 1945) and Bayfield County in northwestern Wisconsin.

*Geomys bursarius illinoensis* Komarek and Spencer*


Type Locality.—One mile south of Momence, Kankakee County, Ill. Range.—East of Mississippi River and south of Illinois River in southern Illinois; and Newton and Jasper Counties in northwestern Indiana.

*Geomys bursarius majusculus* Swenk *


Type Locality.—Lincoln, Lancaster County, Nebr. Range.—Eastern Nebraska (Knox, Pierce, eastern Madison, eastern Platte, Polk, Hamilton, Adams and Webster Counties, east to Missouri River) and adjacent portions of southeastern South Dakota, east through western and northern Iowa at least to Marion County in Des Moines River Valley; and south to northeastern Kansas, westward certainly to Clay and Marion Counties and southward certainly to Greenwood County (Villa and Hall, Univ. Kansas Publ. Mus. Nat. Hist., vol. 1, No. 11, p. 223, Nov. 29, 1947).
Geomys bursarius levisagittalis Swenk*


_Type Locality._—Spencer, Boyd County, Nebr. _Range._—Known only from type locality north of Niobrara River, but probably present in sandy soil areas in stream bottoms in Boyd County, Nebr., and adjacent areas in Boyd–Hall soil area west of Missouri River in Nebraska and South Dakota.

Geomys bursarius hylaeus Blossom*


_Type Locality._—Ten miles south of Chadron, Dawes County, Nebr. _Range._—Pine-clad and deeply eroded canyons of northern escarpment of Pine Ridge in Sioux County together with Hat Creek Basin lying directly north of this escarpment; eastward along Pine Ridge well on to Dawes Table south of White River in Dawes County (Crawford, Chadron), but replaced by more typical _lutescens_ on sand hills south of Niobrara River in Sheridan County, Nebr. (Swenk, Missouri Valley Fauna, Lincoln, No. 2, p. 9, Feb. 1, 1940).

Geomys bursarius vinaceus Swenk


_Type Locality._—Scottsbluff, Scotts Bluff County, Nebr. _Range._—Sandy valley areas of high plains of southern part of Nebraska Panhandle; and Laramie County in extreme southeastern Wyoming and south of South Platte River in Washington County in northeastern Colorado (Hooper, Occ. Pap. Mus. Zool. Univ. Michigan No. 420, p. 3, June 28, 1940).

Geomys bursarius lutescens Merriam†*


_Type Locality._—Sand hills on Birdwood Creek, Lincoln County, western Nebraska. _Range._—Arid plains and sand-hill regions of central and western Nebraska, north to Niobrara River, west into sand hills of Sheridan County, east approximately to long. 97° 30' W. (see Swenk, Missouri Valley Fauna No. 2, pp 1–3, 6–7, Feb. 1, 1940); and south to northwestern Kansas, eastward certainly to Ellis County, southward certainly to Scott County (Villa and Hall, loc. cit.).

Geomys bursarius jugossicularis Hooper


*Type Locality.*—One and one-half miles north of Fowler, Meade County, Kans. Range.—Southwestern Kansas from Meade County eastward to Pratt and Clark Counties; from Pawnee County southward probably to Oklahoma boundary.

**Geomys bursarius major** Davis* 1940. *Geomys lutescens major* Davis, Texas Agr. Exp. Station Bull. 590, p. 32, Oct. 23, 1940.


*Type Locality.*—Eight miles west of Clarendon, Donley County, Tex. Range.—Plains region of northwestern Texas, western Oklahoma, and eastern New Mexico; south-central Kansas, northward certainly to Ellsworth County, westward certainly to Stafford and Barber Counties and eastward to Cowley County (Villa and Hall, loc. cit.).


*Type Locality.*—Llano, Llano County, Tex. Range.—Restricted to Central Basin of Texas.


*Type Locality.*—Mason, Mason County, Tex. Range.—Known from near type locality only.
Geomys bursarius dutcheri Davis†*
Type Locality.—Fort Gibson, Muskogee County, Okla. Range.—Arkansas River Valley from Tulsa, Okla., east at least as far as Benton, Saline County, Ark., and south into northeastern Texas; and northwestern Louisiana, including area between flood plains of Red and Ouachita Rivers (Lowery, Occ. Pap. Mus. Zool. Louisiana State Univ. No. 13, p. 241, Nov. 22, 1943); and north to southeastern Kansas, including Arkansas River Valley (Hibbard, Trans. Kansas Acad. Sci., vol. 47, p. 75, September 1944).

Geomys bursarius breviceps Baird†*
Type Locality.—Prairie Mer Rouge, Morehouse Parish, La. Range.—Restricted to sandy “island” in immediate vicinity of Mer Rouge (Davis, Texas Agr. Exp. Station Bull. 590, p. 14, Oct. 23, 1940).

Geomys bursarius brazensis Davis
Type Locality.—Five miles east of Kurten, Grimes County, Tex. Range.—Sandy, post oak country of Texas, from Sabine River in Kaufman and Panola Counties, south and west to Colorado River in Bastrop and Colorado Counties (Davis, Texas Agr. Exp. Station Bull. 590, p. 14, Oct. 23, 1940).

Geomys bursarius pratincolus Davis*
Type Locality.—Two miles east of Liberty, Liberty County, Tex. Range.—Pinney woods area of southeastern Texas east of Trinity River and north of coastal prairie, east as far as Red River in Louisiana.

Geomys bursarius attwateri Merriam†*
Type Locality.—Rockport, Aransas County, Tex. Range.—Coastal sands of Texas from Colorado River southwestward to Nueces River; inland south of Guadalupe River at least as far as Moore, Frio County (Davis, Texas Agr. Exp. Station Bull. 590, p. 15, Oct. 23, 1940).

*Geomys bursarius ammophilus* Davis†*


Type Locality.—Cuero, De Witt County, Tex. Range.—Between Colorado and Guadalupe Rivers from blackland prairies in northwestern De Witt, Lavaca, and Colorado Counties southeastward to Lake Charles clays near gulf coast, in Texas.

*Geomys bursarius sagittalis* Merriam†*


Type Locality.—Clear Creek, Galveston Bay, southern Harris County, Tex. Range.—Along Clear Creek and in sands along Galveston Bay north of Clear Creek, Texas (Davis, Texas Agr. Exp. Station Bull. 590, p. 18, Oct. 23, 1940).

*Geomys bursarius terricolus* Davis


Type Locality.—One mile north of Texas City, Galveston County, Tex. Range.—Known from type locality only.

*Geomys bursarius ludemani* Davis


Type Locality.—Seven miles southwest of Fannett, Jefferson County, Tex. Range.—Apparently restricted to a few isolated sand ridges in southern parts of Jefferson and Chambers Counties in extreme southeastern Texas.

*Geomys arenarius arenarius* Merriam†*


Type Locality.—El Paso, El Paso County, Tex. Range.—Valley of upper Rio Grande, from below El Paso, Tex., and Juárez, Chihuahua, north to Las Cruces, N. Mex., and west to Deming, N. Mex.

*Geomys arenarius brevirostris* Hall

Type Locality.—East edge of white sand area on Tularosa—Hot Springs Road, 9 miles west of Tularosa, Otero County, N. Mex. Range.—Known from near Tularosa and Alamogordo, Otero County.

**Geomys personatus personatus** True†*


Type Locality.—Padre Island, Cameron County, Tex. Range.—Restricted to Padre and Mustang Islands, Tex.

**Geomys personatus fallax** Merriam†*


Type Locality.—South side of Nueces Bay, Nueces County, Tex. Range.—South side of Nueces Bay and along both sides of Nueces River from Corpus Christi and Edroy northward at least as far as Three Rivers, Live Oak County, Tex. (Davis, Texas Agr. Exp. Station Bull. 590, p. 28, Oct. 23, 1940).

**Geomys personatus maritimus** Davis*


Type Locality.—Flour Bluff, 11 miles southeast of Corpus Christi, Nueces County, Tex. Range.—Beach sands from Flour Bluff south probably as far as Baffin Bay in Kleberg County, Tex.

**Geomys personatus megapotamus** Davis


**Geomys personatus streckeri** Davis


Type Locality.—Carrizo Springs, Dimmit County, Tex. Range.—Known from type locality only.

**Geomys personatus fuscus** Davis


Type Locality.—Fort Clark [Brackettville], Kinney County, Tex. Range.—Along water courses tributary to Rio Grande in Val Verde and Kinney Counties, Tex.

**Geomys personatus tropicalis** Goldman†*

Type Locality.—Altamira, Tamaulipas, México. Range.—Known from type locality only.

Genus PAPPOGEOMYS* Merriam

1895. Pappogeomys Merriam, North Amer. Fauna No. 8, p. 145, Jan. 31, 1895. (Type, Geomys bulleri Thomas.)

Pappogeomys bulleri bulleri (Thomas) *


Type Locality.—West slope of Sierra de Mascota, northwestern Jalisco, México; probably between Talpa and Mascota. Altitude, between 4,500 and 5,000 feet. Range.—Mountain slopes, tableland and coastal region from southern Jalisco north to southern Nayarit, México.

Pappogeomys bulleri flammeus Goldman‡


Type Locality.—Milpillas, 5 miles southwest of San Sebastián, northwestern Jalisco, México. Altitude, 3,800 feet. Range.—Known from type locality only.

Pappogeomys bulleri lagunensis Goldman‡


Type Locality.—La Laguna, Sierra de Juanacatlán, northwestern Jalisco, México. Altitude, 6,500 feet. Range.—Known from type locality only.

Pappogeomys bulleri amecensis Goldman‡


Type Locality.—Mountains near Ameca, northwestern Jalisco, México. Altitude, 6,500 feet. Range.—Known only from region of type locality in upper part of valley of Río de Ameca, Jalisco.

Pappogeomys bulleri albinasus Merriam‡


Type Locality.—Atemajac, a suburb of Guadalajara, Jalisco, México. Range.—Definitely known from type locality only; but burrows seen along the railroad a few miles west of Guadalajara were probably made by this animal.

Pappogeomys bulleri nelsoni (Merriam) ‡


*Type Locality.* — North slope of Sierra Nevada de Colima, near Zapotlán, southern Jalisco, México. Altitude, 6,500 feet. *Range.* — Known from type locality only.

**Pappogeomys bulleri burti** Goldman


*Type Locality.* — Tenacatita Bay, southwest coast of Jalisco, México. *Range.* — Known from type locality only.

**Pappogeomys bulleri nayaritensis** Goldman†*


*Type Locality.* — Jalisco, about 10 miles south of Tepic, southern Nayarit, México. Altitude, 5,000 feet. *Range.* — Known only from type locality, on mountain ridge between valleys of Compostela and Tepic, Nayarit.

**Genus CRATOGEOMYS**  
*Merriam*


*castanops* — group

**Cratogeomys castanops castanops** (Baird) ‡*


**Cratogeomys castanops lacrimalis** Nelson and Goldman†*


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Type Locality.—Roswell, Chaves County, N. Mex. Altitude, 3,500 feet. Range.—Pecos River Valley in southeastern New Mexico, and Pecos and northern side of Rio Grande Valley in western Texas.

Cratogeomys castanops hirtus Nelson and Goldman†*


Type Locality.—Albuquerque, Bernalillo County, N. Mex. Altitude, 5,000 feet. Range.—Upper part of Rio Grande Valley, north-central New Mexico.

Cratogeomys castanops perplanus Nelson and Goldman†*


Type Locality.—Tascosa, Oldham County, Tex. Altitude, 3,000 feet. Range.—Plains region from Canadian River Valley, northwestern Texas and northeastern New Mexico, south to upper Colorado River Valley, in central western part of Texas.

Cratogeomys castanops angusticeps Nelson and Goldman†*


Type Locality.—Eagle Pass, Maverick County, Tex. Altitude, 3,000 feet. Range.—Northern side of Rio Grande Valley, from near mouth of Pecos River south at least to Eagle Pass.

Cratogeomys castanops clarkii (Baird)†*


Type Locality.—Presidio del Norte, on Rio Grande, at or near present town of Ojinaga, Chihuahua, México. Range.—Mexican side of Big Bend section of Rio Grande Valley in northeastern Chihuahua and northern Coahuila, México.

Cratogeomys castanops consitus Nelson and Goldman†*


Type Locality.—Gallego, Chihuahua, México. Altitude, 5,500 feet. Range.—Elevated plains of Chihuahua east of Sierra Madre.

Cratogeomys castanops tamaulipensis Nelson and Goldman†*


Type Locality.—Matamoros, Tamaulipas, México. Range.—Plains of northern Tamaulipas, northern Nuevo León, and east-central Coahuila, México.

Cratogeomys castanops planifrons Nelson and Goldman†*


Type Locality.—Miquihuana, southern Tamaulipas, México. Altitude, 5,000 feet. Range.—Elevated plains of southern Tamaulipas.
Cratogeomys castanops convexus Nelson and Goldman†*


*Type Locality.*—Seven miles east of Las Vacas, Río Grande Valley, Coahuila, México (opposite Del Río, Val Verde County, Tex.). *Range.*—Southern side of Río Grande Valley, in vicinity of type locality, northeastern Coahuila.

Cratogeomys castanops excelsus Nelson and Goldman†*


*Type Locality.*—San Pedro, 10 miles west of Laguna de Mayrán, Coahuila, México. *Range.*—Arid interior basin in southwestern Coahuila and northeastern Durango, México.

Cratogeomys castanops subsimus Nelson and Goldman†*


*Type Locality.*—Jaral, southeastern Coahuila, México. *Range.*—Known only from type locality, in upper part of Río Salinas Valley, México.

Cratogeomys castanops goldmani Merriam†*


*Type Locality.*—Cañitas, Zacatecas, México. *Range.*—Known only from type locality on elevated plains of northern Zacatecas.

Cratogeomys castanops rubellus Nelson and Goldman*


Cratogeomys castanops peridoneus Nelson and Goldman†*


Cratogeomys castanops subnubilus Nelson and Goldman†*


*Type Locality.*—Carneros, Coahuila, México. Altitude, 6,800 feet. *Range.*—Elevated plains and high mountains of southeastern Coahuila.

Cratogeomys merriami merriami (Thomas) *


*Type Locality.*—“Southern México,” probably in the Valley of México.  
*Range.*—Valley of México (7,600 feet), Valley of Toluca and adjacent mountain slopes up to 11,000 feet in altitude.

**Cratogeomys merriami oreocetes** Merriam†*  

*Type Locality.*—Volcán de Popocatépetl, México, México. Altitude, 11,500 feet.  
*Range.*—High slopes of Volcán de Popocatépetl, above range of *merriami*.

**Cratogeomys merriami peregrinus** Merriam†*  

*Type Locality.*—Volcán de Ixtaccihuatl, México, México. Altitude, 11,500 feet.  
*Range.*—High slopes of Volcán de Ixtaccihuatl, above range of *merriami*.

**Cratogeomys merriami saccharalis** Nelson and Goldman†*  
*Type Locality.*—Atlixco, Puebla, México. Altitude, 5,400 feet.  
*Range.*—Valleys drained by upper affluents of Río Balsas, in southwestern Puebla.

**Cratogeomys merriami iroloenis** Nelson and Goldman†*  

*Type Locality.*—Irolo, Hidalgo, México. Altitude, 7,600 feet.  
*Range.*—Elevated plain of Apam, southern Hidalgo; probably extending eastward over plains of Tlaxcala and Puebla, México.

**Cratogeomys perotensis perotensis** Merriam†*  

*Type Locality.*—Cofre de Perote, Veracruz, México. Altitude, 9,500 feet.  
*Range.*—High slopes of Cofre de Perote, western Veracruz.

**Cratogeomys perotensis estor** Merriam†*  

**Type Locality.**—Las Vigas, Veracruz, México. Altitude, 8,000 feet. **Range.**—Known only from type locality at extreme eastern border of high plateau region, east of Cofre de Perote in western Veracruz.

**Cratogeomys perotensis peraltus** Goldman


**Type Locality.**—Near timber line on Mount Orizaba, Veracruz, México. Altitude, 12,500 feet. **Range.**—Known from type locality only.

**Cratogeomys fulvescens fulvescens** Merriam†*


**Type Locality.**—Chalchicomula, Puebla, México. Altitude, 8,200 feet. **Range.**—Open, elevated plains near western base of Mount Orizaba, eastern Puebla.

**Cratogeomys fulvescens subluteus** Nelson and Goldman†*


**Type Locality.**—Perote, Veracruz, México. Altitude, 7,800 feet. **Range.**—Known from type locality only.

**Cratogeomys gymnurus gymnurus** (Merriam) †*


**Type Locality.**—Zapotlan, southern Jalisco, México. Altitude, 4,000 feet. **Range.**—Known from type locality only.

**Cratogeomys gymnurus inclarus** (Goldman) †*


**Type Locality.**—North slope of El Nevado de Colima, Jalisco, México. Altitude, 10,000 feet. **Range.**—Known only from El Nevado de Colima, southern Jalisco. Vertical range, 5,000 to 10,000 feet.

**Cratogeomys gymnurus imparilis** (Goldman) †*


Type Locality.—Pátzcuaro, Michoacán, México. Altitude, 7,000 feet.

Range.—Known only from type locality on lower slope of mountains near southern shore of Lake Pátzcuaro, Michoacán.

Cratogeomys fumosus (Merriam)†*

Type Locality.—Three miles west of city of Colima, Colima, México. Altitude, 1,700 feet. Range.—Plains of Colima. Vertical range, 1,500 to 2,000 feet.

Cratogeomys angustirostris (Merriam)†*

Type Locality.—Mount Patambán, Michoacán, México. Altitude, 10,000 feet. Range.—Known from type locality only.

Cratogeomys varius (Goldman)†*

Type Locality.—Uruapan, Michoacán, México. Altitude, about 6,000 feet. Range.—Known from type locality only.

Cratogeomys tylorhinus tylorhinus (Merriam)†*

Type Locality.—Tula, Hidalgo, México. Altitude, 6,800 feet. Range.—Known only from type locality and from Marques (8,000 feet) in mountains of southwestern Hidalgo.

Cratogeomys tylorhinus arvalis Hooper

Type Locality.—Colonia del Valle, México, Distrito Federal, México. Altitude, 2,275 meters. Range.—Known from vicinity of México, Distrito Federal, only.
Cratogeomys tylorhinus planiceps (Merriam)†*
_Type Locality._—North slope of Volcán de Toluca, México, México. Altitude, 9,000 feet. _Range._—Known only from Volcán de Toluca.

Cratogeomys zinseri (Goldman)†*
_Type Locality._—Lagos, Jalisco, México. Altitude, 6,150 feet. _Range._—Elevated plain in vicinity of type locality, and east to San Diego de la Union, northern Guanajuato, México.

Cratogeomys neglectus (Merriam)†*
_Type Locality._—Cerro de la Calentura, about 3 miles northwest of Pinal de Amoles, Querétaro, México. Altitude, 9,000 feet. _Range._—Known only from upper slopes of Cerro de la Calentura.

_Genus ORTHOGEOMYS*_* Merriam
1895. Orthogeomys Merriam, North Amer. Fauna No. 8, p. 172, Jan. 31, 1895. (Type, Geomys scalops Thomas.)

Orthogeomys grandis grandis (Thomas)∗
1895. Orthogeomys grandis Merriam, North Amer. Fauna No. 8, p. 175, Jan. 31, 1895.

Orthogeomys grandis latifrons Merriam†*


*Type Locality.*—Guatemala; exact locality unknown (perhaps in lowlands near Pacific coast). *Range.*—Known from type locality only.

*Orthogeomys grandis vulcani* Nelson and Goldman†*


*Type Locality.*—Volcán Santa María, Quezaltenango, Guatemala. Altitude, 9,000 feet. *Range.*—Known from type locality only.

*Orthogeomys grandis pluto* Lawrence


*Type Locality.*—Cerro Cantoral, north of Tegucigalpa, Francisco Morazán, Honduras. *Range.*—Known from type locality only.

*Orthogeomys grandis annexus* Nelson and Goldman†*


*Type Locality.*—Tuxtla Gutiérrez, Chiapas, México. Altitude, 2,600 feet. *Range.*—Arid tropical valley of Chiapas River in interior of Chiapas; limits of range unknown.

*Orthogeomys grandis huixtlae* Villa


*Type Locality.*—Finca “Lubeca,” 12 kilometers northeast of Huixtla, Chiapas, México. Altitude, 850 meters. *Range.*—Known from type locality only.

*Orthogeomys grandis soconuscensis* Villa


*Type Locality.*—Finca Esperanza, 45 kilometers by road northwest of Huixtla, Chiapas, México. Altitude, 710 meters. *Range.*—Sierra Madre de Chiapas, from 710 to at least 1210 meters, on both the Pacific and Atlantic slopes.

*Orthogeomys grandis scalops* (Thomas)*


*Orthogeomys grandis nelsoni* Merriam†*


Type Locality.—Mount Zempoaltepec, Oaxaca, México. Altitude, 3,000 feet.
Range.—Mount Zempoaltepec, and adjacent region, including Comaltepec and Totontepec.

**Orthogeomys grandis felipensis** Nelson and Goldman†*


*Type Locality.*—Cerro San Felipe, 10 miles north of Oaxaca, México. Altitude, 10,000 feet. *Range.*—Known only from oak- and pine-forested upper slopes of high mountains rising from plateau in central Oaxaca.

**Orthogeomys grandis alleni** Nelson and Goldman†*


*Type Locality.*—Near Acapulco, Guerrero, México. Altitude, 2,000 feet. *Range.*—Arid Tropical Zone lowlands and adjacent mountain slopes along Pacific coast from central southern Guerrero to central southern Oaxaca, México.

**Orthogeomys grandis guerrerensis** Nelson and Goldman†*


*Type Locality.*—El Limón, in valley of Río de las Balsas, about 20 miles northwest of La Unión, Guerrero, México. *Range.*—Arid Tropical Zone Valley of Río de las Balsas, at low elevations in Guerrero, and probably adjoining parts of southern Michoacán, México.

**Orthogeomys cuniculus** Elliot


**Orthogeomys pygacanthus** Dickey


**Genus HETEROGEOMYS** *Merriam*

1895. Heterogeomys *Merriam*, North Amer. Fauna No. 8, p. 179, Jan. 31, 1895. (Type, Geomys *hispidus* Le Conte.)

**Heterogeomys hispidus hispidus** (Le Conte) *


*Type Locality.*—Near Jalapa, Veracruz, México. *Range.*—The “Tierra Templada,” or middle belt along basal slope of tableland, in Veracruz, between altitudes of 4,000 and 4,500 feet.

**Heterogeomys hispidus torridus** (Merriam) †


*Type Locality.*—Chichicaxtle, Veracruz, México. *Range.*—Lowlands of Veracruz, from Chichicaxtle and Motzorongo to Catemaco.

**Heterogeomys hispidus isthmicus** Nelson and Goldman †


*Type Locality.*—Jaltipan, Veracruz, México. Altitude, 100 feet. *Range.*—Semiforested coastal plains on Gulf side of Isthmus of Tehuantepec, in southern Veracruz.

**Heterogeomys hispidus concavus** Nelson and Goldman †


*Type Locality.*—Pinal de Amoles, Querétaro, México. Altitude, 5,500 feet. *Range.*—Eastern slope of tableland and mountains to 7,000 feet in Querétaro, and lower elevations in San Luis Potosí, México.

**Heterogeomys hispidus tehuantepecus** Goldman †


*Type Locality.*—Mountains 12 miles northwest of Santo Domingo and about 60 miles north of city of Tehuantepec, Oaxaca, México. Altitude, 1,600 feet. *Range.*—Known only from type locality in mountains near top of continental divide on southern side of Isthmus of Tehuantepec, México.

**Heterogeomys hispidus chiapensis** Nelson and Goldman †


*Type Locality.*—Tenejapa, about 16 miles northeast of San Cristóbal, Chiapas, México. Altitude, 7,800 feet. *Range.*—Highlands of Chiapas and Guatemala from about 3,000 to 8,000 feet altitude, and descending to lower elevations in southern Tabasco, México.

**Heterogeomys hispidus teapensis** Goldman †

Type Locality.—Teapa, Tabasco, México. Range.—Lowlands and mountain slopes in southern Tabasco.

**Heterogeomys hispidus yucatanensis** Nelson and Goldman†*

Type Locality.—Campeche, Campeche, México. Altitude, 50 feet. Range.—Lowlands of Yucatán Peninsula and northern Guatemala.

**Heterogeomys hispidus cayoensis** Burt

Type Locality.—Mountain Pine Ridge, 12 miles south of El Cayo, Cayo, British Honduras. Range.—Known only from Mountain Pine Ridge and El Cayo.

**Heterogeomys lanius** Elliot

Type Locality.—Xuchil, southeastern side of Mount Orizaba, Veracruz, México. Range.—Known from type locality only.

**Genus MACROGEOMYS** Merriam


**Macrogeomys heterodus heterodus** (Peters) *


**Macrogeomys heterodus cartagoensis** Goodwin*


**Macrogeomys heterodus dolichocephalus** Merriam†*


Macrogeomys cavator cavator Bangs*


Type Locality.—Bóquete, Chiriquí, Panamá. Altitude, 4,800 feet. Range.—In mountains of Chiriquí, Panamá, and probably adjacent parts of Costa Rica. Vertical range, 4,000 to 7,000 feet.

Macrogeomys cavator pansa Bangs*


Type Locality.—Bogavo [Bugaba], foothills of Volcán de Chiriquí, Chiriquí, Panamá. Altitude, 600 feet. Range.—Northwestern Panamá and southwestern Costa Rica; limits of range unknown.

Macrogeomys cavator nigrescens Goodwin


Type Locality.—El Muñeco (Río Navarro), 10 miles south of Cartago, Cartago, Costa Rica. Altitude, 4,000 feet. Range.—Known from Caribbean rain forest at type locality only.

Macrogeomys dariensis Goldman†*


Type Locality.—Cana [Santa Cruz de Cana], upper Río Tuyra, Darién, mountains of eastern Panamá. Altitude, 2,000 feet. Range.—Recorded also from Boca de Cupe, Tacarcuna, and Tapalisa, Panamá (Goldman, Smithsonian Misc. Coll., vol. 69, No. 5, p. 110, Apr. 26, 1920).

Macrogeomys underwoodi Osgood*


Type Locality.—Alto de Jabillo Pirris, between San Gerónimo and Pozo Azul, San José, western Costa Rica. Range.—Known only from Alto de Jabillo Pirris and San Gerónimo Pirris, Costa Rica.

Macrogeomys cherriei cherriei (J. A. Allen)


**Macrogeomys cherriei costaricensis** Merriam†


**Macrogeomys cherriei carlosensis** Goodwin


*Type Locality.*—Cataratos San Carlos, Alajuela, Costa Rica, a small town on the Río San Carlos. Altitude, about 400 feet. *Range.*—Río San Carlos Valley; limits of range unknown.

**Macrogeomys matagalpae** J. A. Allen


*Genus ZYGOGEMYS* **Merriam**


**Zygogeomys trichopus trichopus** Merriam†


*Type Locality.*—Nahuatzen, Michoacán, México. Altitude, 8,000 to 8,500 feet. *Range.*—Sierra Madre of Michoacán; vertical range, up to 11,500 feet (Mount Tancitaro) and 11,800 feet (Mount Patambán).

**Zygogeomys trichopus tarascensis** Goldman†


*Type Locality.*—Mountains 6 miles southeast of Pátzcuaro, Michoacán, México. Altitude, 8,000 feet. *Range.*—Known only from upper slopes of mountains in vicinity of type locality.

Family Heteromyidae

Subfamily Perognathinae

Genus Perognathus* Wied-Neuwied


Subgenus Perognathus Wied-Neuwied

fasciatus—group

Perognathus fasciatus fasciatus Wied-Neuwied*


Perognathus fasciatus litus Cary†*


Type Locality.—Sun, Sweetwater Valley, Fremont County, central Wyoming. Range.—Sweetwater Valley.

Perognathus fasciatus infraluteus Thomas*


Type Locality.—Loveland, Larimer County, central northern Colorado. Range.—Known from type locality only.

Perognathus flavescens flavescens Merriam†*


* Revised by Merriam, North Amer. Fauna No. 1, Oct. 25, 1889; and by Osgood, North Amer. Fauna No. 18, Sept. 20, 1900.
Type Locality.—Kennedy, Cherry County, Nebr. Range.—Upper Austral plains west of Missouri River in South Dakota, Nebraska (Swenk, Missouri Valley Fauna, No. 3, pp. 1–4, June 5, 1940), western Kansas (Hibbard, Trans. Kansas Acad. Sci., vol. 47, No. 1, p. 75, September 1944), and plains region east of mountains in Colorado (Warren, The mammals of Colorado, . . ., p. 176, 1942).

Perognathus flavescens perniger Osgood†*


Type Locality.—Vermillion, Clay County, S. Dak. Range.—East of Missouri River in North Dakota (except at Breien), South Dakota, Minnesota, and Iowa; north to Finley, Steele County, N. Dak., and Elk River, Sherburne County, Minn.; east to Delaware County, Iowa, and south to Randolph, Fremont County, Iowa (Fichter, Journ. Mamm., vol. 20, No. 3, p. 377, Aug. 14, 1939).

Perognathus flavescens olivaceogriseus Swenk

1940. Perognathus flavescens olivaceogriseus Swenk, Missouri Valley Fauna, Lincoln, No. 3, p. 6, June 5, 1940.

Type Locality.—Chadron, Dawes County, Nebr. Range.—Presumably a narrow belt lying between conifer-bearing Pine Ridge and largely treeless, much eroded buttes and ravines of northern escarpment of Dawes Table, on the south, and almost solid areas of Pierre clays, clay loams, and loams, north of Antelope and Squaw Creeks in northern Sioux County, terraces of Little Cottonwood Creek and White River, in central Dawes County, and on north, extreme northwestern corner of Sheridan County, Nebr.

Perognathus flavescens copei Rhoads*


Perognathus merriami merriami J. A. Allen*


Type Locality.—Brownsville, Cameron County, Tex. Range.—Subtropical region of southern Texas and northeastern México, and Lower Sonoran of central Texas; south to Linares in Nuevo León and Altamira in Tamaulipas; north at least to San Antonio, Bexar County, Tex.; and from Padre Island and Brownsville along Rio Grande at least as far as Comstock, Val Verde County, Tex.
Perognathus merriamigilvus Osgood†*


*Type Locality.—Eddy, near Carlsbad, Eddy County, N. Mex. Range.—Western Texas and eastern New Mexico; north in Pecos River Valley to Roswell, Chaves County, and in Canadian River Valley to 25 miles west of Tucumcari, Quay County, N. Mex., near northern end of Staked Plains (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 279, Mar. 1, 1932); east to Tom Green County, Tex. (Edwards, Journ. Mamm., vol. 27, No. 2, p. 106, May 14, 1946); south to Big Bend area, Brewster County, Tex. (Borell and Bryant, Univ. California Publ. Zool., vol. 48, No. 1, p. 23, Aug. 7, 1942), and north to Big Spring, Howard County, Tex.

Perognathus flavusflavus Baird†*


*Type Locality.—El Paso, El Paso County, Tex. Range.—Upper and Lower Sonoran Zones from western Texas south to southeastern Chihuahua (Escalon) in northern Mexico; westward across New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 273, Mar. 1, 1952) into southeastern Arizona (Dice and Blossom, Carnegie Inst. Washington Publ. 485, p. 26, 1937) and eastward into southwestern Texas (Sierra Blanca, Hudspeth County).

Perognathus flavusbunkeri Cockrum*


*Type Locality.—Conard Farm, 1 mile east of Coolidge, Hamilton County, Kans. Range.—Western Nebraska, eastern Colorado, western Kansas, and western Oklahoma.

Perognathus flavussanluisi Hill


*Type Locality.—Nine miles east of Center, Saguache County (or 20 miles northwest of Alamosa, Alamosa County), Colo. Altitude, 7,580 feet. Range.—Probably most of floor of San Luis Valley, and around margins, where soil and flora are suitable in south-central Colorado.

Perognathus flavuspiperi Goldman†*


†Type Locality.—Twenty-three miles southwest of Newcastle, Weston County, northeastern Wyoming. Range.—Probably ranging at low elevations throughout eastern Wyoming and western South Dakota.

Perognathus flavusbimaculatus Merriam†*


*Type Locality.*—Fort Whipple, near Prescott, Yavapai County, Ariz. *Range.*—Plateau region of central Arizona.

*Perognathus flavus hopiensis* Goldman†*


*Type Locality.*—Oraibi, Hopi Indian Reservation, Navajo County, Ariz. Altitude, 6,000 feet. *Range.*—Painted Desert region of northeastern Arizona, southeastern Utah, southwestern Colorado, and northwestern New Mexico.

*Perognathus flavus fuliginosus* Merriam†*


*Perognathus flavus sonoriensis* Nelson and Goldman†*


*Perognathus flavus mexicanus* Merriam†*


*Perognathus apache apache* Merriam†*


*Type Locality.*—Keams Canyon, Navajo County, Ariz. *Range.*—Northeastern Arizona, including Painted Desert, south at least to Winslow and Holbrook in Navajo County; and northwestern and western New Mexico, east at least on to higher levels of Río Grande and San Juan Valleys, and south to Deming, Luna County (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 277, Mar. 1, 1932). Recorded also from plain south of Navajo Mountain at junction of Colorado and San Juan Rivers, southeastern Utah (Benson, Univ. California Publ. 213756—55—24
Perognathus apache cleomophila Goldman†*
_Type Locality._—Winona, Coconino County, Ariz. Altitude, 6,400 feet. **Range._—Lava beds region east of San Francisco Mountain, Coconino County.

Perognathus apache caryi Goldman†*
_Type Locality._—Eight miles west of Rifle, Garfield County, Colo. **Range._—Valley of Grand River and other affluents of Colorado River in western and southwestern Colorado (see Warren, The mammals of Colorado, . . . , p. 177, 1942); and eastern Utah from East Tavaputs Plateau south to San Juan River Valley (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 62, Feb. 15, 1951).

Perognathus apache relictus Goldman†*
_Type Locality._—Medano Springs Ranch, 15 miles northeast of Mosca, San Luis Valley, Alamosa County, central southern Colorado. Altitude, 7,600 feet. **Range._—San Luis Valley, Colo., and high valleys of central-northern New Mexico, west of Lake Burford, and south to Upper Pecos River Valley; intergrading with typical *apache* in Rio Grande Valley.

Perognathus apache gypsi Dice
_Type Locality._—White Sands, 12 miles southwest of Alamogordo, Otero County, N. Mex. **Range._—Known only from white sands of Otero County.

Perognathus apache melanotis Osgood†*
_Type Locality._—Casas Grandes, northwestern Chihuahua, México. **Range._—Known from type locality only.

Perognathus callistus Osgood†*
_Type Locality._—Kinney Ranch, Green River Basin, near Bitter Creek, Sweetwater County, Wyo. **Range._—Red Desert in vicinity of type locality; and Snake River, about 7 miles above junction with Bear River, and at Two Bar Spring, 20 miles west, Moffat County, northwestern Colorado (F. W. Miller, Journ. Mamm., vol. 9, No. 4, p. 337, Nov. 13, 1928).
Perognathus longimembris—group

*Perognathus longimembris longimembris* (Coues)†*


**Type Locality.**—Old Fort Tejon, Canadá de las Uvas, Tehachapi Mountains, Kern County, Calif. **Range.**—Mountains in near vicinity of Fort Tejon, in Kern and Ventura Counties, and thence east and north over Mohave Desert, to Walker Pass region (west to Onyx, Kern County), to Owens Valley, Inyo County (north to Laws), to vicinity of Providence Mountains and Lavic, San Bernardino County; and westward to Lancaster, Los Angeles County (Bole, Sci. Publ. Cleveland Mus. Nat. Hist., vol. 5, No. 2, p. 6, Dec. 4, 1937) and Lockwood Valley near Mount Pinos, Ventura County (Grinnell, loc. cit.); also, possibly, northwest sparingly through San Joaquin and Sacramento Valleys to Marysville Buttes, Sutter County; zonal range, Upper and Lower Sonoran; vertical range, from about 100 feet (Lodi, San Joaquin County) up to 6,000 feet toward Kearsarge Pass, west of Independence, Inyo County, Calif. (Grinnell, loc. cit.).

*Perognathus longimembris tularensis* W. B. Richardson


**Type Locality.**—One mile west of Kennedy Meadows, South Fork Kern River, Tulare County, Calif. **Altitude.** 6,000 feet. **Range.**—Known only from Kennedy and Chimney Meadows in southern Sierra Nevada, but probably occurs in northern drainage area of South Fork Kern River, from vicinity of Tulare–Kern County line north to Windy Springs, Calif.

*Perognathus longimembris salinensis* Bole


**Type Locality.**—One mile north of Salt Camp on edge of salt lake, Saline Valley, Inyo County, Calif. **Range.**—Mesquite thickets and woodlands on floor of Saline Valley, Inyo County, Calif. chiefly west of the saltpans.

*Perognathus longimembris panamintinus* Merriam†*


**Type Locality.**—Perognathus Flat, near Emigrant Gap [near Bench Mark 4899,

Perognathus longimembris psammophilus von Bloeker


*Type Locality.*—West side of Arroyo Seco, 4 miles south of Soledad, Monterey County, Calif. Altitude, 150 feet. *Range.*—Fine-textured sandy areas in Salinas Valley and Carrizo Plains region of south-central California, from Soledad, Monterey County, southeast at least to Santiago Springs, San Luis Obispo County, Calif.

Perognathus longimembris bangsi Mearns*


Perognathus longimembris brevinasus Osgood‡*


Perognathus longimembris pacificus Mearns†*


*Type Locality.*—Mexican boundary monument No. 258, shore of Pacific Ocean, San Diego County, Calif. (See von Bloeker, Journ. Mamm., vol. 12, No. 4, p. 369, Nov. 11, 1931.)  

*Range.*—A narrow sea-facing strip of territory extending northwest from near mouth of Tia Juana River, southwestern San Diego County, to Palisades del Rey, Los Angeles County, Calif. (von Bloeker, 1932, p. 129).

*Perognathus longimembris internationalis* Huey


*Type Locality.*—Baja California side of international boundary at Jacumba, San Diego County, Calif.  

*Range.*—Known only from both sides of international boundary in Jacumba Valley.

*Perognathus longimembris aestivus* Huey


*Type Locality.*—Sangre de Cristo, lat. 31° 52' N., long. 116° 06' W., Valle San Rafael, western base of Sierra Juárez, Baja California, México.  

*Range.*—Known from type locality only.  

*Upper Sonoran Zone.*

*Perognathus longimembris venustus* Huey


*Type Locality.*—San Agustín, lat. 30° N., long. 115° W., Baja California, México.  

*Range.*—Known from type locality only.

*Perognathus longimembris kinoensis* Huey


*Type Locality.*—Bahía Kino (more precisely, from northern end of sand dune peninsula that borders bay and forms northern arm of estuary), Sonora, México.  


*Perognathus longimembris bombycinus* Osgood†


*Type Locality.*—Yuma, Yuma County, Ariz.  

Perognathus longimembris pimensis Huey


Type Locality.—Eleven miles west of Casa Grande, Pinal County, Ariz. Range.—Vicinity west of Phoenix, Maricopa County, Ariz., thence south to type locality.

Perognathus longimembris arizonensis Goldman†*


Perognathus longimembris nevadensis Merriam†*


Type Locality.—Halleck, East Humboldt Valley, Elko County, Nev. Range.—Northern and central Nevada; northwestern Nevada west of Black Rock Desert and east of Black Rock Desert from Oregon boundary south to Smiths Creek Valley, east to Halleck and to near Eureka (Hall, Mammals of Nevada, p. 360, July 1, 1946); Tumtum Lake and Rome on Owyhee River, southeastern Oregon (V. Bailey, North Amer. Fauna No. 55 (June), p. 248, Aug. 29, 1936); and Great Basin territory along eastern border of California; south to near Eagleville, Modoc County; intergradation toward longimembris south through upper part of Owens Valley, Inyo County; zonal range, Upper Sonoran; vertical range from 4,750 feet near Eagleville to at least 5,600 feet near Benton (Grinnell, loc. cit.).

Perognathus longimembris gulosus Hall


Type Locality.—Half a mile south of Smith Creek Cave, Mount Moriah, White Pine County, Nev. Altitude, 5,800 feet. Range.—Eastern Nevada south from near Montello in Elko County to near Baker in White Pine County (Hall, Mammals of Nevada, p. 364, July 1, 1946); and in adjoining Utah from Kelton, Box Elder County, southward to 5 miles south of Garrison, Millard County (Hall, op. cit., p. 56).

Perognathus longimembris virginis Huey†


Type Locality.—St. George, Washington County, Utah. Altitude, 2,950 feet. Range.—Virgin River Valley in vicinity of St. George, Utah; and in Nevada the Virgin River Valley and southern half of Lincoln County westward into Nye County (Hall, Mammals of Nevada, p. 363, July 1, 1946).
Perognathus longimembris arcus Benson
_Type Locality._—Rainbow Bridge, San Juan County, southeastern Utah. _Range._—Known from type locality only.

Perognathus amplus amplus Osgood†*
_Type Locality._—Fort Verde, eastern Yavapai County, Ariz. _Range._—Upper part of Verde River Valley, Ariz.

Perognathus amplus jacksoni Goldman†*
_Type Locality._—Congress Junction, southwestern Yavapai County, Ariz. _Range._—Desert regions of central western and south-central Arizona, south of range of *amplus*.

Perognathus amplus ammodytes Benson*
_Type Locality._—Two miles south of Cameron, Coconino County, Ariz. _Range._—Known from near type locality in valley of Little Colorado River.

Perognathus amplus cineris Benson*
_Type Locality._—Near Wupatki Ruins, Wupatki National Monument, about 27 miles northeast of Flagstaff, Coconino County, Ariz. _Range._—Known only from ground covered with black volcanic cinders in vicinity of Wupatki Ruins, Coconino County.

Perognathus amplus pergracilis Goldman†*

Perognathus amplus rotundus Goldman†*

Perognathus amplus taylori Goldman†*
Type Locality.—Santa Rita Range Reserve (near Northeast Station), 35 miles south of Tucson, Pima County, Ariz. Altitude, about 4,000 feet. Range.—Desert region of southern Arizona and probably northern Sonora, México, east of range of rotundus.

Perognathus inornatus inornatus Merriam†

Type Locality.—Fresno, Fresno County, Calif. Range.—San Joaquin and Sacramento Valleys, from Weldon and Rose Station, Kern County, northwest to Sites, Colusa County, and Marysville Buttes, Sutter County, Calif; zonal range, Lower and Upper Sonoran; vertical range, from 50 feet (Lodi, San Joaquin County) up to 3,350 feet at Walker Basin, Kern County (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 149, Sept. 26, 1933).

Perognathus inornatus neglectus Taylor*

Type Locality.—McKittrick, Kern County, Calif. Altitude, 1,111 feet. Range.—West side of southern San Joaquin Valley, in vicinity of McKittrick, Kern County, and on Carrizo Plain, San Luis Obispo County; zonal range, Lower Sonoran; vertical range, from 1,100 feet (near McKittrick) up to 2,600 feet at Santiago Spring, edge of Carrizo Plain (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 149, Sept. 26, 1933).

Perognathus inornatus sillimani von Blocker

Type Locality.—West side of Arroyo Seco Wash, 4 miles south of Soledad, Monterey County, Calif. Range.—Sandy washes in Salinas Valley, Calif., from Soledad, Monterey County, south at least to San Miguel, San Luis Obispo County.

parvus—group

Perognathus parvus parvus (Peale)*
Type Locality.—Oregon, probably in neighborhood of The Dalles, Wasco County. Range.—Southeastern Washington south of Snake River, the area on north side of Columbia River in Klickitat County, and Yakima River Valley area as far north as Vantage, Kittitas County (Dalquest, Univ. Kansas Publ. Mus. Nat. Hist., vol. 2, p. 298, Apr. 9, 1948); Upper Sonoran area of eastern Oregon (V. Bailey, North Amer. Fauna No. 55 (June), p. 244, Aug. 29, 1936); along Snake River and its tributaries in southwestern Idaho (Davis, The Recent mammals of Idaho, p. 263, Apr. 5, 1939); and extreme northwestern Nevada (Hall, Mammals of Nevada, p. 367, July 1, 1946).

**Perognathus parvus columbianus** Merriam†*


Type Locality.—Pasco, Franklin County, Wash. Range.—Vicinity of type locality, and part of Columbia Plateau north of Snake River and east of Columbia River, Wash. (Dalquest, loc. cit.).

**Perognathus parvus laingi** Anderson


Type Locality.—Anarchist Mountain, lat. 49°08' N., long. 119°32' W., near Osoyoos-Bridesville Summit, about 8 miles east of Osoyoos Lake, British Columbia. Altitude, about 3,500 feet. Range.—Known from type locality only. Zonal range, Transition.

**Perognathus parvus lordi** (Gray)*


Perognathus parvus idahoensis Goldman†*


Perognathus parvus clarus Goldman†*

*Type Locality.*—Cumberland, Lincoln County, Wyo. *Range.*—Green River Valley in southwestern Wyoming; and upper part of Snake River Valley, in southeastern Idaho, west at least to Minidoka County (Davis, The Recent mammals of Idaho, p. 264, Apr. 5, 1939). Recorded also in Daggett County (2 miles north of Linwood) in northeastern Utah (R. D. Svihla, Journ. Mamm., vol. 12, No. 3, p. 262, August 24, 1931).

Perognathus parvus olivaceus Merriam†*


1900. *Perognathus parvus magruderensis* Osgood†, North Amer. Fauna No. 18, p. 38, Sept. 20, 1900. (Mount Magruder, Esmeralda County, Nev.; altitude, 8,000 feet. Regarded as identical with *olivaceus* by Hall, Mammals of Nevada, p. 367, July 1, 1946.)

*Type Locality.*—Kelton, near north end of Great Salt Lake, Box Elder County, Utah. *Range.*—Great Basin, from Salmon Creek south of Snake River in southern Idaho (Davis, The Recent mammals of Idaho, p. 264, Apr. 5, 1939) southward through northern Utah (Rich, Cache, and Box Elder Counties) at least to Otter Creek in Piute County and to vicinity of Green River in extreme eastern Emery County (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 65, Feb. 15, 1951), and throughout Upper Sonoran Zone of Nevada (Hall, loc. cit.) to eastern margin of California, from Woodford, Alpine County, south along east base of Sierra Nevada as far at least as Little Onion Valley (west of Independence), and to Coso and Panamint Mountains in Inyo County; zonal range, Upper Sonoran and Transition; vertical range, from 5,100 feet at Fredericksburg, Alpine County, up to 8,300 feet at Indian Creek, east slope of White Mountains (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 150, Sept. 26, 1933).

Perognathus parvus plerus Goldman†*

*Type Locality.*—North end of Stansbury Island, Great Salt Lake, Utah. *Altitude.* 4,250 feet. *Range.*—Carrington and Stansbury Islands, Great Salt Lake.
Perognathus parvus trumbullensis Benson*


*Type Locality.*—Mount Trumbull, Mohave County, Ariz. Altitude, 6,250 feet. *Range.*—Probably throughout high plateau region in northwestern Arizona north of Colorado River wherever habitat is suitable.

Perognathus parvus mollipilosus Coues*


*Type Locality.*—Fort Crook [about 2 miles northeast of Burgettville], Shasta County, Calif. *Range.*—From Klamath Basin, Klamath County, Oreg.; south to Modoc region of northeastern California, from Warner Mountains and Surprise Valley, Modoc County, west to Mount Shasta and vicinity, in Siskiyou County, and south from Oregon line to Vinton, Plumas County; zonal range, Upper Sonoran and Transition; up to “subalpine” on Mount Shasta; vertical range from 4,000 feet (Amedee, Lassen County) up to 7,800 feet at head of Panther Creek, Mount Shasta (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 150, Sept. 26, 1933).

Perognathus xanthonotus Grinnell*


Perognathus alticolus alticolus Rhoads*


*Type Locality.*—Squirrel Inn [near Little Bear Valley], San Bernardino Mountains, San Bernardino County, Calif. Altitude, 5,500 feet. *Range.*—Western part of San Bernardino Mountains, San Bernardino County; all stations of capture are in near vicinity of Strawberry Peak; zonal range, Transition; vertical range from 5,400 to 5,750 feet (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 151, Sept. 26, 1933).

Perognathus alticolus inexpectatus Huey*


*Type Locality.*—Fourteen miles west of Lebec [near head of Cuddy Valley], Kern County, Calif. Altitude, 6,000 feet. *Range.*—Grassy flats among scattered yellow pines at type locality. Zonal range, Transition.
formosus—group

Perognathus formosus formosus Merriam†


*Type Locality.*—St. George, Washington County, Utah. *Range.*—Southwestern Utah and probably northwestern Arizona north of Colorado River.

Perognathus formosus incolatus Hall


*Type Locality.*—Two miles west of Smith Creek Cave, Mount Moriah, White Pine County, Nev. *Range.*—Eastern slope of Mount Moriah, White Pine County, on eastern border of Nevada (Hall, Mammals of Nevada, p. 373, July 1, 1946), and Millard County in extreme western Utah (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 6, p. 245, Aug. 10, 1952).

Perognathus formosus melanurus Hall


*Type Locality.*—Lat. 40°28′ N., 6 miles east of California boundary, Washoe County, Nev. Altitude, 4,000 feet. *Range.*—Smoke Creek Desert and vicinity; from southwestern Humboldt County, Nev., south to Truckee River, and from near Toulon, Pershing County, Nev., west to vicinity of Stacy, eastern Lassen County, Calif.

Perognathus formosus mohavensis Huey


*Type Locality.*—Bonanza King Mine, Providence Mountains, San Bernardino County, Calif. *Range.*—Argus, Panamint, and Providence Mountains in Inyo and San Bernardino Counties, Calif., and without doubt generally over Mohave Desert region; and in western Nevada north as far as Walker River and across southern Nevada northward into Hot Creek Valley of eastern Nye County (Hall, Mammals of Nevada, p. 372, July 1, 1946); eastward to Washington County in extreme southwestern Utah (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 6, p. 246, Aug. 10, 1952).

Perognathus formosus mesembrinus Elliot


*Type Locality.*—Palm Springs, Riverside County, Calif. *Range.*—Western rim of Colorado Desert, north from near Mexican boundary in Imperial County to near Palm Springs, Riverside County, Calif.; zonal range, Lower Sonoran; vertical range, from 450 feet (near Palm Springs) up to 2,300 feet at La Puerta Valley, eastern San Diego County (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 152, Sept. 26, 1933).
Perognathus formosus cinerascens Nelson and Goldman


*Type Locality.*—San Felipe, northeastern Baja California, México. *Range.*—Known from type locality only.

Subgenus *CHAETODIPUS* Merriam


*baileyi*—group

Perognathus baileyi baileyi Merriam†


Perognathus baileyi domensis Goldman†


Perognathus baileyi hueyi Nelson and Goldman


*Type Locality.*—San Felipe, northeastern Baja California, México. *Range.*—Desert region east of Sierra San Pedro Mártir in northeastern Baja California; specimens from Calamahué and Onyx tend toward *hueyi* (Nelson and Goldman, Journ. Washington Acad. Sci., vol. 20, No. 12, p. 224, June 19, 1930); in California, desert slopes of Coast Ranges in eastern San Diego County, north from Mountain Spring near Mexican boundary to San Felipe Narrows; zonal range, chiefly Upper Sonoran; vertical range, from 900 feet at San Felipe Narrows up to about 2,500 feet at Mountain Spring (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 152, Sept. 26, 1933).

Perognathus baileyi rudinoris Elliot*


\textbf{Type Locality.}—San Quintín, Baja California, México. \textit{Range.}—Northeastern Baja California, south to about lat. 29° N.; specimens from Punta Prieta on west side approach \textit{rudinoris} (Nelson and Goldman, op. cit., p. 224).

\textbf{Perognathus baileyi extimus} Nelson and Goldman†*


\textbf{Type Locality.}—Tres Pachitas, 36 miles south of La Paz, Baja California, México. \textit{Range.}—Low elevations in Baja California from type locality south of La Paz north to near lat. 29° N., intergrading to the northward with \textit{rudinoris} and \textit{hueyi}; specimens from San Ignacio, lat. 27°16' N., long. 113° W., regarded as typical.

\textbf{Perognathus baileyi fornicatus} Burt


\textbf{Type Locality.}—Monserate Island, lat. 25°30' N., long. 111°02' W., Gulf of California, Baja California, México. \textit{Range.}—Monserate Island.

\textbf{Perognathus baileyi insularis} Townsend‡*


\textbf{Type Locality.}—Tiburón Island, Gulf of California, Sonora, México. \textit{Range.}—Tiburón Island.

\textit{hispidus}—group

\textbf{Perognathus hispidus hispidus} Baird†*


\textbf{Type Locality.}—Charco Escondido, Tamaulipas, México. \textit{Range.}—The greater part of Texas, except high plains, Trans-Pecos area, and Red River Valley; occurs sparingly in forested region of eastern Texas and western Louisiana; north at least to Palo Pinto (Brazos) and Smith (Tyler) Counties, Tex.; east to Natchitoches and Vernon Parishes in northwestern Louisiana; and northern México as far west as Sabinas, Coahuila, and as far south as Ciudad Victoria, Tamaulipas (Glass, Journ. Mamm., vol. 28, No. 2, p. 177, June 2, 1947).

\textbf{Perognathus hispidus spilotus} Merriam†*


*Type Locality.*—Gainesville, Cooke County, Tex. *Range.*—Red River Valley of Texas, eastern Oklahoma, eastern Kansas, and southeastern Nebraska; east to Missouri River and Ozark Mountains; south at least to Cooke (Gainesville) and Marion (Jefferson) Counties, Tex.; intergrading on south with *hispidus* south of Red River somewhere between Hardeman (Chillicothe) and Clay (Henrietta) Counties, Tex.; and intergrading on west with *paradoxus* near western border of Oklahoma, the line of division extending from near eastern edge of Dewey County and middle of Woods County (Glass, op. cit., p. 178); northward through central Kansas, west certainly to Mitchell, Ellsworth, and Barber Counties, and east certainly to Pottawatomi, Lyon, and Montgomery Counties (Cockrum, Univ. Kansas Publ. Mus. Nat. Hist., vol. 7, No. 1, p. 150, Aug. 25, 1952).

*Perognathus hispidus paradoxus* Merriam†*


*Type Locality.*—Banner, Trego County, Kan. *Range.*—Short and mixed grasslands and southwestern desert, from extreme southern North Dakota (west of Missouri River), most of South Dakota west of Missouri River, extreme eastern border of Wyoming, Nebraska (except southeastern area occupied by *spilotus*), eastern Colorado, western Kansas (west of Cloud and Harper Counties), Panhandle and extreme western portion of Oklahoma, high plains and Trans-Pecos areas of Texas, eastern and southern parts of New Mexico (except higher mountains), southeastern quarter of Arizona, northern half of Chihuahua, and plateau of northeastern Sonora, Mexico; east at least to Webster and Lancaster Counties, Nebr. (Glass, Journ. Mamm., vol. 28, No. 2, p. 178, June 2, 1947).

*Perognathus hispidus zacatecae* Osgood†*


*penicillatus*—group

*Perognathus penicillatus penicillatus* Woodhouse†*


*Perognathus penicillatus sobrinus* Goldman†*


*Type Locality.*—Sand flat along Virgin River, 7 miles above Bunkerville, Clark County, Nev.  [Regarded as Mohave County, Ariz., by Hardy, Journ. Mamm., vol. 30, No. 4, p. 435, Nov. 17, 1949.]  *Range.*—Sandy and alluvial soils along Muddy, Virgin, and Colorado Rivers north from Boulder Dam, Nev. (Hall, Mammals of Nevada, p. 376, July 1, 1946); and probably extending along Virgin River into extreme northwestern Arizona.

*Perognathus penicillatus stephensi* Merriam†*


*Type Locality.*—Mesquite Valley [edge of a little mesa near Triangle Spring], northwest arm of Death Valley, Inyo County, Calif.  *Range.*—Central and western portions of Mohave Desert, from Death Valley, Inyo County, south to Victorville, San Bernardino County, and to near Peck's Butte, northeastern Los Angeles County, Calif.; zonal range, Lower Sonoran; vertical range, from near sea level (type locality) to 2,700 feet at Victorville (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 153, Sept. 26, 1933).

*Perognathus penicillatus angustirostris* Osgood†*


*Type Locality.*—Carrizo Creek, western edge of Colorado Desert, Imperial County, Calif.  *Range.*—Colorado Desert; south to northeastern Baja California and east to Colorado River; in California, west from valley of Colorado River at Fort Yuma and Pilot Knob, Imperial County, to Vallecito and La Puerta Valley, in eastern San Diego County, and north from Mexican border as far as Cabezon, Riverside County; zonal range, Lower Sonoran; vertical range, from below sea level (at several localities around margin of Salton Sea) up as high
RODENTIA: HETEROMYIDAE


Perognathus penicillatus pricei J. A. Allen*
_Type Locality._—Oposura, Sonora, México. _Range._—Southern Arizona, west at least to Sentinel, southwestern Maricopa County, and east to Fort Bowie, northeastern Cochise County; and most of northern Sonora, except higher mountains on east, south to San José de Guaymas (Burt, Univ. Michigan Mus. Zool. Misc. Publ. 39, p. 44, Feb. 15, 1938).

Perognathus penicillatus eremicus Mearns†*
_Type Locality._—Fort Hancock, Hudspeth County, Tex. _Range._—Western Texas, north at least to Monahans, Ward County, and east to Brewster County in Big Bend area (Borell and Bryant, Univ. California Publ. Zool., vol. 48, No. 1, p. 24, Aug. 7, 1942); southern New Mexico, north at least to Tularosa, Otero County, and Garfield, Dona Ana County (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 281, Mar. 1, 1932); southeastern Arizona (Cahalane, Journ. Mamm., vol. 20, No. 4, p. 430, Nov. 14, 1939); and south into north-central México east of Sierra Madre at least to Mapimi in northeastern Durango, to La Ventura in extreme southeastern Coahuila, and to northern San Luis Potosí north and west of Matehuala (Dalquest, Journ. Washington Acad. Sci., vol. 41, No. 11, p. 362, Nov. 14, 1951).

Perognathus penicillatus atrodorsalis Dalquest*
_Type Locality._—Seven kilometers west of Presa de Guadalupe, San Luis Potosí, México. _Range._—Desert plains of central part of State of San Luis Potosí from western base of Sierra Madre Oriental westward at least to type locality.

Perognathus penicillatus minimus Burt
_Type Locality._—Turner’s Island, lat. 28°43’ N., long. 112°19’ W., Gulf of California, Sonora, México. _Range._—Turner’s Island.

Perognathus penicillatus seri Nelson†*
Type Locality.—Tiburón Island, Gulf of California, Sonora, México. Range.—Tiburón Island.

**Perognathus arenarius arenarius** Merriam†*


**Perognathus arenarius sublucidus** Nelson and Goldman†*


*Type Locality.*—La Paz, Baja California, México. *Range.*—Desert lying about southwestern part of La Paz Bay, Baja California.

**Perognathus arenarius ambiguus** Nelson and Goldman†*


*Type Locality.*—Yubay, 30 miles southeast of Calamahue, Baja California, México. Altitude, 2,000 feet. *Range.*—Central section from San Fernando south to Vizcaino Desert, the region of perhaps most extreme aridity in Baja California.

**Perognathus arenarius helleri** Elliot*


*Type Locality.*—San Quintín, northwestern Baja California, México. *Range.*—Northwest coast of Baja California.

**Perognathus arenarius mexicalis** Huey


*Type Locality.*—Los Muertos Canyon fan, lat. 32°27' N., long. 115°53' W., in palo verde ironwood association at Gaskill’s Tank, near Laguna Salada, northeastern Baja California, México. *Range.*—As far as known, at two localities not far apart on western side of Laguna Salada.

**Perognathus arenarius albescens** Huey*


*Type Locality.*—San Felipe, Baja California, México. *Range.*—As far as known, sandy area bordering San Felipe Bay, northeastern Baja California.

**Perognathus arenarius albulus** Nelson and Goldman†*


_Type Locality._—Magdalena Island, off west coast of Baja California, México. _Range._—Magdalena Island.

Perognathus arenarius ammophilus Osgood†*


_Type Locality._—Santa Margarita Island, off west coast of Baja California, México. _Range._—Santa Margarita Island.

Perognathus arenarius siccus Osgood†*


_Type Locality._—Ceralbo Island, Gulf of California, Baja California, México. _Range._—Known only from Ceralbo Island.

Perognathus pernix pernix J. A. Allen*


_Type Locality._—Rosario, Sinaloa, México. _Range._—Western México from Altata and Culiacán, Sinaloa, south at least to Acapulco, Nayarit.

Perognathus pernix rostratus Osgood†*


_intermedius_—group

Perognathus intermedius intermedius Merriam†*


Perognathus intermedius erinitus Benson*


*Type Locality.*—Near (2.6 miles west) Wupatki Ruins, Coconino County, Ariz. *Range.*—Northeastern Arizona and southeastern Utah south of Colorado and San Juan Rivers; probably intergrading with *intermedius* through Grand Canyon of Colorado River.

Perognathus intermedius umbrosus Benson


*Type Locality.*—Camp Verde, Yavapai County, Ariz. *Range.*—From eastern Yavapai County (Camp Verde) west at least to Yarnell, Ariz. (Hatfield, Bull. Chicago Acad. Sci., vol. 6, No. 8, p. 153, Jan. 12, 1942).

Perognathus intermedius phasma Goldman†


*Type Locality.*—Tinajas Altas, Gila Mountains, Yuma County, Ariz. *Altitude,* 1,400 feet. *Range.*—Desert mountains of extreme southwestern Arizona, doubtless adjacent parts of Sonora, México.

Perognathus intermedius nigrimontis Blossom


*Type Locality.*—Black Mountain, 10 miles south of Tucson, Pima County, Ariz. *Range.*—Known only from dark-colored lavas in vicinity of Tucson.

Perognathus intermedius pinacate Blossom


*Type Locality.*—Papago Tanks, Sierra Pinacate, Sonora, México. *Range.*—Known only from dark-colored lavas of Sierra Pinacate in northwestern Sonora and from a narrow extension of Pinacate lava in southwestern Arizona.

Perognathus intermedius lithophilus Huey


*Type Locality.*—Puerto Libertad (or, exactly, the summit of a rocky hill 1½ miles north-northwest of fresh water spring on beach), Sonora, México. *Range.*—So far as known, vicinity of Puerto Libertad.

Perognathus intermedius rupestris Benson


*Type Locality.*—That part of lava beds nearest to Kenzin, Dona Ana County, N. Mex. *Range.*—Lava beds near Kenzin, Dona Ana County, N. Mex.

Perognathus intermedius ater Dice

Type Locality.—Malpais Spring, 15 miles west of Three Rivers, Otero County, N. Mex. Altitude, 4,150 feet. Range.—Black malpais lava in Otero and Lincoln Counties, N. Mex.

Perognathus nelsoni nelsoni Merriam†*


Type Locality.—Hacienda La Parada, about 25 miles northwest of city of San Luis Potosí, San Luis Potosí, México. Range.—Upper and Lower Sonoran Zones of tableland of central México, from Inde in northern Durango, and Jimulco and La Ventura in southern Coahuila, south to Lagos in northwestern Jalisco, to Hacienda La Parada in southwestern San Luis Potosí, and to Berriozábal in southern Zacatecas, and east to Jaumave in southwestern Tamaulipas, México.

Perognathus nelsoni canescens Merriam†*


Type Locality.—Jaral, Coahuila, México. Range.—From southern Coahuila, México, north at least to Chisos Mountains, Brewster County, Tex. (Borell and Bryant, loc. cit.), and Davis Mountains, Jeff Davis County, Tex.

Perognathus lineatus Dalquest*


Type Locality.—One kilometer south of Arriaga, San Luis Potosí, México. Range.—Desert plains of western and central San Luis Potosí and, without doubt, adjacent parts of Guanajuato, Zacatecas, and Jalisco.

Perognathus goldmani Osgood†*


Perognathus artus Osgood†*


Perognathus fallax fallax Merriam†*


_Type Locality._—Reche Canyon, 3 miles southeast of Colton, San Bernardino County, Calif. Altitude, 1,250 feet. _Range._—Northern Baja California and southwestern California, from Mexican boundary (Tia Juana east to Jacumba) northwest to vicinity of Riverside and San Bernardino; specimens from Banning, 2,500 feet, Riverside County, indicate intergradation through San Gorgonio Pass with *pallidus*; zonal range, Lower and Upper Sonoran; vertical range, from near sea level (mouth of Tia Juana River and near San Onofre, San Diego County) up to 3,100 feet near Jacumba, San Diego County (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 153, Sept. 26, 1933).

Perognathus fallax pallidus Mearns†*


_Type Locality._—Mountain Spring, halfway up east slope of Coast Range Mountains, on Mexican boundary, Imperial County, Calif. Altitude, about 2,500 feet. _Range._—Western rim of Colorado Desert and southern margin of Mohave Desert in California; from Mexican boundary (near Mountain Spring) north along northeast slopes of main mountain divides to Cabezon, Riverside County; and at north of main San Bernardino Mountains, from Cactus Flat to Oro Grande and east to Twentynine Palms, San Bernardino County; zonal range, chiefly Lower Sonoran, locally Upper Sonoran; vertical range, from 450 feet (Palm Springs, Riverside County) up to 3,500 feet (near Dos Palmos Spring, Santa Rosa Mountains, Riverside County) and 6,000 feet at Cactus Flat, north slope of San Bernardino Mountains (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 153, Sept. 26, 1933); and southward along eastern slope of Coast Range into Baja California.

Perognathus fallax inopinus Nelson and Goldman†*


_Type Locality._—Turtle (San Bartolomé) Bay, west coast of Baja California, México. _Range._—Known from type locality only.

Perognathus anthonyi Osgood†*

Type Locality.—South Bay, Cerros (Cedros) Island, Baja California, México.

Range.—Known from type locality only.

californicus—group

**Perognathus californicus californicus** Merriam†*


**Type Locality.**—Berkeley, Alameda County, Calif. Range.—Coast region of west-central California, south of Golden Gate and Strait of Carquinez; south from Redwood City, San Mateo County, and Walnut Creek and Mount Diablo, Contra Costa County, to northern Santa Cruz and southern Santa Clara Counties. Zonal range, Upper Sonoran.

**Perognathus californicus marinensis** von Blocker*


**Type Locality.**—Indian Harbor, 1½ miles south of Marina, Monterey County, Calif. Altitude, 50 feet. Range.—Narrow humid coastal belt of Pacific drainage slope of Santa Cruz and Santa Lucia Mountains, Calif., from Bear Creek, Black Mountain, Santa Clara County, south at least to Morro Bay, San Luis Obispo County. Vertical range, from near sea level to at least 4,600 feet.

**Perognathus californicus bensoni** von Blocker*


**Type Locality.**—Stonewall Creek, about 6.3 miles northeast of Soledad, Monterey County, Calif. Altitude, 1,300 feet. Range.—Gabilan–Diablo Range, Calif., from Herrero Canyon, Merced County, south through San Benito, eastern Monterey and western Fresno Counties onto Carrizo Plains, San Luis Obispo County. Vertical range, from 200 feet to at least 4,400 feet.

**Perognathus californicus dispar** Osgood†*


**Type Locality.**—Carpinteria, Santa Barbara County, Calif. Range.—From San Luis Obispo, southern San Luis Obispo County (Osgood, op. cit., p. 59), south through coastal slopes of Santa Barbara, Ventura, and Los Angeles Counties; also lower, western slopes of Sierra Nevada, from Dunlap, southern Fresno County, northwest to Auburn, western Placer County; zonal range, Upper Sonoran and Transition locally in Sierra Nevada; vertical range, from near sea level (near Carpinteria) up to 5,300 feet at Hume, Fresno County, Calif. (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 154, Sept. 26, 1933).

**Perognathus californicus ochrus** Osgood†*


**Type Locality.**—Santiago Springs, 16 miles southwest of McKittrick, Kern County, Calif. Range.—Mountains and foothills around southern rim of San
Joaquin Valley; west to Cuyama Valley, northern Santa Barbara County; south to Cuddy Canyon, northern Ventura County; and east through Tehachapi and Walker Pass territory and into southern Sierra Nevada as far as Jordan Hot Springs, Tulare County, Calif.; zonal range, chiefly Upper Sonoran, locally Lower Sonoran; vertical range, from 600 feet (Wheeler Ridge, Kern County) up to 7,000 feet at Taylor Meadow, Tulare County (in part, Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 154, Sept. 26, 1933).

**Perognathus californicus bernardinus** Benson*


**Perognathus californicus femoralis** J. A. Allen*


**Perognathus californicus mesopolius** Elliot


*Type Locality.*—Piñon, Sierra San Pedro Martir, Baja California, México. Altitude, 5,000 feet. *Range.*—Sierra San Pedro Martir.

**Perognathus spinatus spinatus** Merriam†*


*Type Locality.*—Twenty-five miles below The Needles, Colorado River, San Bernardino County, Calif. *Range.*—Desert region of southeastern California and northeastern Baja California; in California, rough, hilly country along Colorado River Valley, from vicinity of The Needles, San Bernardino County, south to Pilot Knob, Imperial County; westernmost station, Horn Mine, east base Turtle Mountains, San Bernardino County; zonal range, Lower Sonoran; vertical range, from 200 feet (at base of Pilot Knob) up at least to 1,000 feet at Horn Mine (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 155, Sept. 26, 1933).
Perognathus spinatus rufescens Huey*


*Type Locality.*—Mouth of Palm Canyon, Borego Valley, northeastern San Diego County, Calif. *Range.*—Lower eastern slopes of mountains along west side of Colorado Desert, from near Mountain Spring, extreme eastern San Diego County, north to vicinity of Palm Springs, Riverside County; zonal range, Lower Sonoran; vertical range, from 450 feet (near Palm Springs) up to 3,000 feet near Dos Palmos Spring, Santa Rosa Mountains, Calif. (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 155, Sept. 26, 1933).

Perognathus spinatus prietae Huey


*Type Locality.*—Twenty-five miles north of Punta Prieta, lat. 29°24' N., long. 114°24' W., Baja California, México. *Range.*—probably throughout suitable localities in central northern Baja California. Actually known from lat. 30° S. south to type locality.

Perognathus spinatus peninsulare Merriam†*


*Type Locality.*—San José del Cabo, Baja California, México. *Range.*—Cape region of Baja California.

Perognathus spinatus magdalenae Osgood†*


*Type Locality.*—Magdalena Island, off west coast of Baja California, México. *Range.*—Magdalena Island.

Perognathus spinatus margaritae Merriam†*


*Type Locality.*—Santa Margarita Island, off west coast of Baja California, México. *Range.*—Santa Margarita Island.

Perognathus spinatus lambi Benson


*Type Locality.*—San Gabriel, Espíritu Santo Island, Gulf of California, Baja California, México. *Range.*—Espíritu Santo Island.

Perognathus spinatus latijugularis Burt


*Type Locality.*—San Francisco Island, lat. 24°50' N., long. 110°34' W., Gulf of California, Baja California, México. *Range.*—San Francisco Island.
Perognathus spinatus bryanti Merriam*
Type Locality.—San José Island, Gulf of California, Baja California, México. Range.—San José Island.

Perognathus spinatus seorsus Burt
Type Locality.—Danzante Island, lat. 25°47' N., long. 111°11' W., Gulf of California, Baja California, México. Range.—Danzante Island.

Perognathus spinatus occultus Nelson†*
Type Locality.—Carmen Island, Gulf of California, México. Range.—Carmen Island.

Perognathus spinatus pullus Burt
Type Locality.—Coronados Island, lat 26°06' N., long. 111°13' W., Gulf of California, Baja California, México. Range.—Coronados Island.

Perognathus spinatus marcosensis Burt
Type Locality.—San Marcos Island, lat. 27°13' N., long. 112°05' W., Gulf of California, Baja California, México. Range.—San Marcos Island.

Perognathus spinatus guardiae Burt
Type Locality.—Puerto Refugio, north end of Ángel de la Guarda Island, Gulf of California, Baja California, México. Altitude, 30 feet. Range.—Ángel de la Guarda Island.

Perognathus spinatus evermanni Nelson and Goldman
Type Locality.—Mejía Island, near north end of Ángel de la Guarda Island, Gulf of California, Baja California, México. Range.—Mejía Island.
Subfamily DIPODOMYINAE

Genus DIPODOMYS* Gray (kangaroo-rats)


1890. *Dipodops* Merriam, North Amer. Fauna No. 3, p. 71, Sept. 11, 1890. (Type, *Dipodomys agilis* Gambel.)

heermannii—group

*Dipodomys heermannii heermannii* Le Conte*


_Type Locality._—Sierra Nevada, Calif.; more exactly, vicinity of Calaveras River, in foothill district, Calaveras County (see Grinnell, Univ. California Publ. Zool., vol. 24, No. 1, p. 47, June 17, 1922). _Range._—Lower west slope of central Sierra Nevada; recorded from Carbondale, Amador County, south to Coulterville, Mariposa County; vertical range, 500 to 3,200 feet; zonal range, Upper Sonoran, lower edge of Transition locally (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 157, Sept. 26, 1933).

*Dipodomys heermannii californicus* Merriam†*


_Type Locality._—Ukiah [more exactly, the west edge of main road running south from Ukiah and about a mile south of the then center of town], Mendocino County, Calif. _Range._—Northwestern California, chiefly east of humid coastal belt and altogether west of lower Sacramento River; south to Nicasio, Marin County, and Vacaville, Solano County; north to Hornbrook, Siskiyou County;

**Dipodomys heermannii gabrielsoni** Goldman†


*Type Locality.*—Brownsboro, Jackson County, Oreg. Altitude, below 4,000 feet. *Range.*—Vicinity of Brownsboro, some 15 miles northeast of Medford, Oreg., but tracks and trails may be seen in open charparal of Upper Sonoran area of Rogue River Valley from Grants Pass to Ashland (V. Bailey, North Amer. Fauna No. 55 (June), p. 241, Aug. 29, 1936).

**Dipodomys heermannii saxatilis** Grinnell and Linsdale*


*Type Locality.*—Mesa near Dale’s, north side of Paine’s Creek, Tehama County, Calif. Altitude, 700 feet. *Range.*—Eastern side of Sacramento Valley, on rising ground, from a little south of Battle Creek, Tehama County, south nearly to South Fork of American River, in El Dorado County; vertical range, 300 to 1,200 feet; zonal range, Lower and Upper Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 156, Sept. 26, 1933).

**Dipodomys heermannii eximius** Grinnell*


**Dipodomys heermannii tularensis** (Merriam)†


*Type Locality.*—Alila, now Earlimart, Tulare County, Calif. *Range.*—Chiefly floor of San Joaquin Valley; extends north on eastern side of this valley to vicinity of Raymond, Madera County; on western side to near Tracy, San Joaquin County; southeastward to vicinity of Bakersfield and Buena Vista Lake, Kern County; vertical range, 120 to 3,000 feet; zonal range, mostly Lower Sonoran, but extends into Upper Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 157, Sept. 26, 1933).
Dipodomys heermanni dixoni (Grinnell)*

*Type Locality.*—Delhi, near Merced River, Merced County, Calif. *Range.*—Floor of lower (northern) end of San Joaquin Valley on eastern side of San Joaquin River, in Stanislaus and Merced Counties; recorded from Delhi east to Merced Falls; vertical range, below 500 feet; zonal range, Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 157, Sept. 26, 1933).

Dipodomys heermanni berkeleyensis Grinnell*


Dipodomys heermanni goldmani (Merriam) †*

*Type Locality.*—Salinas, mouth of Salinas Valley, Monterey County, Calif. *Range.*—Lower (northern) end of Salinas Valley and adjacent smaller valleys and hill-slopes, from sand-dune area on Monterey Bay just south of Salinas River mouth, southeast to vicinity of Soledad; recorded east to Bear Valley, in vicinity of Cook Post Office, San Benito County, and thence north to San Jose, Santa Clara County; vertical range, sea level up to about 1,300 feet; zonal range, Upper Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 158, Sept. 26, 1933).

Dipodomys heermanni jolonensis Grinnell*

*Type Locality.*—Valley floor, 1 mile southwest of Jolon, Monterey County, Calif. *Range.*—Upper (southern) end of Salinas Valley and tributary valleys, from vicinity of King City and Peachtree, in Monterey County, south to Creston, in San Luis Obispo County; west to Jolon; vertical range, 400 to 1,500 feet; zonal range, chiefly Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 158, Sept. 26, 1933).
Dipodomys heermanni morroensis (Merriam)†*
Type Locality.—Four miles south of Morro, San Luis Obispo County, Calif. Range.—Immediate vicinity of Morro Bay (south side only, so far as known), San Luis Obispo County, Calif.; vertical range, below 250 feet; zonal range, Upper Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 158, Sept. 26, 1933).

Dipodomys heermanni swarthi (Grinnell)★
Type Locality.—Seven miles southeast of Simmler, Carrizo Plain, San Luis Obispo County, Calif. Range.—Carrizo and Cuyama plains, in southeastern San Luis Obispo County and extreme northern Santa Barbara County; also southwestern border of San Joaquin Valley, in vicinity of McKittrick and San Emigdio, Kern County; vertical range, 300 to 2,000 feet; zonal range, Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 158, Sept. 26, 1933; see also Boulware, Univ. California Publ. Zool., vol. 46, No. 7, p. 394, Sept. 16, 1943).

Dipodomys heermanni arenæae Boulware
Type Locality.—C. A. Davis ranch, 2 miles north-northwest of Lompoc, Santa Barbara County, Calif. Altitude, 400 feet. Range.—Pacific slope of San Luis Obispo and Santa Barbara Counties from Oceano southward to Santa Inez River and up Santa Inez River Valley at least as far as Buellton.

Dipodomys panamintinus panamintinus (Merriam)†★
Type Locality.—Head of Willow Creek, Panamint Mountains, Inyo County, Calif. [On U. S. Geol. Surv. Ballarat Quadrangle, March 1913; this is probably at about 6,200 feet altitude, some 3 miles northeast of Jackass Spring, in Inyo County about 20 miles due east of Keeler. See Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 159, Sept. 26, 1933.] Range.—Higher parts of northern section of Panamint Mountains, Inyo County; area of habitat, about 6 by 3 miles, in vicinity of Jackass Spring; vertical range, 6,000 to 7,000 feet; zonal range, Upper Sonoran and lower edge of Transition (Grinnell, 1933, loc. cit.).
**Dipodomys panamintinus leucogenys** (Grinnell) *


*Type Locality.—* Pellisier Ranch, 5 miles north of Benton Station, Mono County, Calif. Altitude, 5,600 feet. *Range.—* Territory lying immediately southeast of Mono Lake and in head of Owens Valley; recorded from Dry Creek, near Mono Lake, Mono County, east to Nevada line, and south along west side of Owens Valley as far as vicinity of Independence, Inyo County; vertical range, 3,900 to 7,300 feet; zonal range, Upper Sonoran and, at the north, Transition (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 159, Sept. 26, 1933); Upper Sonoran along western border of Nevada from Pyramid Lake south to head of Owens Valley (Hall, loc. cit.).

**Dipodomys panamintinus mohavensis** (Grinnell) *


*Type Locality.—* Half mile east of railway station at Warren, about 5 miles north of Mohave, Kern County, Calif. Altitude, 3,275 feet. *Range.—* Mohave Desert region; north into lower end of Owens Valley as far as vicinity of Lone Pine; south to Hesperia, San Bernardino County; east to Purdy, near New York Mountains, San Bernardino County; and west to Fairmont, northern Los Angeles County, and over Walker and Kelso Passes into Kern River Basin as far as Isabella, Kern County; vertical range, 2,500 to 5,500 feet; zonal range, upper Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 159, Sept. 26, 1933).

**Dipodomys panamintinus argusensis** Huey


*Type Locality.—* Junction Ranch, Argus Mountains, Inyo County, Calif. Altitude, 5,725 feet. *Range.—* So far as known, region about Junction Ranch, in the Argus Mountains.

**Dipodomys panamintinus caudatus** Hall


*Type Locality.—* Providence Mountains, 6 miles south of Granite Well, San Bernardino County, Calif. Altitude, 3,300 feet. *Range.—* Providence Mountains region of northeastern San Bernardino County, Calif., and western Clark County, Nev.
Dipodomys stephensi (Merriam)†*

Type Locality.—San Jacinto Valley, Riverside County, Calif.; more exactly, a little west of present town of Winchester, toward Menifee. Range.—San Jacinto Valley and vicinity, in western Riverside County and extreme southern San Bernardino County; recorded from Reche Canyon (4 miles southeast of Colton) southwest to Temescal, and east to near San Jacinto; vertical range, 1,100 to 1,600 feet; zonal range, chiefly Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 160, Sept. 26, 1933).

Dipodomys ingens (Merriam)†*

Type Locality.—Painted Rock, 20 [= 12] miles southeast of Simmler, Carrizo Plain, San Luis Obispo County, Calif. Range.—Western margin of San Joaquin Valley, and, to southeastward, Carrizo Plain and Cuyama Valley; occurs from near mouth of Laguna Seca Creek, in western Merced County, southeast to near Buena Vista Lake, southern Kern County; southwest to south side of Cuyama Valley, in extreme northern Santa Barbara County; vertical range, 400 to 2,500 feet; zonal range, Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 160, Sept. 26, 1933).

Dipodomys gravipes Huey*

Type Locality.—Two miles west of Santo Domingo Mission, lat. 30°45′ N., long. 115°55′ W., or precisely, on cactus-covered slopes south of huge red cliff that marks entrance of Santo Domingo River Canyon from coastal plain, Baja California, México. Range.—So far as known, from vicinity of type locality south over llano and foothills east of San Quintin, a distance of about 20 miles, and north over Llano de Camalú to San Telmo River (Huey, Trans. San Diego Soc. Nat. Hist., vol. 11, No. 10, p. 255, Apr. 30, 1951).

phillipsii—group

Dipodomys phillipsii phillipsii Gray*

Type Locality.—Near Real del Monte, Valley of México, Hidalgo, México (See Nelson in Merriam, Proc. Biol. Soc. Washington, vol. 8, pp. 84–87, July 18, 1893). Range.—Highlands of México from Zacatecas south through Hidalgo (9 kilometers south of Pachuca), Tlaxcala (Huamantla), and plains of Puebla

**Dipodomys phillipsii oaxacae** Hooper


*Type Locality.*—Teotitlán, Oaxaca, México. *Altitude.* 950 meters. *Range.*—Known from type locality only, but probably ranges northward at low elevations in Puebla and adjoining States, and intergrading with highland *phillipsii* and *perotensis*.

**Dipodomys phillipsii perotensis** Merriam†*


*Type Locality.*—Perote, Veracruz, México. *Range.*—Semidesert area of Veracruz (Perote and Guadalupe Victoria, 8,300 feet) west of Laguna Salada near Alchichica, 8,000 feet, and Chalchicomula, 10 kilometers west of San Andrés, 8,300 feet in Puebla, México (Davis, loc. cit.).

**Dipodomys ornatus** Merriam†*


*Type Locality.*—Berriozábal, Zacatecas, México.

**Dipodomys spectabilis spectabilis** Merriam†*


**Dipodomys spectabilis perblandus** Goldman†*


**Dipodomys spectabilis clarenceei** Goldman†*

Type Locality.—Blanco, San Juan County, N. Mex. Range.—San Juan River Valley south to Gallup, McKinley County, in northwestern New Mexico, northeastern Arizona, and probably southeastern Utah and southwestern Colorado.

Dipodomys spectabilis baileyi Goldman†*

Type Locality.—Forty miles northwest of Roswell, Chaves County, N. Mex.

Range.—From Cabezon, northwestern New Mexico, south through Rio Grande Valley in open plains country below level of nut pines and junipers to northwestern Texas, to eastern border of Tularosa Basin near Jarilla, and Pecos River Valley from Santa Rosa, Guadalupe County, south to Carlsbad, N. Mex. (V. Bailey, North Amer. Fauna No. 53 (Dec. 1931), p. 259, Mar. 1, 1932); eastward in northwestern Texas at least to Presidio, Reeves, and Crane Counties (V. Bailey, North Amer. Fauna No. 25, p. 147, Oct. 24, 1905).

Dipodomys spectabilis zygomaticus Goldman†*

Type Locality.—Parral, southern Chihuahua, México.

Range.—Known from type locality only.

Dipodomys spectabilis cratodon Merriam†*

Type Locality.—Chicalote, Aguas Calientes, México.


Dipodomys nelsoni Merriam†*

Type Locality.—La Ventura, Coahuila, México.

Range.—From Santa Rosalía, Chihuahua, to Jaral and La Ventura, Coahuila, and thence to Doctor Arroyo, Nuevo León, México.

elator—group

Dipodomys elator Merriam†*

Type Locality.—Henrietta, Clay County, Tex.


merriami—group

Dipodomys merriami merriami Mearns*


Type Locality.—New River, north of Phoenix, Maricopa County, Ariz. Range.—From Valverde and Ward Counties through extremely arid Lower Sonoran Zone of western Texas (V. Bailey, North Amer. Fauna No. 25, p. 149, Oct. 24, 1905) into southern New Mexico at least as far as Carlsbad in Pecos Valley, to Jarilla and Tularosa in Otero County, to Socorro in Rio Grande Valley, and to Deming and Red Rock in the southwest (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 263, Mar. 1, 1932); south over tableland of México east of Sierra Nevada through northern and eastern Chihuahua to southern Coahuila and central Nuevo León, México (Vorhies and Taylor, U. S. Dept. Agric. Dept. Bull. 1091, map, p. 4, Sept. 13, 1922); most of desert area of northern Sonora, México, except northwestern arm, south to San José de Guaymas (Burt, Univ. Michigan Mus. Zool. Misc. Publ. 39, p. 47, Feb. 15, 1938); Arizona south of Colorado River in area south and west of Mogollon Plateau (Benson, op. cit., p. 182), Washington County, west of Beaver Dam Mountains, in extreme southwestern Utah (Durrant and Setzer, Bull. Univ. Utah, vol. 35, No. 26, p. 31, June 30, 1945); Lower Sonoran zone of southern Nevada north to Alamo, Lincoln County, and low western part of State in salt-desert area north to Quinn River Crossing, Humboldt County (Hall, loc. cit.); and Mohave Desert region of California from Nevada line and Colorado River west to Weldon, in valley of South Fork of Kern River, Kern County, and to 7 miles west of Mohave; north, in Owens Valley, to Independence, Inyo County; south to road towards Blythe, 53 miles east to Mecca, and, along Colorado River, to Blythe, in Riverside County; vertical range, 200 to 7,000 feet; zonal range, Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 160, Sept. 26, 1933).

*Dipodomys merriami ambiguus* Merriam†*

May 13, 1941; and as a valid subspecies by Blair, Journ. Mamm., vol. 30, No. 4, p. 388, Nov. 17, 1949.)


**Dipodomys merriami simiolus** Rhoads*


**Dipodomys merriami parvus** Rhoads*


**Dipodomys merriami trinidadensis** Huey


Type Locality.—Aguajito Spring, El Valle de la Trinidad, Baja California, México. Range.—El Valle de la Trinidad and more arid parts of El Valle de la San Rafael, at least to Sangre de Cristo along western base of Sierra Juárez.
Dipodomys merriami quintinensis Huey


_Type Locality._—Five miles east of San Quintin, Baja California, México. _Range._—Coastal plain above San Quintin Bay, and as far north as vicinity of Santo Domingo, some 25 miles north of San Quintin.

Dipodomys merriami arenivagus Elliot*


_Type Locality._—San Felipe, Baja California, México. _Range._—Arid area east of Sierra San Pedro Mártir and Sierra Juárez from San Felipe northward almost to boundary, excepting region about Colorado River delta (Huey, Trans. San Diego Soc. Nat. Hist., vol. 11, No. 10, p. 221, Apr. 30, 1951).

Dipodomys merriami semipallidus Huey*


_Type Locality._—Seven miles north of Santa Catarina, lat. 29°45’ N., long. 115°10’ W., western Baja California, México. _Range._—From near El Rosario River Canyon on the west and southernmost foothills of Sierra San Pedro Mártir on the east, thence tapering southward to an apex on Pacific coast somewhere west of Punta Prieta (Huey, Trans. San Diego Soc. Nat. Hist., vol. 11, No. 10, p. 223, Apr. 30, 1951).

Dipodomys merriami platycephalus Merriam†*


Dipodomys merriami annulus Huey


_Type Locality._—Barril, lat. 28°20’ N., long. 112°50’ W., Gulf of California, Baja California, México. _Range._—Gulf of California side of Peninsula over coastal plain bordering San Francisquito and Santa Teresa Bays and thence northward into nontypical population at Las Flores, near Los Angeles Bay.

Dipodomys merriami brunensis Huey*


_Type Locality._—Llano de San Bruno, Baja California, México. _Range._—El Valle de Yaqui about 8 or 10 miles northwest of Santa Rosalía, Llano de San Bruno south of Santa Rosalía, and the gradually rising region from south end of Concepción Bay to Canipolé, Baja California.
Dipodomys merriami melanurus Merriam†*  
_Type Locality._—San José del Cabo, Baja California, Méx. _Range._—Southern base of higher foothills of Sierra Victoria from Cape San Lucas to San José del Cabo, thence northward up the very wide valley at least to Agua Caliente (Huey, Trans. San Diego Soc. Nat. Hist., vol. 11, No. 10, p. 226, Apr. 30, 1951).

Dipodomys merriami llanoensis Huey*  
_Type Locality._—Buena Vista, lat. 24°50' N., long. 111°50' W., Magdalena Plain, Baja California, México. _Range._—From San Jorge, on northern end of Magdalena Plain, south to area south of El Refugio, but ranges without doubt farther southward, at least to region of Arroyo Seco below Magdalena Bay.

Dipodomys merriami vulcani Benson*  
_Type Locality._—Lower end of Toroweap Valley, about 1/2 mile east of Vulcan’s Throne, Mohave County, Ariz. _Range._—From Vulcan’s Throne north into southern Washington County, Utah, east of Beaver Dam Mountains (Durrant and Setzer, op. cit., p. 31).

Dipodomys merriami regillus Goldman†*  
_Type Locality._—Tule Well, Tule Desert between Cabeza Prieta Mountains and Tule Mountains, Yuma County, Ariz. Altitude, 1,000 feet. _Range._—Low desert plains of southwestern Arizona, including lower part of Gila River Valley and adjoining parts of Sonora, from Colorado River east to Quitobaquito, Pima County, Ariz., and Sonoyta, Sonora, intergrading to east and north with _merriami._

Dipodomys merriami mayensis Goldman†*  

Dipodomys merriami mitchelli Mearns‡†*  
_Type Locality._—Tiburón Island, Gulf of California, Sonora, México. _Range._—Low flat sandy areas on Tiburón Island.
Dipodomys merriami atronanus Merriam†*

*Type Locality.*—Hacienda La Parada, about 25 miles northwest of city of San Luis Potosí, San Luis Potosí, México.

Dipodomys nitratooides nitratooides Merriam†*

*Type Locality.*—Tipton, San Joaquin Valley, Tulare County, Calif. *Range.*—Floor of southeastern side and end of (upper) San Joaquin Valley, from 15 miles south of Corcoran, Kings County, south to Caliente Wash, Kern County; west to north side of Buena Vista Lake, Calif.; vertical range, 230 to 600 feet; zonal range, Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 161, Sept. 26, 1933).

Dipodomys nitratooides exilis Merriam†*


Dipodomys nitratooides brevinasus Grinnell*

*Type Locality.*—Hayes Station, near Bench Mark 503 [= 502 of U. S. Geol. Surv. Panoche quadrangle], 19 miles southwest of Mendota, near mouth of Panoche Creek canyon, Fresno County, Calif. *Range.*—Arid western side of San Joaquin Valley, from near mouth of Panoche Creek and near Mendota, in western Fresno County, south to near mouth of San Emigdio Creek, in southwestern Kern County, Calif.; vertical range, 175 to 600 feet; zonal range, Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 162, Sept. 26, 1933).

Dipodomys insularis Merriam†*

*Type Locality.*—San José Island, Gulf of California, Baja California, México. *Range.*—San José Island.
Dipodomys margaritae Merriam*†


_Type Locality._—Santa Margarita Island, off west coast of southern Baja California, México. _Range._—Santa Margarita Island.

_ordii_—group 1

Dipodomys ordii ordii Woodhouse*


Dipodomys ordii extractus Setzer


_Type Locality._—One mile east of Samalayuca, Chihuahua, México. Altitude, 4,500 feet. _Range._—Known from type locality only.

Dipodomys ordii obscurus (J. A. Allen)


Dipodomys ordii idoneus Setzer


_Type Locality._—San Juan, 12 miles west of Lerdo, Durango, México. Altitude, 3,800 feet. _Range._—Known from type locality only.

Dipodomys ordii palmeri (J. A. Allen) *


Dipodomys ordii durranti Setzer†*


Type Locality.—Jaumave, Tamaulipas, México. Range.—Nuevo León, extreme northern Zacatecas, Tamaulipas, and northern San Luis Potosí, México. Marginal localities: In Coahuila, La Ventura; in Tamaulipas, Tula, Jaumave and Nuevo Laredo (Setzer, loc. cit.).

Dipodomys ordii parvabullatus Hall


Type Locality.—Island, 83 miles south and 10 miles west of Matamoros, Tamaulipas, México. Range.—Islands along coast of Tamaulipas.

Dipodomys ordii sennetti (J. A. Allen) *


Dipodomys ordii largus Hall


Type Locality.—Mustang Island, 14 miles southwest of Port Aransas, Aransas County, Tex. Range.—Known from Mustang Island only.

Dipodomys ordii compactus True†*


Type Locality.—Padre Island, Cameron County, Tex. Range.—Known from type locality only.
Dipodomys ordii attenuatus Bryant*  
*Type Locality.*—Mouth of Santa Helena Canyon, Big Bend of Rio Grande, Brewster County, Tex. Altitude, 2,146 feet. *Range.*—Big Bend region of Brewster County.

Dipodomys ordii medius Setzer†  
*Type Locality.*—Santa Rosa, Guadalupe County, N. Mex. *Range.*—From north-central New Mexico, southeastward to west-central Texas. Marginal localities: In New Mexico, 15 miles north of Ojo Caliente, Gallina Mountains, Deer Creek, and San Pedro; in Texas, 20 miles north of Monahans, Colorado, 7 miles east of Post, and 6 miles southwest of Muleshoe.

Dipodomys ordii oklahomae Trowbridge and Whitaker†  
*Type Locality.*—North bank of South Canadian River, 2 1/4 miles south of Norman, Cleveland County, Okla. *Range.*—Known only from South Canadian River Valley west of Minco, Canadian County; and east to Lexington, Cleveland County, Oklahoma (Setzer, Univ. Kansas Publ. Mus. Nat. Hist., vol. 1, No. 23, p. 514, Dec. 27, 1949).

Dipodomys ordii richardsoni (J. A. Allen)  

Dipodomys ordii luteolus (Goldman)†  
*Type Locality.*—Casper, Natrona County, Wyo. *Range.*—Southeastern Wyoming, northeastern Colorado, northwestern half of Nebraska, and southwestern South Dakota. Marginal localities: In Wyoming, Casper, Sun, and Fort Steele; in Colorado, Loveland, Hugo, and Akron; in Nebraska, Birdwood Creek, Neligh.

**Dipodomys ordii terrosus** Hoffmeister*


**Dipodomys ordii priscus** Hoffmeister*


**Dipodomys ordii evexus** Goldman†*


**Dipodomys ordii montanus** Baird†*


**Dipodomys ordii nexilis** Goldman†*


*Type Locality.*—Five miles west of Naturita, Montrose County, Colo. *Range.*—West-central Colorado, southwest into San Juan County, Utah, north of San Juan River; northwest into Grand County, Utah, to Colorado River; and westward probably as far as Colorado River. Marginal localities: In Utah,

**Dipodomys ordii longipes** (Merriam)†*


**Dipodomys ordii chapmani** Mearns*


**Dipodomys ordii cupidineus** Goldman†*


**Dipodomys ordii sanrafaelii** Durrant and Setzer*


*Type Locality.*—One and one half miles north of Price, Carbon County, Utah. Altitude, 5,567 feet. Range.—East-central Utah, east into west-central Colorado. Marginal localities: In Utah, 12 miles east of Price, 1½ miles north of Price, Notom, King’s Ranch, 12 miles southwest of Green River, and 16 miles north-
Dipodomys ordii uintensis Durrant and Setzer

Dipodomys ordii fremonti Durrant and Setzer
*Type Locality.*—Torrey, Wayne County, Utah. Altitude, 7,000 feet. *Range.*—Known from type locality only.

Dipodomys ordii panguitchensis Hardy
*Type Locality.*—One mile south of Panguitch, Garfield County, Utah. Altitude, 6,666 feet. *Range.*—Known from type locality only.

Dipodomys ordii cinderensis Hardy*
*Type Locality.*—At about 4,000 feet on sandy soil immediately north of the northern of two large cinder cones in Diamond Valley, 10 miles north of St. George, Washington County, Utah. *Range.*—Diamond Valley, Washington County, Utah, north through Mountain Meadows, east as far as Cedar City, Iron County, Utah, north through Escalante Desert to Lund, Iron County, and west almost to Utah–Nevada boundary. Marginal localities, all in Utah: 11 miles southeast of Lund, north end Mountain Meadows, Diamond Valley, 10 miles west of Cedar City, 4½ miles northwest of Summit, and 6 miles west of Parowan (Setzer, Univ. Kansas Publ. Mus. Nat. Hist., vol. 1, No. 23, p. 540, Dec. 27, 1949).

Dipodomys ordii celeripes Durrant and Hall

Dipodomys ordii pallidus Durrant and Setzer

Dipodomys ordii utahensis (Merriam)†*


Dipodomys ordii cineraceus Goldman†*


Type Locality.—Dolphin Island, Great Salt Lake, Box Elder County, Utah. Altitude, 4,250 feet. Range.—Known from Dolphin Island only.

Dipodomys ordii marshalli Goldman†*


Type Locality.—Bird Island, Great Salt Lake, Tooele County, Utah. Altitude, about 4,300 feet. Range.—Bird, Carrington, Badger, and Stansbury Islands, in Great Salt Lake; around western edge of Great Salt Lake north to Kelton, Box Elder County, and around southern and southeastern edge of lake to mouth of Jordan River, Utah. Marginal localities: In Utah, Kelton, 2 miles west of Grantsville, 14 miles west of Salt Lake City, and Bird Island in Great Salt Lake (Setzer, Univ. Kansas Publ. Mus. Nat. Hist., vol. 1, No. 23, p. 551, Dec. 27, 1949).

Dipodomys ordii fetosus Durrant and Hall


RODENTIA: HETEROMYIDAE

Dipodomys ordii monoensis (Grinnell) *


Type Locality.—Pellisier Ranch, 5 miles north of Benton Station, Mono County, Calif. Altitude, 5,600 feet. Range.—Northeastern Inyo and Mono Counties, Calif., north to southern Pershing County and east to eastern Nye County, Nev. Marginal localities: In California, 5 miles north of Benton Station and Deep Spring Valley; in Nevada, Arlemont, 2 miles northwest of Palmetto, 1 mile north of Beatty, 5 miles west of White Rock Spring, Big Creek at Quinn Canyon Mountains, 21/2 miles south of Lock’s Ranch, 2 miles south of Millett Post Office, 131/2 miles northwest of Goldfield, Fingerrock Wash, Eastgate, 1/2 mile northeast of Toulon, 21 miles west and 2 miles north of Lovelock, 1/2 mile south of Pyramid Lake, West Walker River in Smith’s Valley, and 10 miles south of Yerington (Setzer, Univ. Kansas Publ. Mus. Nat. Hist., vol. 1, No. 23, p. 528, Dec. 27, 1949).

Dipodomys ordii inaquosus Hall *


Dipodomys ordii columbianus (Merriam) † *


Type Locality.—Umatilla, at mouth of Umatilla River, Plains of Columbia, Umatilla County, Oreg. Range.—Southeastern Washington, eastern Oregon, southwestern Idaho, northwestern and northern and most of northeastern Nevada. Marginal localities: In Washington, 2 miles southwest of Paterson, 4 miles east of Burbank, and Wallula; in Oregon, 7 miles east of Madras, 2 miles east of Prineville, and Guano Valley; in California, Eagleville, Red Rock, Observation Peak, 5 miles east of Litchfield, Honey Lake, and Vinton; in Nevada, 31/2 miles east of Flanagan, 6 miles south of Pahrum Peak, 21/2 miles east and 11 miles north of Gerlach, 2 miles southwest of Quinn River Crossing, 1 mile southeast of Tuscarora, 5 miles north of Beowave, 1/2 mile south of Beowave, 21/2 miles northeast of Smiths Creek Ranch, Bells Ranch, 5 miles west of Austin, 8 miles west of Eureka, 4 miles south of Shoshone, 5 miles southeast of Greens Ranch, and 22 miles north of Deeth; in Idaho, 8 miles west of Rodgerston, 6 miles southwest of American Falls, 4 miles northeast of American Falls, 5 miles northwest of

**Dipodomys agilis agilis** Gambel*


*Type Locality.*—Los Angeles, Los Angeles County, Calif. *Range.*—Chiefly Pacific slope of southern California, from near San Jose Creek in southeastern Santa Barbara County (Boulware, Univ. California Publ. Zool., vol. 46, No. 7, p. 395, Sept. 16, 1943) southeast through Ventura, Los Angeles and Orange Counties into western San Bernardino and Riverside Counties (to include San Bernardino and San Jacinto mountains); easternmost record-station, Kenworthy, in San Jacinto Mountains; vertical range, close to sea level up to 7,500 feet; zonal range, chiefly Upper Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 163, Sept. 26, 1933).

**Dipodomys agilis fuscus** Boulware


*Type Locality.*—Two and one-half miles north of La Purisima Mission, Santa Barbara County, Calif. *Altitude.* 600 feet. *Range.*—Known only from vicinity of Lompoc, Santa Barbara County, Calif.

**Dipodomys agilis perplexus** (Merriam)†*‡


*Type Locality.*—Walker Basin, Kern County, Calif. *Altitude.* 3,400 feet. *Range.*—Mountain ranges and included valleys around southern end of San Joaquin Valley; recorded from Trout Creek (toward head of South Fork of Kern River), Tulare County, southwest through Tehachapi and Tejon country to head of Piru Creek, Ventura County; vertical range, 2,400 to 6,500 feet; zonal range, Upper Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 163, Sept. 26, 1933; see also, Boulware, Univ. California Publ. Zool., vol. 46, No. 7, p. 395, Sept. 16, 1943).

**Dipodomys agilis cabezonae** (Merriam)†*‡


*Type Locality.*—Cabezon, San Gorgonio Pass, Riverside County, Calif. *Range.*—Desert slopes of coastal mountains of southern California, from Cabezon and east slope of San Jacinto Mountains, in Riverside County, south through east-

Dipodomys agilis simulans (Merriam)†*


Type Locality.—Dulzura, San Diego County, Calif. Range.—Pacific slope of San Diego County; recorded from Mexican border north to Bonsall; easternmost station, Santa Ysabel; vertical range, near sea level up to 3,000 feet; zonal range, mainly Upper Sonoran, locally into Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 163, Sept. 26, 1933); in Baja California, over great coastal foothill area from western base of Sierra Juárez to Pacific Ocean and from international boundary directly south of Campo, Calif., as far south as Rancho San Pablo, 10 miles south of Álamo, thence diagonally southwest to San Quintin and Pacific Ocean (Huey, Trans. San Diego Soc. Nat. Hist., vol. 11, No. 10, p. 234, Apr. 30, 1951).

Dipodomys agilis martirensis Huey*


Type Locality.—La Grulla (east side of valley), Sierra San Pedro Mártir, Baja California, México. Altitude, 7,500 feet. Range.—Higher parts of Sierra Juárez, southward to La Grulla in Sierra San Pedro Mártir, and westward along higher foothill slopes to vicinity of San José (Huey, Trans. San Diego Soc. Nat. Hist., vol. 11, No. 10, p. 239, Apr. 30, 1951).

Dipodomys agilis plectilis Huey


Type Locality.—Mouth of canyon San Juan de Dios, lat. 30°7' N., Baja California, México. Range.—From El Rosario Valley as far eastward as mouth of canyon San Juan de Dios, a distance of about 10 miles airline, thence southward to Aguaito and El Mármol and thence coastwise to near Santa Catarina and Santa Catarina Landing.

Dipodomys paralius Huey

Type Locality.—Santa Catarina Landing, lat. 29°31’ N., Baja California, México. Range.—Near Santa Catarina and around Santa Catarina Landing.

Dipodomys peninsularis peninsularis (Merriam)†*


Type Locality.—Santo Domingo Landing, lat. 28°51’ N., long. 114° W., Baja California, México. Range.—Vizcaíno Desert from below Punta Prieta (about lat. 28°40’ N.) south to vicinity of San Ignacio (lat. 27°20’ N.), thence over peninsular divide to El Valle de Yaqui between San Ignacio and Santa Rosalía on Gulf slope (Huey, loc. cit.).

Dipodomys peninsularis pedionomus Huey


Type Locality.—Two miles north of Chapala Dry Lake, lat. 29°30’ N., long. 114°35’ W., on Llano de Santa Ana, Baja California, México. Range.—Inland llanos from southeast of San Fernando Mission south to valley region below Punta Prieta and eastward to Valle de Agua Amargá and San Borjas Mission.

Dipodomys peninsularis eremocus Huey


Type Locality.—Seven miles west of San Francisquito Bay, lat. 28°30’ N., Gulf of California, Baja California, México. Range.—Wide llano-like region bordering Santa Teresa and San Francisquito bays on Gulf side of Baja California.

Dipodomys peninsularis australis Huey*


Type Locality.—Santo Domingo, Magdalena Plain, Baja California, México. Range.—Magdalena Plain from San Jorge in northernmost section, south to Matancita, a ranch inland from mouth of Magdalena Bay at about lat. 24°40’ N.

Dipodomys venustus venustus (Merriam)†*


Type Locality.—Santa Cruz, Santa Cruz County, Calif. Range.—Chiefly Santa Cruz Mountains; in other words, area lying between San Francisco and Monterey Bay; but also east to Mount Hamilton, Santa Clara County, and southeast to Fremont Peak, in northern end of Gabilan Range, Monterey County; vertical range, near sea level up to 4,000 feet; zonal range, chiefly Upper Sonoran, into Transition locally (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 164, Sept. 26, 1933).
Dipodomys venustus sanctiluciae Grinnell*


**Type Locality.**—One mile southwest of Jolon, Monterey County, Calif. **Range.**—Santa Lucía Mountain region, Calif.; in other words, mountainous area lying between Monterey Bay and San Luis Obispo, and between Salinas Valley and seacoast; vertical range, 900 to 5,900 feet; zonal range, chiefly Upper Sonoran and into Transition locally (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 164, Sept. 26, 1933).

Dipodomys elephantinus (Grinnell)*


_Dicrops—group^2_

Dipodomys microps microps (Merriam)^†_


**Type Locality.**—Lone Pine, Owens Valley, Inyo County, Calif. **Range.**—Owens Valley, from near Benton, Mono County, south to Olancha, Inyo County; also vicinity of Victorville, on Mohave Desert, San Bernardino County; vertical range, 2,700 to 7,700 feet; zonal range, Lower Sonoran; into Upper Sonoran locally (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 164, Sept. 26, 1933). Recorded at 10,400 feet on Big Prospector Meadow, White Mountains, Mono County (Bole, Journ. Mamm., vol. 19, No. 2, p. 246, May 12, 1938).

Dipodomys microps levipes (Merriam)^†_


**Type Locality.**—Perognathus Flat, Emigrant Gap (near Bench Mark 4899, 2 miles northwest of Harrisburg, according to Grinnell, Univ. California Publ.

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Dipodomys microps aquilonius Willett


Type Locality.—Three miles east of Eagleville, Modoc County, Calif. Range.—Washoe County, Nev., and extreme eastern California from Surprise Valley south to near the south end of Pyramid Lake, Nev. (Hall and Dale, Occ. Pap. Mus. Zool. Louisiana State Univ. No. 4, p. 55, Nov. 10, 1939).

Dipodomys microps occidentalis Hall and Dale*


Type Locality.—Three miles south of Schurz, Mineral County, Nev. Altitude, 4,100 feet. Range.—Western and southern Nevada, and eastern California in Mono and Inyo Counties; south from southern Humboldt County, Nev., to Death Valley, Calif., and Las Vegas, Nev.; east from Black Rock Desert, Sierra Nevada, White Mountains, and Death Valley, to Smiths Creek Valley, Lander County, and Mud Lake, Nye County, thence east (south of Pahute Mesa) to a point 21 miles west of Panaca, in Desert Valley.

Dipodomys microps centralis Hall and Dale*


Type Locality.—Four miles southeast of Romano, Diamond Valley, Eureka County, Nev. Range.—Central Nevada from Humboldt River Valley south to Pahute Mesa; east from northeastern Pershing County, Reese River Valley, Great Smoky, and Ralston Valleys to Steptoe and Spring Valleys.

Dipodomys microps preblei (Goldman) †*


Type Locality.—Narrows, Malheur Lake, Harney County, Oreg. Range.—Southeastern Oregon and northern Humboldt County, Nev.; south from Narrows, Oreg., to 17 miles south of Quinn River Crossing, Nev.; east from Summer Lake, Oreg., to Owyhee River, Oreg. (Hall and Dale, loc. cit.).

Dipodomys microps idahoensis Hall and Dale


Type Locality.—Five miles southeast of Murphy, Owyhee County, Idaho. Range.—Known only from northern Owyhee County.

Dipodomys microps bonnevillei Goldman†*

Type Locality.—Kelton, Box Elder County, Utah. Altitude, about 4,300 feet. Range.—Western Utah from Idaho—Utah line, south to northern Iron County; from western border of Utah east as far as western edge of Sevier County (Durrant and Setzer, Bull. Univ. Utah, vol. 35, No. 26, p. 12, June 30, 1945); and eastern Nevada south from near Contact in Elko County to northern Lincoln County (Hall, Mammals of Nevada, p. 423, July 1, 1946).

**Dipodomys microps russeolus** Goldman†*


Type Locality.—Dolphin Island, Great Salt Lake, Box Elder County, Utah. Altitude, 4,250 feet. Range.—Known from Dolphin Island only.

**Dipodomys microps subtenuis** Goldman†*


Type Locality.—Carrington Island, Great Salt Lake, Tooele County, Utah. Altitude, 4,250 feet. Range.—Badger, Carrington, and Stansbury Islands, Great Salt Lake, and probably south through Rush Valley to Cedar Valley west of Utah Lake, Utah County, Utah (Durrant and Setzer, Bull. Univ. Utah, vol. 35, No. 26, p. 15, June 30, 1945).

**Dipodomys microps alfredi** Goldman†*


Type Locality.—Gunnison Island, Great Salt Lake, Box Elder County, Utah. Altitude, 4,300 feet. Range.—Gunnison Island.

**Dipodomys microps woodburyi** Hardy


Type Locality.—In the Clistoyucca area on Beaver Dam Slope, west of Beaver Dam Mountains, Washington County, Utah. Altitude, 3,300 feet. Range.—Known only from west slope of Beaver Dam Mountains in southwestern Washington County, Utah (Durrant and Setzer, Bull. Univ. Utah, vol. 35, No. 26, p. 16, June 30, 1945).

**Dipodomys microps celsus** Goldman†*


Type Locality.—Six miles north of Wolf Hole (about 30 miles south of St. George, Utah), Mohave County, Ariz. Altitude, 3,500 feet. Range.—Southwestern Utah along Virgin River and northwestern Arizona north of Colorado River; east to Kanab Creek (Hall and Dale, Occ. Pap. Mus. Zool. Louisiana State Univ. No. 4, p. 60, Nov. 10, 1939).

**Dipodomys microps leucotis** Goldman†*


Type Locality.—Six miles west of Colorado River Bridge, House Rock Valley, north side of Marble Canyon of Colorado River, Coconino County, Ariz. Alti-

**Dipodomys deserti deserti** Stephens†*


*Type Locality.*—Mohave River [bottom at upper crossing on old road from Cajon Pass to Rabbit Springs, 3 or 4 miles from, and opposite, Hesperia], San Bernardino County, Calif. *Range.—*Colorado Desert district of northeastern Baja California from vicinity of Pilot Knob westward along international boundary to base of Coast Range Mountains, thence southward along eastward edge of Pattie Basin, skirting desert base of Sierra San Pedro Mártir at least to latitude of San Felipe (Huey, Trans. San Diego Soc. Nat. Hist., vol. 11, No. 10, p. 253, Apr. 30, 1951); Colorado and Mohave Desert regions, Calif., north from Mexican border to Death Valley and Owens Valley (on east side to Alvord, Inyo County); west from Colorado River across Mohave Desert at least to vicinity of Hesperia, San Bernardino County, and across Colorado Desert to Whitewater, Riverside County, and Borego Spring, eastern San Diego County; vertical range, 200 to 3,900 feet; zonal range, Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 165, Sept. 26, 1933); extreme northwest arm of Sonora (at El Doctor), México (Burt, Univ. Michigan Mus. Zool. Misc. Publ. 39, p. 49, Feb. 15, 1933); western Arizona (Grinnell, Univ. California Publ. Zool., vol. 12, No. 4, p. 240, Mar. 20, 1914); Lower Sonoran Zone of southern Nevada and low western part of State in salt-desert area north to southern Humboldt County (Hall, Mammals of Nevada, p. 428, July 1, 1946); and Beaver Dam Wash, in extreme southwestern Washington County, Utah (Durrant and Setzer, Bull. Univ. Utah, vol. 35, No. 26, p. 9, June 30, 1945).

**Dipodomys deserti sonoriensis** Goldman†*


*Genus MICRODIPODOPS*³ Merriam (pigmy kangaroo-rats)


**Microdipodops megacephalus megacephalus** Merriam†*


**Microdipodops megacephalus oregonus** Merriam†*


**Microdipodops megacephalus californicus** Merriam†*


*Type Locality.*—Sierra Valley, near Vinton, Plumas County, Calif.  *Range.*—Intermontane valleys of eastern Plumas County (Hall, loc. cit.); and western Nevada from Pyramid in Washoe County southward at least to 3½ miles east of Carson City in Carson River Valley (Hall, Mammals of Nevada, p. 388, July 1, 1946).

**Microdipodops megacephalus nasutus** Hall


*Type Locality.*—Fletcher, Mineral County, Nev.  *Altitude.* 6,098 feet.  *Range.*—Known from type locality only.

**Microdipodops megacephalus polionotus** Grinnell*


*Type Locality.*—McKeever’s Ranch, 2 miles south of Benton Station, Mono County, Calif.  *Altitude.* 5,200 feet.  *Range.*—Mono Lake Basin and extreme head of Owens Valley, in Mono County; southeast from south side of Mono Lake to vicinity of Benton and Benton Station; west to Taylor Valley; vertical range, 5,200 to 7,000 feet; zonal range, Upper Sonoran and dilute Transition (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 166, Sept. 26, 1933).
Microdipodops megacephalus ambiguus Hall*

Type Locality.—One and one-fourth miles north of Sulphur, Humboldt County, Nev. Altitude, 4,050 feet. Range.—Smoke Creek and Black Rock Deserts and lower part of Humboldt River Valley in Nevada and in extreme eastern California; from Quinn River Crossing southwest to Flanigan, south to Humboldt, and east to Golconda.

Microdipodops megacephalus medius Hall

Type Locality.—Three miles south of Vernon, Pershing County, Nev. Altitude, 4,250 feet. Range.—Southwestern Pershing County.

Microdipodops megacephalus nexus Hall

Type Locality.—Three miles south of Izenhood, Lander County, Nev. Range.—From 5½ miles northeast of Golconda, Humboldt County, east to Izenhood, Lander County, Nev.

Microdipodops megacephalus sabulonis Hall

Type Locality.—Five miles southeast of Kawich Post Office, Kawich Valley, Nye County, Nev. Altitude, 5,400 feet. Range.—South-central Nevada from eastern Esmeralda County eastward across Nye County to western Lincoln County.

Microdipodops megacephalus albiventer Hall and Durrant

Type Locality.—Desert Valley, 21 miles west of Panaca, Lincoln County, Nev. Altitude, 5,300 feet. Range.—Desert Valley in central Lincoln County (Hall, loc. cit.).

Microdipodops megacephalus paululus Hall and Durrant*

Type Locality.—Pine Valley, ½ mile east of headquarters building of Desert Range Experiment Station of U. S. Forest Service, T. 25 S., R. 17 W., sec. 33, Salt Lake Bench Mark, Millard County, Utah. Range.—Western Utah in Pine, White, and Snake Valleys (Hall, loc. cit.).

Microdipodops megacephalus leucotis Hall and Durrant
**Type Locality.**—Eighteen miles southwest of Orr's Ranch, Tooele County, Utah. Altitude, 4,400 feet. **Range.**—Known from type locality only.

**Microdipodops pallidus pallidus** Merriam†*


**Type Locality.**—Mountain Well, Churchill County, Nev. (see Hall, Field Mus. Nat. Hist. Publ. 511, Zool. Ser., vol. 27, p. 269, Dec. 8, 1941). **Range.**—Low western part of Nevada from southern Pershing County southward through Fish Lake Valley to Oasis, Mono County, Calif., and in Deep Spring Valley, Inyo County, Calif. (Hall, loc. cit.).

**Microdipodops pallidus ammophilus** Hall


**Type Locality.**—Railroad Valley, Able Spring. 12½ miles south of Lock's Ranch, Nye County, Nev. Altitude, 5,000 feet. **Range.**—Railroad Valley, eastern Nye County.

**Microdipodops pallidus purus** Hall


**Type Locality.**—Fourteen and one-half miles south of Groom Baldy, Lincoln County, Nev. **Range.**—Emigrant and Desert Valleys in eastern Lincoln County.

**Microdipodops pallidus ruficollaris** Hall


**Type Locality.**—Five miles southeast of Kawich Post Office, Kawich Valley, Nye County, Nev. Altitude, 5,400 feet. **Range.**—Fine sands of valleys from western Nye County eastward to western Lincoln County, Nev.

**Subfamily HETEROMYINAE**

**Genus HETEROMYS**† Desmarest (spiny pocket mice)


**Subgenus HETEROMYS** Desmarest

desmarestianus—group

**Heteromys desmarestianus desmarestianus** Gray*†


Type Locality.—Mountains near Tonalá, Chiapas, México. Range.—Mountains of western Chiapas and along Isthmus of Tehuantepec in eastern Oaxaca. Zonal range, Humid Tropical.


Type Locality.—Los Esesmiles, Chalatenango, El Salvador. Altitude, 8,000 feet. Range.—Rain forest at summit of mountains at type locality.


Type Locality.—San Gerónimo de Pirris, San José, western Costa Rica. Range.—Western Costa Rica; limits of range undetermined.

Type Locality.—Angostura, southern side of Río Reventazón, opposite Turrialba, Cartago, Costa Rica. Altitude, about 1,980 feet. Range.—Río Reventazón and Río Pacuare valleys, eastern Costa Rica; limits of range unknown.

Heteromys desmarestianus chiriquensis Enders


Heteromys desmarestianus repens Bangs*


Type Locality.—Boquete, southern slope of Volcán de Chiriquí, Chiriquí, Panamá. Altitude, 4,000 feet. Range.—Panamá and probably also in Costa Rica.

Heteromys desmarestianus zonalis Goldman†*


Type Locality.—Río Indio, near Gatún, Canal Zone, Panamá. Range.—Rocky slopes of heavily forested hills near Atlantic coast of Panamá.

Heteromys desmarestianus panamensis Goldman†*


Type Locality.—Cerro Azul, near headwaters of Río Chagres, Panamá. Altitude, 2,800 feet. Range.—Dense forest from 2,000 to 3,000 feet altitude near headwaters of Río Chagres and on Cerro Brujo, near Atlantic coast of Panamá.

Heteromys desmarestianus crassirostris Goldman†*


Type Locality.—Near head of Río Limón, Mount Pirri, Darién, eastern Panamá. Altitude, 5,000 feet. Range.—Densely forested upper slopes of mountains (4,500 to 5,000 feet) in vicinity of type locality.

Heteromys australis pacificus Pearson

Type Locality.—Amagal, south of Guayabo Bay, Darién, eastern Panamá. Altitude, 1,000 feet.

**Heteromys australis conscius** Goldman†*


*Type Locality.*—Cana (Santa Cruz de Cana), upper Río Tuyra, Darién, eastern Panamá. Altitude, 2,000 feet. *Range.*—Known from type locality only.

**Heteromys temporalis** Goldman†*


**Heteromys lepturus** Merriam†*


*Type Locality.*—Mountains near Santo Domingo (a few miles west of Guichicovi), Oaxaca, México. *Range.*—Humid, heavily forested mountain slopes and coastal plains in northeastern Oaxaca and southeastern Veracruz. Zonal range, Humid Tropical.

**Heteromys goldmani** Merriam†*


**Heteromys longicaudatus** Gray*


*Type Locality.*—“México.” *Range.*—Low coastal plains of Tabasco, México, and probably adjacent portions of Chiapas, southwestern Campeche, and northwestern Guatemala. Zonal range, Humid Tropical.

**Heteromys gaumeri** J. A. Allen and Chapman*


Subgenus *XYLOMYS* Merriam


**Heteromys nelsoni** Merriam† *


*Type Locality.*—Pinabete, Chiapas, México. Altitude, 8,200 feet. *Range.*—Humid, heavily forested Pacific slopes of Sierra Madre in southern Chiapas, México, and doubtless adjacent portions of Guatemala.

**Heteromys oresterus** Harris


*Type Locality.*—El Copey de Dota, Cordillera de Talamanca, Cartago, Costa Rica. Altitude, 6,000 feet. *Range.*—Known only from vicinity of type locality.

**Genus LIOMYS** Merriam


**pictus**—group

**Liomys pictus pictus** (Thomas) *


**Liomys pictus escuinapae** (J. A. Allen) *


*Type Locality.*—Escuinapa, Sinaloa, México. *Range.*—Coastal plains and Pacific slopes of Sierra Madre from southern Sinaloa southward, passing into typical *pictus* in southern Nayarit and northwestern Jalisco. Zonal range, Arid Tropical and Lower Sonoran.

**Liomys pictus sonoranus** Merriam† *


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Type Locality.—Alamos, Sonora, México. Range.—Arid coastal plains and basal slopes of Sierra Madre from southern Sonora to southern Sinaloa; mainly overlapping portions of Lower Sonoran and Arid Tropical Zones. In southern Sonora, north at least as far as Ures (Burt, Univ. Michigan Mus. Zool. Misc. Publ. 39, p. 43, Feb. 15, 1938).

**Liomys pictus plantinarensis** Merriam†*


**Liomys pictus parviceps** Goldman†*


**Liomys pictus rostratus** Merriam†*


**Liomys pictus phaeurus** Merriam†*


**Liomys pictus isthmius** Merriam†*


*Type Locality.*—Tehuantepec, Oaxaca, México. *Range.*—Arid coastal plains and interior valleys on southern side of Isthmus of Tehuantepec in southeastern Oaxaca and western Chiapas and thence eastward through valley of Río Chiapas to Nentón, Guatemala. Zonal range, Arid Tropical.

**Liomys pictus veraebrucis** Merriam†*


**Type Locality.**—San Andrés Tuxtla, Veracruz, México. **Range.**—Humid northern slopes of Isthmus of Tehuantepec and coastal plains in southern Veracruz. Zonal range, Humid Tropical.

**Liomys pictus obscurus** Merriam†∗


**Liomys annectens** (Merriam) †∗


**Type Locality.**—Pluma, Oaxaca, México. **Range.**—Pacific slopes of Sierra Madre in Oaxaca and Guerrero. Zonal range, Humid Tropical.

*crispus*—group

**Liomys crispus crispus** Merriam†∗


**Type Locality.**—Tonala, Chiapas, México. **Range.**—Coastal plains and lower foothills of Sierra Madre in western Chiapas. Zonal range, Arid Tropical.

**Liomys crispus setosus** Merriam†∗


**Liomys heterothrix** Merriam†∗


**Liomys adspersus** (Peters) *


*Liomyys salvini salvini* (Thomas) *


*Liomyys salvini nigrescens* (Thomas) *


*Liomyys salvini aterrimus* Goodwin


*Liomyys salvini vulcani* (J. A. Allen)


*Liomyys anthonyi* Goodwin


*Type Locality.*—Sacapulas, El Quiché, central Guatemala. Altitude, 4,500 feet. *Range.*—Known from type locality only.
**Lioimys irratoratus irratoratus** (Gray)*


**Lioimys irratoratus torridus** Merriam†*


**Lioimys irratoratus minor** Merriam†*


**Lioimys irratoratus pullus** Hooper*


*Type Locality.*—Tlapan, Distrito Federal, México. Altitude, 2,250 meters. *Range.*—Known only from localities near México, Distrito Federal, 7,500 to 8,500 meters.

**Liomys irroratus acutus** Hall and Villa*


**Liomys irroratus jaliscensis** (J. A. Allen) *


**Liomys irroratus alleni** (Coues) *


**Liomys irroratus pretiosus** Goldman†


**Liomys irroratus texensis** Merriam†


**Liomys irroratus canus** Merriam†*


**Liomys bulleri** (Thomas) *


**Type Locality.**—Laguna, Sierra de Juanacatlán, Jalisco, México. **Range.**—Known only from type locality. Zonal range, Upper Sonoran.

**Liomys guerrerensis** Goldman†*


**Superfamily CASTOROIDEA**

**Family CASTORIDAE** (beavers)

**Genus CASTOR** Linnaeus

1758. Castor Linnaeus, Systema naturae, ed. 10, vol. 1, p. 58. (Type, Castor fiber Linnaeus.)

**Castor canadensis canadensis** Kuhl*

1820. Castor canadensis Kuhl, Beiträge zur Zoologie und vergleichenden Anatomie, Abth. 1, p. 64.

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**Castor canadensis caecator** Bangs*


**Type Locality.**—Near Bay St. George, Newfoundland. **Range.**—Restricted to Island of Newfoundland.

**Castor canadensis michiganensis** V. Bailey‡*


**Type Locality.**—Tahquamenaw River (5 miles above falls), Luce County, Mich. **Range.**—In Canada, southern part of Algoma District (Pancake Bay), Ontario, east of Lake Superior (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 132, Jan. 24, 1947); Upper and Lower Peninsulas of Michigan (Burt, Mammals of Michigan, p. 199, 1946); northeastern Minnesota (Cahn, Journ. Mamm., vol. 2, No. 2, p. 72, May 2, 1921); and Wisconsin.

**Castor canadensis labradorensis** V. Bailey and Doutt*


**Type Locality.**—Five miles above Grand Falls, Hamilton River, Labrador. **Range.**—Eastern Labrador, in valleys of Hamilton and Paradise Rivers, which drain eastward into Atlantic Ocean.

**Castor canadensis acadicus** V. Bailey and Doutt‡*


**Type Locality.**—Nepisiquit River, New Brunswick, Canada. **Range.**—New Brunswick, Nova Scotia, southern and central Quebec, north at least to Lake Mistassini (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 132, Jan. 24,
1947); south to Adirondacks in New York and Charleston in southwestern New Hampshire; formerly probably in Maine and Vermont and possibly over greater part of New York and Pennslyvania (V. Bailey and Doult, *loc. cit.*); and formerly probably all of New England south to Long Island Sound.

**Castor canadensis carolinensis** Rhoads*


**Castor canadensis texensis** V. Bailey†*


**Castor canadensis missouriensis** V. Bailey†*


**Castor canadensis concisor** Warren and Hall*


*Type locality.*—Monument Creek, southwest of Monument, El Paso County, Colo. *Range.*—Elevated, mountainous part of Colorado, from Gunnison River (Colorado drainage) in Mesa County, east to headwaters of Arkansas River (Mississippi drainage) in El Paso County, and north to North Platte River (Mississippi drainage) in Jackson County; known definitely from Jackson, Boulder,

**Castor canadensis duchesnei** Durrant and Crane*


*Type Locality.*—Duchesne River, 10 miles northwest of Duchesne, Duchesne County, Utah. Altitude, 5,600 feet. *Range.*—Drainage of Duchesne and White Rivers in Utah and Colorado.

**Castor canadensis pallidus** Durrant and Crane


*Type Locality.*—Lynn Canyon, Box Elder County, Utah. Altitude, 7,500 feet. *Range.*—Known from Raft River Mountains only.

**Castor canadensis rostralis** Durrant and Crane


*Type Locality.*—Red Butte Canyon, Fort Douglas, Salt Lake County, Utah. Altitude, 5,000 feet. *Range.*—Known from western streams of Wasatch Mountains; probably occurs in all streams draining westward into basin of Pleistocene Lake Bonneville.

**Castor canadensis mexicanus** V. Bailey†*


*Type Locality.*—Ruidoso Creek, 6 miles below Ruidoso, Lincoln County, N. Mex. *Range.*—Pecos River and Rio Grande and some tributary streams in New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 213, Mar. 1, 1932); formerly on both sides of Rio Grande to Brownsville, Tex., and to below Matamoros, northeastern Tamaulipas, México; also Pecos and Devils Rivers in southwestern Texas (V. Bailey, North Amer. Fauna No. 25, p. 124, Oct. 24, 1905); recently recorded along Rio Grande from mouth of Santa Helena Canyon to mouth of Boquillas Canyon, Tex. (Borell and Bryant, Univ. California Publ. Zool., vol. 48, No. 1, p. 28, Aug. 7, 1942).

**Castor canadensis frondator** Mearns†*


**Castor canadensis repentinus** Goldman†*


**Castor canadensis subauratus** Taylor*°


*Type Locality.*—Grayson, San Joaquin River, Stanislaus County, Calif. *Range.*—Lower courses of San Joaquin and Sacramento Rivers, and lower portions of larger tributaries of these main rivers, from Tulare Lake (formerly), Kings County, and from Kings River, near Sanger (formerly) and at Mendota, in Fresno County, north to Sacramento River and Butte Creek, north of Marysville Buttes, and at one time to McCloud and upper Sacramento Rivers, in Shasta County; vertical range, below 1,000 feet; zonal range, Lower and Upper Sonoran (Grinnell, *loc. cit.*).

**Castor canadensis shastensis** Taylor†*


*Type Locality.*—Cassel, on Hat Creek, near Pit River, Shasta County, Calif. *Range.*—Pit River basin in northeastern California: recorded from Pit River, above Narrows, north to Willow Creek and Steele Meadow, near Clear Lake, and east to Lassen Creek, east of Goose Lake, and to North Fork of Pit River above Alturas; vertical range, 3,000 feet (on Pit River, Shasta County) up to between 6,000 and 7,000 feet (on Lassen Creek, west slope of Warner Mountains); zonal range, chiefly Upper Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 166, Sept. 26, 1933); in Oregon, from Thomas Creek, a small branch of Cottonwood Creek, which flows into northwestern corner of Goose Lake, and probably Klamath section, Lost River, Sprague River, and Yamsay Mountains (V. Bailey, North Amer. Fauna No. 55 (June), pp. 222–223, Aug. 29, 1936).
Castor canadensis baileyi Nelson†*


Type Locality.—Humboldt River, 4 miles above Winnemucca, Humboldt County, Nev. Range.—Humboldt River drainage in Nevada (Hall, Mammals of Nevada, p. 488, July 1, 1946); in southeastern Oregon, from headwaters of Blitzen River north to Malheur Lake, and northward in Silvies River and Steens Mountains drainage (V. Bailey, North Amer. Fauna No. 55 (June), p. 224, Aug. 29, 1936).

Castor canadensis taylori Davis*  


Type Locality.—Big Wood River, near Bellevue, Blaine County, Idaho. Range.—Snake River drainage basin in southern Idaho (Davis, loc. cit.), northern Nevada in streams tributary to Snake River drainage (Hall, Mammals of Nevada, p. 488, July 1, 1946), and possibly in western Utah (Long., Journ. Mamm., vol. 21, No. 2, p. 177, May 16, 1940).

Castor canadensis pacificus Rhoads*  


Castor canadensis idoneus Jewett and Hall*  


Type Locality.—Foley Creek, tributary to Nehalem River, Tillamook County, Oreg. Range.—Probably humid coastal area in Oregon west of Willamette drainage, but definitely known only from type locality and from Blaine, Tillamook County; in Washington, lowlands near mouth of Columbia River and also Puget Island (Dalquest, Univ. Kansas Publ. Mus. Nat. Hist., vol. 2, p. 322, Apr. 9, 1948).

Castor canadensis leucodontus Gray*  


Type Locality.—Vancouver Island, British Columbia, Canada. Range.—Vancouver Island.

**Castor canadensis sagittatus** Benson*  

*Type Locality.*—Indianpoint Creek, 16 miles northeast of Barkerville, British Columbia, Canada. Altitude, 3,200 feet. *Range.*—Interior of British Columbia from southern border (Newgate on Kootenay River near northwestern Montana boundary, and Meadow Creek near Yahk northeast of Montana–Idaho corner) north to Cariboo Range (Indianpoint Lake, Isaacs Lake, and other points in Barkerville region, South Murphy Lake), Finlay River (Fort Grahame, Wistaria near Burns Lake, Sinhut Lake near Vanderhoof), north to Liard River (Lower Liard Crossing) and probably parts of southeastern Yukon; intergrades with *belugae* in northwestern parts of its range and probably with *pacificus* farther south (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 133, Jan. 24, 1947); probably also in Kootenay National Forest in extreme northwestern Montana; and probably northern Idaho south to Clearwater hydrographic basin (Davis, The Recent mammals of Idaho, p. 274, Apr. 5, 1939).

**Castor canadensis belugae** Taylor*  


**Castor canadensis phaeus** Heller*  


*Suborder MYOMORPHA*

*Superfamily MUROIDEA*

*Family CRICETIDAE*

*Subfamily CRICETINAE*

**Genus ORYZOMYS**1 Baird (rice rats)  

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1 Revised by Goldman, North Amer. Fauna No. 43, Sept. 23, 1918.
Subgenus ORYZOMYS Baird

Oryzomys palustris palustris (Harlan)*


Type Locality.—“Fast Land,” near Salem, Salem County, N. J. Range.—Atlantic coastal areas from southern New Jersey south to northeastern Florida, thence westward through southern Georgia to Gulf coast of Alabama and Mississippi, and north through Alabama and western Tennessee to southwestern Kentucky, southern Illinois, and parts of southeastern Missouri. Vertical range from sea level up along streams to about 500 feet (rarely to 1,000 feet); zonal range mainly Lower Austral, but reaching into Upper Austral in southern New Jersey, southeastern Kentucky, and southeastern Missouri (Marble Hill). (See also McLaughlin and Robertson, Nat. Hist. Misc. Chicago Acad. Sci. No. 80, pp. 1–2, Mar. 30, 1951.)

Oryzomys palustris natator Chapman* 


Type Locality.—Gainesville, Alachua County, Fla. Range.—Central Florida, north of Everglades. Zonal range, Austroriparian.

Oryzomys palustris coloratus Bangs* 


Type Locality.—Cape Sable, Monroe County, Fla. Range.—Tropical southern Florida, north to Lake Okeechobee.

Oryzomys palustris texensis J. A. Allen* 


Type Locality.—Rockport, Aransas County, Tex. Range.—From Corpus Christi Bay north and east along Gulf coast of Texas and Louisiana to delta of Mississippi thence north in Mississippi Valley to southeastern Missouri; general range reaching southeastern Kansas, probably by way of Arkansas River Valley through Oklahoma (McCurtain County, Okla.; Whitaker, Journ. Mamm., vol. 18, No. 1, p. 102, Feb. 11, 1937). Vertical range in Austroriparian Zone, mainly below 500 feet but extending up to about 1,000 feet in Kansas.

Oryzomys couesi couesi (Alston)* 


**Type Locality.**—Cobán, Alta Verapaz, Guatemala (see Thomas, Ann. Mag. Nat. Hist., ser. 6, vol. 11, p. 403, May 1893). **Range.**—From northern Veracruz southeastward through eastern Puebla, eastern Oaxaca, northern and extreme southern Chiapas, Tabasco, Campeche, Yucatán, and Quintana Roo, in México, Guatemala, Honduras, and Nicaragua, to northwestern Costa Rica. Vertical range from sea level to about 5,000 feet, mainly in humid Lower Tropical Zone.

**Oryzomys couesi zygomaticus** Merriam†*


**Type Locality.**—Nentón, Huehuetenango, Guatemala. **Range.**—Known only from Río Chiapas Valley in southwestern Guatemala and south-central Chiapas, México. Zonal range, Arid Lower Tropical.

**Oryzomys couesi pinicola** Murie


**Type Locality.**—A pine ridge, 12 miles south of El Cayo, British Honduras. Altitude about 1,500 feet. **Range.**—Known from type locality only.

**Oryzomys couesi richmondi** Merriam†*


**Type Locality.**—Escondido River (50 miles above Bluefields), Zelaya, Nicaragua. **Range.**—Lower river valleys of eastern Nicaragua. Zonal range, Humid Lower Tropical.

**Oryzomys couesi regillus** Goldman†*

Type Locality.—Los Reyes, Michoacán, México. Range.—Plateau region of northwestern Michoacán. Vertical range from about 3,000 to 4,000 feet, mainly in Arid Lower Tropical Zone.

**Oryzomys couesi albiventer** Merriam†*


Type Locality.—Ameca, Jalisco, México. Altitude, 4,000 feet. Range.—River valleys of plateau region in central Jalisco. Vertical range from about 4,000 to 5,000 feet, mainly in Lower Sonoran Zone.

**Oryzomys couesi mexicanus** J. A. Allen*


Type Locality.—Hacienda San Marcos, Tonila, Jalisco, México. Altitude, 3,500 feet. Range.—Pacific coastal plains and basal mountain slopes from southern Sinaloa to southeastern Oaxaca. Vertical range from sea level to about 1,000 feet (rarely to 3,500 feet), mainly in Arid Lower Tropical Zone.

**Oryzomys couesi azteca** Merriam†*


Type Locality.—Yautepec, Morelos, México. Range.—Interior river valleys of Morelos, southern Puebla, northern Oaxaca, and northeastern Guerrero. Vertical range from about 3,000 to at least 4,000 feet in Arid Lower Tropical Zone.

**Oryzomys couesi crinitus** Merriam†*


**Oryzomys couesi lambi** Burt


**Oryzomys couesi peragrus** Merriam†*


Type Locality.—Río Verde, San Luis Potosí, México.  Range.—Known only from type locality, at about 3,000 feet altitude on Río Verde, in southern San Luis Potosí.  Zonal range, Lower Sonoran.

**Oryzomys couesi aquaticus** J. A. Allen*


**Oryzomys peninsulae** Thomas*


Type Locality.—Santa Anita, Baja California, México.  Range.—Known only from very limited marshy areas near sea level in extreme southern Baja California.  Zonal range, Arid Lower Tropical.

**Oryzomys fulgens** Thomas


Type Locality.—“México.”  Probably in or near Valley of México.  Range.—Range unknown.

**Oryzomys nelsoni** Merriam†*


Type Locality.—María Madre Island, Tres Marias Islands, Nayarit, México.  Range.—Known only from María Madre Island, where it inhabits moist places on upper slopes at about 800 feet altitude.  Zonal range, Arid Lower Tropical.

**Oryzomys cozumelae** Merriam†*


Type Locality.—Cozumel Island, Quintana Roo, México.  Range.—Known from type locality only.
Oryzomys aphpastus Harris


_Type Locality._—Joaquin de Dota [= San Joaquín de Dota], San José, Costa Rica. Altitude, about 4,000 feet. _Range._—Known only from type locality in Pacific rain forest of Costa Rica, southeast of Santa María de Dota.

Oryzomys azuerensis Bole


_Type Locality._—Paracote, 1½ miles south of mouth of Río Anguño, Mariato-Suay Lands, Veraguas, Panamá. Altitude, sea level.

Oryzomys gatunensis Goldman†


_Type Locality._—Gatún, Canal Zone, Panamá. _Range._—Known only from type locality, near sea level. _Zonal range,_ Humid Lower Tropical.

Oryzomys antillarum Thomas*


_Type Locality._—Jamaica. _Range._—Known from Jamaica only.

melanotis—group

Oryzomys melanotis melanotis Thomas*


_Type Locality._—Mineral San Sebastián, Jalisco, México. _Range._—Coastal plains and basal mountain slopes in southern Sinaloa, Nayarit, and Jalisco; vertical range from sea level to about 3,000 feet. _Zonal range,_ Arid Lower Tropical.

Oryzomys melanotis colimensis Goldman†


_Type Locality._—Armería, Colima, México. _Range._—Forested coastal plains and basal mountain slopes in State of Colima. Vertical range from sea level to 1,500 feet; zonal range, Arid Lower Tropical.

Oryzomys rostratus rostratus Merriam†


_Type Locality._—Metlatoyuca, Puebla, México. _Range._—Forested coastal plains and basal mountain slopes in southeastern Tamaulipas, northern Puebla, Veracruz, and northeastern Oaxaca. Vertical range from sea level to about 1,500 feet; zonal range, Arid and Humid Lower Tropical.

Oryzomys rostratus carrorum Lawrence

RODENTIA: CRICETIDAE

Type Locality.—Rancho Santa Ana, about 8 miles southwest of Padilla, Río Soto la Marina, Tamaulipas, México. Range.—Known from type locality only.

Oryzomys rostratus megodon Merriam†*


Type Locality.—Teapa, Tabasco, México. Range.—Heavily forested coastal plains and lower mountain slopes in Tabasco and Campeche. Vertical range from sea level to at least 500 feet; zonal range, Humid Lower Tropical.

Oryzomys rostratus yucatanensis Merriam†*


Type Locality.—Chichén-Itzá, Yucatán, México. Range.—Forested lowlands of Yucatán and Quintana Roo. Zonal range, Arid Lower Tropical.

Oryzomys alfaroï (J. A. Allen) *


Type Locality.—San Carlos, Alajuela, Costa Rica. Range.—Heavily forested mountainous portions of Honduras, Nicaragua, Costa Rica, and western Panamá. Vertical range from about 1,000 to 4,000 feet; zonal range, mainly Humid Lower Tropical.

Oryzomys alfaroï dariensis Goldman†*


Type Locality.—Cana (Santa Cruz de Cana), upper Río Tuyra, Darién, eastern Panamá. Altitude, 2,000 feet. Range.—Heavily forested mountain slopes in eastern Panamá at 2,000 feet altitude, and probably adjacent portions of Colombia. Zonal range, Humid Lower Tropical.

Oryzomys alfaroï angusticeps Merriam†*


Type Locality.—Volcán Santa Maria, Quezaltenango, Guatemala. Altitude, 9,000 feet. Range.—Heavily forested slopes of high mountains in southwestern Guatemala and central southern Chiapas. Vertical range from about 8,000 to 9,000 feet.
Oryzomys alfaroii rhabdops Merriam†*
Type Locality.—Calex, Quezaltenango, Guatemala. Altitude, 10,000 feet.
Range.—Known only from type locality, at about 10,000 feet altitude on upper slope of high mountains in southwestern Guatemala.

Oryzomys alfaroii caudatus Merriam†*
Type Locality.—Comaltepec, Oaxaca, México. Range.—Mountains of northeastern Oaxaca. Vertical range from 3,500 to 6,500 feet; zonal range, Humid Upper Tropical.

Oryzomys alfaroii palatinus Merriam†*
Type Locality.—Teapa, Tabasco, México. Range.—Forested mountain slopes in southern Tabasco and northwestern Chiapas. Known vertical range from about 3,000 to 3,500 feet; zonal range, Humid Upper Tropical.

Oryzomys alfaroii hylocetes Merriam†*
Type Locality.—Chicharras, Chiapas, México. Range.—Heavily forested Pacific slope, at 3,500 feet, of mountains along continental divide in extreme southern Chiapas, and doubtless adjacent portions of Guatemala. Zonal range, Humid Upper Tropical.

Oryzomys alfaroii saturatior Merriam†*
Type Locality.—Tumbalá, Chiapas, México. Range.—Forested northern slope of mountains of northern Chiapas, at 5,000 feet altitude; limits of range unknown. Zonal range, Humid Upper Tropical.

Oryzomys alfaroii chapmani Thomas*
Type Locality.—Jalapa, Veracruz, México. Range.—Forested eastern slopes of Méxican Plateau in central Veracruz. Known vertical range from 4,400 to 6,000 feet; zonal range, Humid Upper Tropical.

**Oryzomys alfaroii dilutior** Merriam†*


**Type Locality.**—Huauchinango, Puebla, México. Range.—Eastern slope of Mexican Plateau at 5,000 feet altitude in northern Puebla; limits of range unknown. Zonal range, Humid Upper Tropical.

**Oryzomys alfaroii huastecae** Dalquest*


**Type Locality.**—Ten kilometers east of Platanito, San Luis Potosí, México. Range.—Tropical eastern slopes of Sierra Madre Oriental in eastern San Luis Potosí.

**Oryzomys guerrerensis** Goldman†*


**Type Locality.**—Omilteme, Guerrero, México. Range.—Forested Pacific slope of Sierra Madre in Guerrero and Oaxaca. Vertical range from 3,000 to about 8,000 feet; zonal range, Humid Upper Tropical.

**tamamnacae—group**

**Oryzomys talamancae talamancae** J. A. Allen†*


**Type Locality.**—Talamanca, Limón, Costa Rica. Range.—Forested regions from foothills in eastern Costa Rica to Pacific coast, eastward through Panamá to near Colombian frontier; zonal range, Tropical (Goodwin, loc. cit.).

**Oryzomys talamancae carrikeri** J. A. Allen


**Type Locality.**—Banks of Río Sicsola [= Sixaola], between Cuabre and mouth of Río Sixaola, Limón, Costa Rica. Range.—Known from type locality only, in low coastal regions of Limón Province.

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bombycinus—group

Oryzomys bombycinus bombycinus Goldman†*

Type Locality.—Cerro Azul, near headwaters of Chagres River, Panamá, Panamá. Altitude, 2,500 feet. Range.—Mountains of east-central Panamá. Vertical range from 1,000 to 3,000 feet; zonal range, Humid Lower Tropical.

Oryzomys bombycinus orinus Pearson

Type Locality.—Mount Pirri, near Río Limón, Darién, eastern Panamá.

Oryzomys bombycinus alleni Goldman

Type Locality.—Tuis, about 20 miles east of Cartago, Cartago, Costa Rica. Altitude, 2,250 feet. Range.—Mountainous portions of northeastern Costa Rica. Vertical range from 800 to 3,000 feet; zonal range, Humid Lower Tropical.

devius—group

Oryzomys devius Bangs*

Type Locality.—Bóqueta, Volcán de Chiriquí, Chiriquí, Panamá. Altitude, 5,000 feet. Range.—Forested slopes of high mountains in central Costa Rica and western Panamá. Vertical range from 4,000 to at least 5,000 feet; zonal range, Humid Upper Tropical.

Oryzomys pirrensis Goldman†*

Type Locality.—Near head of Río Limón, Mount Pirri, Darién, eastern Panamá. Altitude, 4,500 feet. Range.—Steep, heavily forested slopes of high mountains at 4,500 feet altitude in eastern Panamá, and probably adjacent portions of Colombia. Zonal range, Humid Upper Tropical.

tectus—group

Oryzomys tectus tectus Thomas*

Type Locality.—Bogavo [=Bugaba], foothills of Volcán de Chiriquí, Chiriquí, Panamá. Altitude, about 800 feet. Range.—Pacific slope of western Panamá and southern Costa Rica at about 800 feet altitude. Limits of vertical range unknown; zonal range, Arid Lower Tropical.
Oryzomys tectus frontalis Goldman\textsuperscript{†*}


*Type Locality.*—Corozal, Canal Zone, Panamá. Altitude, 100 feet. *Range.*—Forested Pacific slope of Panamá from Canal Zone to near Colombian frontier, and probably adjacent Colombian territory. Vertical range from sea level to about 2,000 feet; zonal range, Arid and Humid Lower Tropical.

Oryzomys victus Thomas


Subgenus Oligoryzomys Bangs


Oryzomys fulvescens fulvescens (Saussure)*


Oryzomys fulvescens engraciae Osgood


Oryzomys fulvescens pacificus Hooper


*Type Locality.*—Mapastepec, Chiapas, México. *Range.*—Pacific coastal lowlands of Chiapas and probably of western Guatemala. Known geographic range from Arriaga southeast to Mapastepec. Known vertical range from approximately 50 feet at Pijijiapan to approximately 300 feet at Arriaga.
Oryzomys fulvescens lenis Goldman†*


Oryzomys fulvescens mayensis Goldman†*


*Type Locality.*—Apazote (near Yohaltún), Campeche, México. Altitude, 200 feet. *Range.*—Peninsula of Yucatán and Campeche. Vertical range from near sea level to about 300 feet; zonal range, Arid Lower Tropical.

Oryzomys fulvescens costaricensis J. A. Allen*  


Oryzomys fulvescens creper Goodwin*


Oryzomys fulvescens reventazoni Goodwin*


Oryzomys fulvescens nicaragucae J. A. Allen  


Oryzomys fulvescens vegetus Bangs*

_Type Locality._—Bóquete, Volcán de Chiriquí, Chiriquí, Panamá. Altitude, 4,000 feet. _Range._—Known from vicinity of type locality only. Zonal range, Upper Tropical.

Subgenus MELANOMYS Thomas


Oryzomys caliginosus idoneus Goldman†*

_Type Locality._—Cerro Azul, near headwaters of Chagres River, Panamá, Panamá. Altitude, 2,500 feet. _Range._—Heavily forested mountain slopes in eastern Panamá. Known vertical range from 1,800 to 2,800 feet; zonal range, Humid Lower Tropical.

Oryzomys caliginosus chrysomelas J. A. Allen*

_Type Locality._—Suerre, a finca near Jiménez, Limón, Costa Rica. Altitude, 1,500 feet. _Range._—Western Panamá, Costa Rica, and north to northern Nicaragua. Vertical range from near sea level to about 3,000 feet; zonal range, mainly Humid Lower Tropical.

Genus OECOMYS Thomas


Oecomys endersi Goldman

_Type Locality._—Barro Colorado Island, Canal Zone, Panamá. _Range._—Known from type locality only.

Oecomys trabeatus G. M. Allen and Barbour

_Type Locality._—Río Jesucito, Darién, eastern Panamá. _Range._—Known from type locality only.
Genus MEGALOMYS Trouessart


Megalomys audreyae Hopwood


Type Locality.—Cave on island of Barbuda, Lesser Antilles. (Extinct.)

Megalomys desmarestii (Fischer)*


Type Locality.—Martinique, Lesser Antilles. Range.—(Extinct?)

Megalomys luciae (Major)


Type Locality.—St. Lucia, Lesser Antilles. (Extinct?)

Genus NEACOMYS Thomas


Neacomys pictus Goldman†*


* On account of the existence of the earlier name Megamys (Laurillard, 1848) applied to another genus, Megalomys has been replaced by Moschomys Trouessart (Ann. Mag. Nat. Hist., ser. 7 vol. 11, p. 388, April 1903; not of Billberg, 1828) and Moschophoromys Elliot (Field Columb. Mus. Publ. 90, Zool. Ser., vol. 3, p. 270, Mar. 7, 1904). This is not in accordance with the provisions of the International Code of Zoological Nomenclature. See art. 36, with accompanying recommendation; also Opinion 25 of the International Commission of Zoological Nomenclature (Smithsonian Inst. Spec. Publ. 1938, pp. 59–61, July 1910). The name Megalomus (Hall, 1852) differs in etymology as well as in form.
Genus NECTOMYS* Peters

Subgenus SIGMODONTOMYS J. A. Allen

Nectomys alfari alfari (J. A. Allen)*


Nectomys alfari efficax Goldman†*

Type Locality.—Cana (Santa Cruz de Cana), upper Río Tuyra, Darién, eastern Panamá. Altitude, 1,800 feet. Range.—Known only from northwestern slope of Serrania del Darién, Panamá (Hershkovitz, Univ. Michigan Mus. Zool. Misc. Publ. 58, p. 76, Jan. 4, 1944).

Genus RHIPIDOMYS Tschudi

Rhipidomys scandens Goldman†*

Type Locality.—Near head of Río Limón, Mount Pirri, Darién, eastern Panamá. Altitude, 5,000 feet. Range.—Known from type locality only.

Genus TYLOMYS Peters

Tylomys gymnurus Villa
_Type Locality._—Presidio, Veracruz, México. _Range._—Known from type locality only.

Tylomys bullaris Merriami†*
_Type Locality._—Tuxtla, Chiapas, México. _Range._—Known from type locality only.

Tylomys tambalensis Merriami†*

Tylomys nudicaudus (Peters) *

Tylomys watsoni Thomas*

Tylomys panamensis (Gray) *
_Type Locality._—Panamá. _Range._—Recorded at Cana, Darién, eastern Panamá (Goldman, Smithsonian Misc. Coll., vol. 69, No. 5, p. 90, Apr. 26, 1920).
**Rodentia: Cricetidae**

**Tylomys fulviventer** Anthony


*Type Locality.*—Tacarcuna, Darién, Panamá. Altitude, 4,200 feet. *Range.*—Known from type locality only.

**Genus OTOTYLOMYS** Merriam


**Ototylomys phyllotis phyllotis** Merriam


**Ototylomys phyllotis phaeus** Merriam


**Ototylomys phyllotis guatemalae** Thomas


**Ototylomys phyllotis fumeus** J. A. Allen


**Ototylomys phyllotis australis** Osgood


*Type Locality.*—San Gerónimo, near Pozo Azul de Pirris, San José, western Costa Rica. *Range.*—Known from type locality only.
Ototylomys connectens Sanborn
*Type Locality.*—Cobán, Alta Verapaz, Guatemala. *Range.*—Recorded also at Chimoxán and Finca Chama, Alta Verapaz.

**Genus NYCTOMYS** Saussure

**Nyctomys sumichrasti sumichrasti** (Saussure) *

**Nyctomys sumichrasti pallidulus** Goldman† *
*Type Locality.*—Santo Domingo, 8 miles west of Lagunas, on Mexican National Railroad, Isthmus of Tehuantepec, Oaxaca, México. Altitude, 900 feet. *Range.*—Known only from type locality in arid tropical belt on southern side of Isthmus of Tehuantepec, Oaxaca; probably has an extensive range in arid Pacific coast region of southwestern México.

**Nyctomys sumichrasti salvini** (Tomes) *

**Nyctomys sumichrasti decolorus** (True) ‡ *
Nyctomys sumichrasti florencei Goldman

*Type Locality.*—Barra de Santiago, Ahuachapán, El Salvador. Sea level.

*Range.*—Pacific coastal region of El Salvador; vertical range from sea level to at least 2,600 feet.

Nyctomys sumichrasti venustulus Goldman†*


Nyctomys sumichrasti costaricensis Goldman†*

*Type Locality.*—San Gerónimo de Pirris, hamlet on main road to Pirris before reaching Jabillo, about 2 miles before abrupt descent to lowlands of Pozo Azul and about 12 miles inland from Pirris, San José, west coast of Costa Rica. Altitude, about 100 feet. *Range.*—Valley of Río Grande de Pirris, western Costa Rica; limits of range undetermined.

Nyctomys sumichrasti nitellinus Bangs*


**Genus** OTONYCTOMYS Anthony


Otonyctomys hatti Anthony

*Type Locality.*—Chichén-Itzá, Yucatán, México. *Range.*—Known from type locality only.


Reithrodontomys humulis humulis (Audubon and Bachman) *
1895. Reithrodontomys humulis dickinsoni Rhoads, Amer. Nat., vol. 29, p. 590, June 1895. (Willow Oak, Pasco County, Fla.)


Reithrodontomys humulis merriami (J. A. Allen) †

Type Locality.—Austin Bayou, near Alvin, Brazoria County, Tex. Range.—Tall-grass prairies and marsh grasslands of extreme eastern Texas and southern Louisiana, west of Mississippi River. Known from vicinity of Richmond, Fort Bend County, and Alvin, Brazoria County, Tex., north and east to Lafayette, Lafayette Parish, La. (Hooper, Occ. Pap. Mus. Zool. Univ. Michigan No. 477, p. 9, Nov. 5, 1943).

Reithrodontomys humulis virginianus A. H. Howell †


Reithrodontomys montanus montanus (Baird) †


*Type Locality.*—Rocky Mountains, lat. 39° N. (Regarded as probably near upper end of San Luis Valley, Saguache County, Colo., by J. A. Allen, Bull. Amer. Nat. Hist., vol. 7, p. 124, May 21, 1895; and as very probably on Medano Creek, Alamosa County, Colo., by Warren, The Mammals of Colorado, . . ., p. 196, 1942.)


*Reithrodontomys montanus albescens* Cary†*


*Type Locality.*—Eighteen miles northwest of Kennedy, Cherry County, Nebr.


*Reithrodontomys montanus griseus* V. Bailey†*


*Reithrodontomys burti* Benson


*Type Locality.*—Rancho de Costa Rica, Río Sonora, Sonora, México. *Range.*—Coastal flood plains of western Sonora from Río Sonora south to near Guaymas. Known vertical range from 300 to 600 feet.
Reithrodontomys megalotis megalotis (Baird)†*


**Type Locality.**—Between Janos, Chihuahua, México, and San Luis Springs, Grant County, N. Mex. **Range.**—From Okanagan Valley (Osoyoos Lake and Penticton), British Columbia (Holland, Murrelet, vol. 23, p. 60, Aug. 14, 1942), south through Columbian Plateau of Washington in Upper Sonoran area west of Columbia River and south of Wenatchee Mountains in Kittitas, Yakima, and Benton Counties, north side of Columbia River in Klickitat County, and Okanogan County east of Okanogan River (Dalquest, op. cit., p. 325); Great Basin region of Idaho north to Fremont County and eastward probably into Wyoming (Davis, op. cit., p. 281) and south into Utah, excluding region east of Colorado River (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 6, p. 296, Aug. 10, 1952); all Nevada in Sonoran Zone (Hall, op. cit., p. 497); dry Upper Sonoran area of Oregon east of Cascades (V. Bailey, North Amer. Fauna No. 55 (June), p. 189, Aug. 29, 1936); Great Basin areas and Colorado and Mohave Deserts of California; recorded north, at Montague and Brownell, in Siskiyou County, and Bieber, in extreme northwestern Lassen County, and east of Sierra Nevada, at Goose Lake, near Sugar Hill, eastern Modoc County; west at south, from valley of Colorado River, to Mecca, Riverside County, to Victorville, San Bernardino County, to Tehachapi, Kern County, and through Walker Pass region as far as Bodfish, on Kern River, Kern County; vertical range, from 250 feet below sea level (Eagle Borax Works, Death Valley, Inyo County) up to 7,500 feet above sea level (Little Onion Valley, east flank Sierra Nevada west of Independence, Inyo County) and exceptionally to 11,500 feet (at McAfee Meadow, White Mountains, Mono County) in California (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 169, Sept. 26, 1933); northeastern Baja California; Arizona, and southern New Mexico (V. Bailey, North Amer. Fauna, No. 53 (December 1931), p. 162, Mar. 1, 1932) to western Texas (west of Pecos River) and southwestern Kansas (Hill and Hibbard, Journ. Mamm., vol. 24, No. 1, p. 22, Feb. 20, 1943). Known range in México from vicinity of Puerto de Lobos and Cananea, northern Sonora, southeast on Plateau and in foothills of Sierra Madre to vicinity of Guanajuato. Known vertical range in México from approximately sea level at Puerto de Lobos, Sonora, to approximately 8,500 feet near Guanajuato,

**Reithrodontomys megalotis zacatecae** Merriam†*


**Reithrodontomys megalotis saturatus** J. A. Allen and Chapman*


*Type Locality.*—Las Vigas, Veracruz, México. Altitude, 8,000 feet. *Range.*—Highlands of central and eastern México. Known range from vicinity of Volcán de Orizaba, west-central Veracruz, west to Ameca, central Jalisco, and north in Sierra Madre Oriental to neighborhood of Galeana, west-central Nuevo León. Vertical range from 3,500 feet in mountains near Gómez Farias, Tamaulipas, to timber line (about 13,000 feet) on Volcán de Popocatépetl and Volcán de Orizaba (Hooper, op. cit., p. 56).

**Reithrodontomys megalotis amoles** A. H. Howell†*


*Type Locality.*—Pinal de Amoles, Querétaro, México. Altitude, approximately 7,500 feet. *Range.*—Known from type locality only.

**Reithrodontomys megalotis alticolus** Merriam†*


*Type Locality.*—Cerro San Felipe, near city of Oaxaca, Oaxaca, México. Altitude, 10,000 feet. *Range.*—Highlands of Oaxaca and probably of Guerrero. Known range from vicinity of Tamazulapan and Cerro Zempoaltepec south to

**Reithrodontomys megalotis peninsulae** (Elliot) *


*Type Locality.*—San Quintín, Baja California, México. *Range.*—West coast of Baja California, between lat. 30° and 31° N.; southern limit of range not definitely known.

**Reithrodontomys megalotis limicola** von Bloeker


*Type Locality.*—Playa del Rey, Los Angeles County, Calif. *Range.*—Coastal marshes in Orange, Los Angeles, and Ventura Counties, Calif.; from Anaheim Bay, Orange County, to Point Mugu, Ventura County.

**Reithrodontomys megalotis santacruzae** Pearson


*Type Locality.*—Prisoner's Harbor, Santa Cruz Island, Santa Barbara County, Calif. *Range.*—Known only from Prisoner's Harbor, on north shore of Santa Cruz Island.

**Reithrodontomys megalotis catalinae** (Elliot) *


**Reithrodontomys megalotis distichalis** von Bloeker


*Type Locality.*—Salt marsh at mouth of Salinas River, Monterey County, Calif. *Range.*—Coastal salt marshes and sandhill region in vicinity of seacoast in Monterey County from mouth of Elkhorn Slough, Moss Landing, south to Seaside Lagoon.

**Reithrodontomys megalotis longicaudus** (Baird) †*


*Type Locality.*—Petaluma, Sonoma County, Calif. *Range.*—Greater part of western California, except marshes along coast south of Monterey Bay, east to foothills of Sierra Nevada, San Bernardino and San Jacinto Ranges (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 170, Sept. 26, 1933); north to Grants Pass, Oreg., and south into northwestern Baja California to about lat. 32° N.

*Reithrodontomys megalotis arizonensis* J. A. Allen


*Type Locality.*—Rock Creek, Chiricahua Mountains, Cochise County, Ariz. Altitude, about 8,000 feet. *Range.*—Known only from head of Rock Creek Canyon, west of Long Park, Chiricahua Mountains.

*Reithrodontomys megalotis aztecus* J. A. Allen*


*Reithrodontomys megalotis caryi* A. H. Howell†*


*Type Locality.*—Medano Ranch, 15 miles northeast of Mosca, Alamosa County, Colo. *Range.*—San Luis Valley, Colo.

*Reithrodontomys megalotis ravus* Goldman†*


*Type Locality.*—North end of Stansbury Island (sand bar at springs on lake shore), Great Salt Lake, Tooele County, Utah. Altitude, 4,250 feet. *Range.*—Recorded also at Grantsville, Tooele County (Marshall, Journ. Mamm., vol. 21, No. 2, pp. 154, 155, May 16, 1940).
Reithrodontomys megalotis dychei J. A. Allen*


**Type Locality.**—Lawrence, Douglas County, Kans. **Range.**—Greater part of Kansas, Nebraska, Iowa, Missouri, and South Dakota; southeastern and southwestern North Dakota; southwestern Minnesota (Hanson, Field Mus. Nat. Hist. Publ. 564, Zool. Ser., vol. 29, p. 206, Oct. 26, 1944); southeastern Montana; eastern Wyoming and eastern Colorado.

Reithrodontomys megalotis pectoralis Hanson*


Reithrodontomys raviventris raviventris Dixon*


Reithrodontomys raviventris halicoetes Dixon*


**Type Locality.**—Salt marsh 3 miles south of Petaluma, Sonoma County, Calif. **Range.**—Chiefly tidal marshes on north side of San Francisco and Suisun Bays, from vicinity of Petaluma, Sonoma County, east to Grizzly Island, Solano County; occurs also as far up Sacramento River as Grand Island, 2 miles north of Knight’s Landing, Yolo County, and on south side of Suisun Bay east to near Brentwood, Contra Costa County; vertical range below 50 feet; zonal range, Upper Sonoran (Grinnell, loc. cit.).

Reithrodontomys sumichrasti sumichrasti (Saussure) *


RODENTIA: CRICETIDAE


*Type Locality.*—México (restricted to Mirador, Veracruz, by Hooper, op. cit., p. 72). *Range.*—Mountains of southeastern México, in Veracruz, Puebla, Hidalgo, Querétaro, México, Distrito Federal, and Oaxaca. Known range from Amoles, Querétaro, and Molango, Hidalgo, southeast to Cerro San Felipe, Oaxaca. Known vertical range from about 4,000 feet at Orizaba, Veracruz, to 9,500 feet in vicinity of San Bartolomé, near city of México (Hooper, op. cit., p. 72).

*Reithrodontomys sumichrasti nerus* Merriam†*


*Type Locality.*—Foothills of El Nevado de Colima, Jalisco, México. Altitude, 6,500 feet. *Range.*—Mountains bounding southwestern part of Mexican Plateau, in States of Jalisco and Michoacán. Known range from Sierra de Aultlán, Jalisco, east to Macho de Agua, extreme eastern Michoacán. Known vertical range from 5,300 feet at Uruapan, Michoacán, to 9,500 feet on Nevada de Colima, Jalisco (Hooper, loc. cit.).

*Reithrodontomys sumichrasti luteolus* A. H. Howell†*


1914. *Reithrodontomys alleni* A. H. Howell†, North Amer. Fauna No. 36, p. 59, June 5, 1914. (Mountains near Ozolotepec, Oaxaca, México. Altitude, 10,000 feet.)


*Type Locality.*—Juquila, Oaxaca, México. Altitude, 5,000 feet. *Range.*—Sierra Madre del Sur of Guerrero and Oaxaca, México. Known range from Omilteme, Guerrero, east to vicinity of Ozolotepec, Oaxaca. Known vertical range from 5,000 feet at Juquila to 10,000 feet in mountains near Ozolotepec (Hooper, loc. cit.).

*Reithrodontomys sumichrasti dorsalis* Merriam†*


*Type Locality.*—Calel, southwest of Momostenango, Quezaltenango, Guatemala. Altitude, 10,200 feet. *Range.*—Mountains of Chiapas and Guatemala. Known range from Pueblo Nuevo, Chiapas, southeast to vicinity of Salamá.
and San Rafael, Guatemala. Vertical range from 4,000 feet at Las Margaritas, Chiapas, to approximately 13,200 feet on Volcán Tajumulco, Guatemala (Hooper, loc. cit.).

Reithrodontomys sumichrasti modestus Thomas


Type Locality.—Jinotega, Jinotega, north-central Nicaragua. Altitude, 4,650 feet. Range.—Interior highlands of El Salvador, Honduras, and northwestern Nicaragua. Known range from Los Esesmiles, El Salvador, and Monte Verde, Honduras, east to vicinity of Jinotega and San Rafael del Norte, Nicaragua. Vertical range from 4,500 feet at Monte Verde to 8,000 feet on Los Esesmiles (Hooper, loc. cit.).

Reithrodontomys sumichrasti australis J. A. Allen*


Type Locality.—Volcán de Irazú, Cartago, Costa Rica. Range.—Cordillera Central and Cordillera de Talamanca in Costa Rica. Known range confined to Volcán de Irazú and to other mountains near San José, Costa Rica (Hooper, loc. cit.).

Reithrodontomys sumichrasti vulcanius Bangs


Type Locality.—Volcán de Chiriquí, Chiriquí, Panamá. Altitude, 10,300 feet. Range.—High mountains of western Panamá and probably of extreme eastern Costa Rica. Known only from vicinity of Volcán de Chiriquí, from 4,400 feet, in open grassland on flanks of volcano, to about 11,400 feet, on summit (Hooper, loc. cit.).

Reithrodontomys chrysopsis chrysopsis Merriam†*


Type Locality.—Volcán Popocatépetl, México, México. Altitude, 11,500 feet. Range.—High mountains of central México in States of Puebla, México,
RODENTIA: CRICETIDAE


Reithrodontomys chrysopsis perotensis Merriam*†


_Type Locality._—Cofre de Perote, Veracruz, México. Altitude, 9,500 feet._

Range._—Known only from elevations above 9,500 feet on Cofre de Perote, Veracruz, and Volcán de Orizaba, Veracruz and Puebla (Hooper, loc. cit.).

Reithrodontomys fulvescens fulvescens J. A. Allen*


_Type Locality._—Oposura, Sonora, México. Altitude, 2,000 feet._


Reithrodontomys fulvescens canus Benson*


_Type Locality._—Five miles southeast of Chihuahua, Chihuahua, México. Altitude, 5,750 feet._


Reithrodontomys fulvescens intermedius J. A. Allen*


**Type Locality.**—Brownsville, Cameron County, Tex. **Range.**—Plains and hills of southern Texas and northeastern México. Known range from Kerr County, Tex., south to Santa Engracia, Tamaulipas, and to localities near Monterrey, Nuevo León. Vertical range from near sea level at several localities in Texas to 2,400 feet near Santa Catarina, Nuevo León (Hooper, Univ. Michigan Mus. Zool. Misc. Publ. 77, p. 107, Jan. 16, 1952).

*Reithrodontomys fulvescens aurantius* J. A. Allen†*


**Type Locality.**—Lafayette, Lafayette Parish, La. **Range.**—South-central United States. Known range from Cherokee and Chautauqua Counties, southeastern Kansas, Ozark County, southern Missouri, and Cleveland County, central Oklahoma, south to Copiah County, Miss., and Colorado County, Tex. Vertical range from near sea level at several localities in Texas and Louisiana to 1,500 feet at Noble, Okla. (Hooper, Univ. Michigan Mus. Zool. Misc Publ. 77, p. 105, Jan. 16, 1952).

*Reithrodontomys fulvescens griseoflavus* Merriam†*


**Type Locality.**—Ameca, Jalisco, México. Altitude, 4,000 feet. **Range.**—Plains and mountains of southwestern part of Mexican Plateau. Known range from vicinity of Jaral, Coahuila, and Jaumave, Tamaulipas, south and west to Santa Isabel, southeastern Nayarit, and to vicinity of Talpa and Autlán, Jalisco. Vertical range from about 2,700 feet at Jaumave, Tamaulipas, to 6,800 feet near Punta, Jalisco (Hooper, loc. cit.).

*Reithrodontomys fulvescens tropicalis* Davis*


*Reithrodontomys fulvescens difficilis* Merriam†*


*Type Locality.*—Orizaba, Veracruz, México. Altitude, about 4,500 feet. 

*Reithrodontomys fulvescens toltecus* Merriam†*


*Type Locality.*—Tlalpan, Distrito Federal, México. Altitude, 7,500 feet. 

*Reithrodontomys fulvescens tenuis* J. A. Allen*


*Type Locality.*—Rosario, Sinaloa, México. Altitude, about 200 feet. 

*Reithrodontomys fulvescens nelsoni* A. H. Howell‡*


*Type Locality.*—Colima, Colima, México. Altitude, about 1,300 feet. 

*Reithrodontomys fulvescens infernatis* Hooper

Type Locality.—Teotitlán, Oaxaca, México. Altitude, 3,100 feet. Range.—Extreme southeastern Puebla and northern Oaxaca. Known range confined to the areas drained by Salado and Quiotepcte Rivers, from vicinity of Teotitlán, 3,100 feet, Oaxaca, north to Tepanco, 5,700 feet, Puebla (Hooper, Univ. Michigan Mus. Zool. Misc. Publ. 77, p. 117, Jan. 16, 1952).

Reithrodontomys fulvescens mustelinus A. H. Howell†*


Reithrodontomys fulvescens helvolus Merriam†*

Type Locality.—City of Oaxaca, Oaxaca, México. Altitude, about 5,000 feet. Range.—Sierra Madre del Sur in Oaxaca and probably in eastern Guerrero. Known range from vicinity of city of Oaxaca south to Sola de la Vega and east to Nejapa. Vertical range from 1,900 feet at Nejapa to 5,000 feet at Oaxaca (Hooper, Univ. Michigan Mus. Zool. Misc. Publ. 77, p. 119, Jan. 16, 1952).

Reithrodontomys fulvescens amoenus (Elliot)

Type Locality.—Reforma, Oaxaca, México. Altitude, about 500 feet. Range.—Known only from type locality but probably ranging to west and east on Pacific coastal lowlands of Oaxaca and southwestern Chiapas (Hooper, loc. cit.).

Reithrodontomys fulvescens chiapensis A. H. Howell†*

Type Locality.—Canjob, Chiapas, México. Altitude, about 5,000 feet. Range.—Arid interior valleys and slopes of Chiapas, Guatemala, El Salvador, and Honduras. Known range from vicinity of Cintalapa and Bochil, Chiapas, southeast to Volcán San Miguel, El Salvador, and to vicinity of Tegucigalpa, Honduras, but excluding Pacific coastal drainages of southern Chiapas and western Guatemala. Known vertical range from 1,800 feet at Cintalapa to 5,700 feet in vicinity of Comitán (Hooper, Univ. Michigan Mus. Zool. Misc. Publ. 77, p. 121, Jan. 16, 1952).
Reithrodontomys hirsutus Merriam†

*Type Locality.—*Ameca, Jalisco, México. Altitude, 4,000 feet. *Range.—* Moderate elevations in mountains of western Jalisco and southern Nayarit. Known range from Santa Isabel, south to Sierra de San Sebastián and east to Ameca, Jalisco. Vertical range from 3,000 feet near San José del Conde to 4,000 feet at Ameca (Hooper, Univ. Michigan Mus. Zool. Misc. Publ. 77, p. 125, Jan. 16, 1952).

*Subgenus APORODON A. H. Howell*

*mexicanus*—group

Reithrodontomys gracilis gracilis J. A. Allen and Chapman*


Reithrodontomys gracilis anthonyi Goodwin*


Reithrodontomys gracilis pacificus Goodwin*

*Type Locality.—*Hacienda California, a cattle ranch on Pacific coast, 6 miles from Ocós, and about same distance from Chiapas border, San Marcos, Guatemala. Near sea level. *Range.—* Pacific coastal plain and slopes in Chiapas and Guatemala. Known range from vicinity of Pijìjìapán, Chiapas, to San José, Guatemala. Vertical range from near sea level at San José and Hacienda California, to about 2,000 feet at Finca El Ciprés, Guatemala (Hooper, loc. cit.).
Reithrodontomys gracilis harrisi Goodwin

*Type Locality.*—Hacienda Santa María, 18 miles northeast of Liberia, Guanacaste, Costa Rica. Altitude, 3,200 feet. *Range.*—Known only from type locality, but probably ranging on Pacific coastal slopes and plain northward into Nicaragua and southward in Costa Rica (Hooper, loc. cit.).

Reithrodontomys dariensis Pearson*

*Type Locality.*—Cana (Santa Cruz de Cana), upper Río Tuyra, Darién, eastern Panamá. Altitude, 2,000 feet. *Range.*—Known only from type locality, but probably occurring elsewhere in lowlands of Panamá and Colombia. A specimen from Gatún, Panamá Canal Zone, may be an example of *dariensis* (Hooper, Univ. Michigan Mus. Zool. Misc. Publ. 77, p. 137, Jan. 16, 1952).

Reithrodontomys mexicanus mexicanus (Saussure) *

*Type Locality.*—Mountains of Veracruz, México (restricted to Mirador, Veracruz, by Hooper, Univ. Michigan Mus. Zool. Misc. Publ. 77, p. 140, Jan. 16, 1952). *Range.*—Moderate elevations on slopes of mountains of eastern México entirely within drainage of Gulf of Mexico. Known range from mountains near Gómez Farías, southwestern Tamaulipas, south to Totontepec, Oaxaca. Vertical range from 800 feet at Metlatoyuca to 6,000 feet at Totontepec (Hooper, loc. cit.).

Reithrodontomys mexicanus scansor Hooper

*Type Locality.*—Villa Flores, Chiapas, México. Altitude, 2,000 feet. *Range.*—Interior arid tropical valleys in southwestern Chiapas. Known range from Cintalapa, 1,700 feet, southeast to Villa Flores, 2,000 feet.

Reithrodontomys mexicanus howelli Goodwin*

*Type Locality.*—Chichicastenango (on some maps Santo Tomás), El Quiché, western Guatemala. Altitude, 6,500 feet. *Range.*—Mountains of eastern and

Reithrodontomys mexicanus orinus Hooper*


_Type Locality._—Hacienda Chilata, about 12 miles southeast of Sonsonate, near summit of Balsam Range, Sonsonate, El Salvador. Altitude, 2,000 feet. _Range._—Mountain slopes of El Salvador and of southeastern Guatemala; from San Rafael and Lago de Amatitlán, Guatemala, southeast in coastal chain of volcanoes to Balsam Range, El Salvador, and southeast on southern flanks of interior highlands of El Salvador as far as Cerro Cacaguatique; vertical range from 2,000 feet at Hacienda Chilata to 7,000 feet at San Rafael, Guatemala (Hooper, Univ. Michigan Mus. Zool. Misc. Publ. 77, pp. 147–148, Jan. 16, 1952).

Reithrodontomys mexicanus ocotepequensis Goodwin


Reithrodontomys mexicanus lucifrons A. H. Howell†*


_Type Locality._—Cerro Cantoral, about 15 miles (air line) north-northwest of Tegucigalpa, Francisco Morazán, Honduras. Altitude, about 6,000 feet. _Range._—Highlands of central and eastern Honduras and northwestern Nicaragua. Known range from vicinity of Muya, Honduras, southeast to Río Coco (probably headwaters near Ocotal), Nicaragua. Vertical range from approximately 3,500 feet at Comayaguela to 6,000 feet on Cerro Cantoral, Honduras (Hooper, Univ. Michigan Mus. Zool. Misc. Publ. 77, p. 150, Jan. 16, 1952).

Reithrodontomys mexicanus cherrii (J. A. Allen) *


tenuirostris—group


Type Locality.—Todos Santos (southeast of Nentón), Huehuetenango, Guatemala. Altitude, 10,000 feet. Range.—High mountains of Guatemala and ex-

**Reithrodontomys microdon albilabris** Merriam†*


*Type Locality.*—Cerro San Felipe, Oaxaca, México. Altitude, 10,000 feet. *Range.*—Known from type locality only.

**Reithrodontomys microdon wagneri** Hooper


*Type Locality.*—Western flanks of Cerro San Andrés, about 10 miles northwest of Ciudad Hidalgo, Michoacán, México. Altitude, 9,400 feet. *Range.*—Known only from two localities, in Distrito Federal and Michoacán, but probably occurring elsewhere on mountains that rim southern end of Mexican Plateau. Known vertical range 9,200 to 10,000 feet in Cañon Contreras, near city of México.

**Reithrodontomys tenuirostris** Merriam†*


*Type Locality.*—Todos Santos (southeast of Nentón), Huehuetenango, Guatemala. Altitude, 10,000 feet. *Range.*—Highlands of Guatemala and probably of southeastern Chiapas, México. Known from one locality in Sierra Cuchumatanes and several localities in Sierra Madre from Volcán de Tajumulco south to Mataquesquinta. Known vertical range from 8,000 to 10,400 feet on Volcán de Tajumulco (Hooper, Univ. Michigan Mus. Zool. Misc. Publ. 77, pp. 171-172, Jan. 16, 1952).

**Reithrodontomys rodriguezi** Goodwin


*Type Locality.*—Volcán de Irazú, Cartago, Costa Rica. Altitude, 9,400 feet. *Range.*—Known from type locality only.

**Reithrodontomys creper** Bangs*


Genus PEROMYSCUS Gloger (white-footed mice)

1841. Peromyscus Gloger, Gemeinnütziges Hand- und Hilfsbuch der Naturgeschichte, vol. 1, p. 95. (Type, Peromyscus arboreus Gloger = Mus sylvaticus növeboracensis Fischer.)

Subgenus HAPLOMYLOMYS 12 Osgood


Peromyscus crinitus crinitus 13 (Merriam) †


Peromyscus crinitus pergracilis Goldman†*


Type Locality.—South end of Stansbury Island, Great Salt Lake, Tooele County, Utah. Altitude, 4,250 feet. Range.—White Pine County and adjoining parts of Elko and Eureka Counties in eastern Nevada (Hall, Mammals of Nevada, p. 508, July 1, 1946), and western Utah (Hall and Hoffmeister, Journ. Mamm., vol. 23, No. 1, p. 58, Feb. 14, 1942).

Peromyscus crinitus doutti Goin*


Type Locality.—Antelope Canyon, 20 miles southeast of Duchesne, Duchesne County, Utah. Altitude, 7,200 feet. Range.—Utah, between Green River on east and Wasatch Mountains and Fish Lake Plateau on west, and from Wyoming border (one specimen from Sweetwater County, Wyo., one mile north of Linwood, Utah) south at least to central Garfield County (see also Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 78, Feb. 15, 1951).

Peromyscus crinitus auripectus (J. A. Allen) *


tical with *auripectus* by Hall and Hoffmeister, Journ. Mamm., vol. 23, No. 1, p. 64, Feb. 14, 1942.)

*Type Locality.*—Bluff City, San Juan County, Utah. *Range.*—Southern Wyoming, Utah east of Green and Colorado Rivers (Goin, Journ. Mamm., vol. 25, No. 2, p. 190, May 26, 1944), western Colorado, northwestern New Mexico, and northeastern Arizona west to Supai (Hall and Hoffmeister, loc. cit.).

**Peromyscus crinitus stephensi** Mearns†


*Type Locality.*—Lowest water on wagon road in canyon at eastern base of Coast Range, near Mexican boundary [=3 miles east of Mountain Spring], Imperial County, Calif. (See A. B. Howell, Journ. Mamm., vol. 4, No. 4, p. 266, Nov. 1, 1923.) *Range.*—Southern Nevada from about latitude of Walker Lake, southwestern Utah, and western Arizona south to Gila River; southward through southeastern California and northeastern Baja California to San Felipe (Hall and Hoffmeister, Journ. Mamm., vol. 23, No. 1, p. 59, Feb. 14, 1942).

**Peromyscus crinitus pallidissimus** Huey


*Type Locality.*—Small island in Gonzaga Bay, lat. 29°50’ N., long. 114°20’ W., Gulf of California, Baja California, México. *Range.*—Known from type locality only.

**Peromyscus crinitus disparilis** Goldman†


*Type Locality.*—Tinajas Altas, Gila Mountains, Yuma County, Ariz. Altitude, 2,000 feet. *Range.*—Southwestern Arizona, south of Gila River, and northwestern Sonora south to near Punta Peñasca (Hall and Hoffmeister, loc. cit.).

**Peromyscus crinitus delgadilli** Benson


*Type Locality.*—Two miles south of Crater Elegante, Sierra del Pinacate,
34 miles west of Sonoyta, Sonora, México. *Range.*—Pinacate lava field, northwestern Sonora, México.

**Peromyscus collatus** Burt


*Type Locality.*—Turner’s Island, lat. 28° 43’ N., long. 112° 19’ W., Gulf of California, Sonora, México. *Range.*—Turner’s Island.

**Peromyscus pseudocrinitus** Burt


*Type Locality.*—Coronados Island, lat. 26° 60’ N., long. 111° 18’ W., Gulf of California, Baja California, México. *Range.*—Coronados Island.

**Peromyscus californicus californicus** (Gambel) *


*Type Locality.*—Monterey, Monterey County, Calif. *Range.*—Coastal strip of west-central California, from vicinity of Monterey south to (presumptively) northwestern Santa Barbara County; this area lies altogether west of Salinas Valley and for the most part within fog belt (Grinnell and Orr, Journ. Mamm., vol. 15, No. 3, p. 216, Aug. 10, 1934).

**Peromyscus californicus benitoensis** Grinnell and Orr *


*Type Locality.*—Near Cook Post Office, Bear Valley, San Benito County, Calif. Altitude, 1,300 feet. *Range.*—Salinas Valley and inner Coast Ranges of west-central California, from and including San Benito County south at least to San Luis Obispo County.

**Peromyscus californicus parasiticus** (Baird) † *


*Type Locality.*—Santa Clara Valley [probably near Mountain View], Santa Clara County, Calif. *Range.*—That portion of west-central California lying south from Golden Gate and San Francisco Bay to (through) Santa Cruz County; east to include parts of Contra Costa, Alameda, and northwestern Santa Clara Counties (Grinnell and Orr, Journ. Mamm., vol. 15, No. 3, p. 214, Aug. 10, 1934).

**Peromyscus californicus mariposae** Grinnell and Orr *

Type Locality.—El Portal, Mariposa County, Calif. Altitude, 2,500 feet. Range.—Lower western slopes of southern Sierra Nevada, south at least from northwestern Mariposa County to Kern County, Calif.

Peromyscus californicus insignis Rhoads*


Type Locality.—Dulzura, San Diego County, Calif. Range.—Southern coastal district of California at least from Ventura County (probably eastern Santa Barbara County) south, west of interior deserts, to San Quintín (lat. 30° 29' N.), Baja California, Mexico, including San Bernardino and San Jacinto Mountains in California and Sierra Juárez and Sierra San Pedro Mártir in northern Baja California (Grinnell and Orr, Journ. Mamm., vol. 15, No. 3, p. 218, Aug. 10, 1934).

Peromyscus eremicus eremicus (Baird) †*


Type Locality.—Old Fort Yuma, Imperial County, Calif., on Colorado River opposite Yuma, Ariz. Range.—Lower Sonoran Zone of northeastern Baja California east of mountain ranges from vicinity of San Luis Bay northward through Colorado Desert and eastern portion of Mohave Desert in Imperial and extreme eastern San Diego Counties to north end of Death Valley, Inyo County, and west from Valley of Colorado River to Victorville and Oro Grande, San Bernardino County, and to Banning, Riverside County, Calif. (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 172, Sept. 26, 1933); and from northwestern Sonora, except Pinacate region, from as far east as Providencia mines, south and west to Hermosillo (Burt, Univ. Michigan Mus. Zool. Misc. Publ. 39, p. 55, Feb. 15, 1938); northward through western Arizona to southern Nevada (Hall, Mammals of Nevada, p. 509, July 1, 1946) and southwestern Utah; and from southern New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 158, Mar. 1, 1932) and western Texas (see Borell and Bryant, Univ. California Publ. Zool., vol. 48, No. 1, pp. 30–31, Aug. 7, 1942) southward through eastern Chihuahua and Coahuila to northeastern Durango, México.
Peromyscus eremicus fraterculus (Miller)*
(Reche Canyon, San Bernardino County, Calif.)


Peromyscus eremicus cedrosensis J. A. Allen* 

*Type Locality.*—Cerros (Cedros) Island, Baja California, México. *Range.*—Cedros Island.

Peromyscus eremicus eva Thomas* 

*Type Locality.*—San José del Cabo, Baja California, México. *Range.*—Lower Sonoran Zone of central and southern part of Peninsula of Baja California, from Cape San Lucas north to vicinity of lat. 29° N., meeting ranges of *eremicus* and *fraterculus*.

Peromyscus eremicus polypolius Osgood†*


Peromyscus eremicus avius Osgood†*

*Type Locality.*—Ceralbo Island, Gulf of California, Baja California, México. *Range.*—Confined to Ceralbo Island.
Peromyscus eremicus insulicola Osgood†*


*Type Locality.*—Espíritu Santo Island, Gulf of California, Baja California, México. *Range.*—Confined to Espíritu Santo Island.

Peromyscus eremicus cinereus Hall


*Type Locality.*—San José Island, lat. 25° N., Baja California, México. *Range.*—San José Island.

Peromyscus eremicus carmeni Townsend†*


*Type Locality.*—Carmen Island, Gulf of California, Baja California, México. *Range.*—Carmen Island.

Peromyscus eremicus anthonyi (Merriam) †*


Peromyscus eremicus pullus Blossom*


*Type Locality.*—Black Mountain, 10 miles south of Tucson, Pima County, Ariz. *Range.*—Black Mountain.

Peromyscus eremicus papagensis Goldman†*


*Type Locality.*—Sierra Pinacate, Sonora, México. *Range.*—Known from type locality only.

Peromyscus eremicus tiburonensis Mearns†*


*Type Locality.*—Tiburón Island, Gulf of California, Sonora, México. *Range.*—Tiburón Island and immediately adjacent mainland.

Peromyscus eremicus phaeurus Osgood†*

Type Locality.—Hacienda la Parada, San Luis Postosi, México. Range.—Middle part of Mexican tableland in States of San Luis Potosi, Zacatecas, and Nuevo León.

Peromyscus merriami merriami Mearns†*


Type Locality.—Sonoyta, Sonora, México.

Peromyscus merriami goldmani Osgood†*


Type Locality.—Alamos, Sonora, México.

Peromyscus caniceps Burt


Type Locality.—Monserrate Island, lat. 25°38′ N., long. 111°02′ W., Gulf of California, Baja California, México. Range.—Monserrate Island.

Peromyscus guardia guardia Townsend†*


Type Locality.—Angel de la Guarda Island, Gulf of California, Baja California, México. Range.—Angel de la Guarda Island.

Peromyscus guardia mejiae Burt


Type Locality.—Mejia Island, lat. 29°33′ N., long. 113°35′ W., Gulf of California, Baja California, México. Range.—Mejia Island.

Peromyscus guardia interparietalis Burt


Type Locality.—South San Lorenzo Island, lat. 28°36′ N., long. 112°51′ W., Gulf of California, Baja California, México. Range.—South San Lorenzo Island.

Peromyscus dickeyi Burt


Type Locality.—Tortuga Island, lat. 27°21′ N., long. 111°54′ W., Gulf of California, Baja California, México. Range.—Tortuga Island.
Peromyscus pembertonii Burt


Type Locality.—San Pedro Nolasco Island, lat. 27°58' N., long. 111°24' W., Gulf of California, Sonora, México. Range.—San Pedro Nolasco Island.

Peromyscus stephani Townsend†


Type Locality.—San Esteban Island, Gulf of California, Baja California, México. Range.—San Esteban Island.

Subgenus *PEROMYSCUS* Gloger


Peromyscus maniculatus maniculatus (Wagner) *


Type Locality.—The Moravian Settlements in Labrador. Range.—From east end of Hudson Strait (Port Burwell, Quebec) south along Labrador coast to Strait of Belle Isle, west through Hudsonian Zone to southeast side of Hudson Bay, and around James Bay to west side of Hudson Bay; south to southern border of Hudsonian Zone in Quebec and northern Ontario to north shore of Lake Superior (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 135, Jan. 24, 1947).

Peromyscus maniculatus plumbeus C. F. Jackson *


Type Locality.—Pigou River, north shore of the Gulf of St. Lawrence, Saguenay County, Quebec, Canada. Range.—From Pigou River westward to Bay of Seven Islands; limits of range unknown.

Peromyscus maniculatus anticostiensis Moulthrop


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Type Locality.—Fox Bay, eastern end of Anticosti Island, Gulf of St. Lawrence, Quebec, Canada. Range.—Known only from type locality, but undoubtedly ranging over all of Anticosti Island, since Fox Basin region is typical of entire island.

**Peromyscus maniculatus eremus** Osgood†*


*Type Locality.*—Pleasant Bay, Grindstone Island, Magdalen Islands, Quebec, Canada. Range.—Grindstone Island.

**Peromyscus maniculatus abietorum** Bangs*


**Peromyscus maniculatus argentatus** Copeland and Church*


*Type Locality.*—Grand Harbor, Grand Manan Island, New Brunswick, Canada. Range.—Grand Manan Island.

**Peromyscus maniculatus gracilis** (Le Conte) †*


**Peromyscus maniculatus nubiterrae** Rhoads*


*Type Locality.*—Summit of Roan Mountain, Mitchell County, N. C. Altitude, 6,370 feet. Range.—Allegheny and Blue Ridge Mountains and adjacent Ranges

**Peromyscus maniculatus borealis** Mearns*


**Peromyscus maniculatus algidus** Osgood†*


*Type Locality.*—Head of Lake Bennett (site of old Bennett City), British Columbia, Canada. *Range.*—Southern Alaska near head of Lynn Canal (Haines, Skagway, White Pass), northwestern British Columbia west of northern part of Coast Range (Bennett and Cheonnee Mountains), and southwestern Yukon from Lake Bennett to lower part of Lewes River (Lake Tagish, Whitehorse) and to Lake Dezadeash, 60 miles west of Whitehorse, at headwaters of Alsek River (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 136, Jan. 24, 1947).

**Peromyscus maniculatus hylaeus** Osgood†*


*Type Locality.*—Hollis, Kasaan Bay, Prince of Wales Island, Alaska. *Range.*—Islands and coast of southeast Alaska west and northwest of range of *macrorhinus*, including Prince of Wales, Kupreanof, Mitkof, and Admiralty Islands, and mainland coast from Lynn Canal to Frederick Sound.

**Peromyscus maniculatus macrorhinus** (Rhoads) *


Type Locality.—North Pacific Salmon Cannery, mouth of Skeena River, British Columbia, Canada. Range.—Mainland coast of southern Alaska and some adjacent islands (Revillagigedo, Woronkofski, Wrangell) and southward along northwest coast of British Columbia (Metlakatla, Port Simpson; lower Skeena River, Dean Channel, mouth of Dean River, Eucott Bay Hot Springs, Kimsquit, Port John, to Calvert Island and Rivers Inlet), intergrading with oreas in southern part of its range and with hylaecus in southern Alaska (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 140, Jan. 24, 1947; see also McCabe and Cowan, Trans. Roy. Canadian Inst., vol. 25, pp. 168–196, February 1945).

*Peromyscus maniculatus keeni* (Rhoads)


Type Locality.—Massett, Graham Island, Queen Charlotte Islands, British Columbia, Canada. Range.—Moresby and Graham Islands, Queen Charlotte Islands.

*Peromyscus maniculatus maritimus* McCabe and Cowan


Type Locality.—Largest of Moore Islands, British Columbia, Canada. Range.—Moore Island, British Columbia.

*Peromyscus maniculatus pluvialis* McCabe and Cowan


Type Locality.—Northern Island of Goose Island Group, lat. 52° N., long. 128° 31’ W., British Columbia, Canada. Range.—Restricted to type locality.

*Peromyscus maniculatus rubriventer* McCabe and Cowan


Type Locality.—Ruth Island, the small, westernmost member of Hunter Island complex, British Columbia, Canada. Range.—Ruth, Hunter, Hunter “B”, Smythe, Townsend, Reginald, and in slightly modified form on Campbell, Dufferin, and Horsfall Islands. The Hecate Island and Chaffield Island *Peromyscus*, while intermediate, are closer to this race than to *macrorhinus*.

*Peromyscus maniculatus cancrivorus* McCabe and Cowan


Type Locality.—Table Island, Queen Charlotte Sound, British Columbia, Canada. Range.—Confined to Table Island.

*Peromyscus maniculatus isolatus* Cowan


Type Locality.—Pine Island, Queen Charlotte Sound, off north end of Vancouver Island, British Columbia, Canada. Range.—Pine Island and Nigei Island, British Columbia.

Peromyscus maniculatus balaclavae McCabe and Cowan


Type Locality.—Balaclava Island, British Columbia, Canada. Range.—Balaclava and Hope Islands of Gordon Group, adjacent to northern Vancouver Island, British Columbia.

Peromyscus maniculatus saxamans McCabe and Cowan


Type Locality.—Duncan Island, British Columbia, Canada. Range.—Duncan and Heard Islands, and in slightly modified form on Bell and Hurst islands, all of Gordon Group.

Peromyscus maniculatus doylei McCabe and Cowan


Type Locality.—Doyle Island, Gordon Group, British Columbia, Canada. Range.—So far as known confined to Doyle Island, adjacent to northern tip of Vancouver Island.

Peromyscus maniculatus georgiensis Hall


Type Locality.—Vananda, Texado Island, Georgia Strait, British Columbia, Canada. Range.—Known from Savary, Texada, Lasqueti, Thormanby, and Bowen Islands, in Georgia Strait.

Peromyscus maniculatus saturatus Bangs


Type Locality.—Saturna Island, Gulf of Georgia, halfway between cities of Victoria and Vancouver, British Columbia, Canada. Range.—Confined to Saturna Island.

Peromyscus maniculatus interdictus Anderson


Type Locality.—Forbidden Plateau, lat. 49°42' N., long. 125°25' W., near eastern end of Strathcona Park, north of Mount Albert Edward, and about 17 miles west of Comox, Vancouver Island, British Columbia, Canada. Altitude, about 4,200 feet. Range.—Mountains of central and northern Vancouver Island, west to coast on Nootka Sound, and on northern coast (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 139, Jan. 24, 1947).
Peromyscus maniculatus angustus Hall*


Type Locality.—Beaver Creek, 15 miles northwest of Alberni, Vancouver Island, British Columbia, Canada. Range.—Restricted to Vancouver Island, on seacoast and at lower levels in interior, along east coast as far north as Sayward, and on west coast to Nootka Sound (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 136, Jan. 24, 1947).

Peromyscus maniculatus oreas Bangs*


Peromyscus maniculatus alpinus Cowan*


Type Locality.—Mount Revelstoke, 19 miles northeast of Revelstoke, British Columbia, Canada. Altitude, 6,000 feet. Range.—Definitely known only from vicinity of type locality, and probably does not occur outside of Selkirk Range (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 136, Jan. 24, 1947).

Peromyscus maniculatus artemisiae (Rhoads) *


cept in Sawtooth and Salmon River Mountains, Idaho (Davis, The Recent mammals of Idaho, p. 290, Apr. 5, 1939), and through western Montana to northwestern Wyoming.

**Peromyscus maniculatus serratus** Davis*


*Type Locality.*—Mill Creek, 14 miles west of Challia, Custer County, Idaho. Altitude, 8,370 feet. *Range.*—Sawtooth and Salmon River Mountains in central Idaho; limits of range unknown (Davis, loc. cit.).

**Peromyscus maniculatus hollisteri** Osgood†*


**Peromyscus maniculatus austerus** (Baird) †*


**Peromyscus maniculatus rubidus** Osgood†*


*Type Locality.*—Mendocino City, Mendocino County, Calif. *Range.*—From Puget Sound, Wahkiakum County, Wash. (Dalquest, Univ. Kansas Publ. Mus. Nat. Hist., vol. 2, p. 331, Apr. 9, 1948), southward through coast region of Oregon, east, except in upper Rogue River Valley, to west slope of Cascades (V. Bailey, North Amer. Fauna, No. 55 (June), p. 182, Aug. 29, 1936) and narrow humid northwest coast belt of California to Golden Gate, Marin County; also locally in redwood belt south of San Francisco Bay from Woodside, San
Mateo County, south as far as Sur, Monterey County; but these southward populations are intermediate in characters toward gambelli (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 173, Sept. 26, 1933).

**Peromyscus maniculatus gambelli** (Baird)†*


**Peromyscus maniculatus streatori** Nelson and Goldman†*


**Type Locality.**—San Miguel Island, Santa Barbara County, Calif. **Range.**—San Miguel Island.

**Peromyscus maniculatus sanctacrosae** von Bloeker*


**Type Locality.**—Elderberry Canyon, Santa Rosa Island, Santa Barbara County, Calif. **Range.**—Santa Rosa Island.

**Peromyscus maniculatus santacruzae** Nelson and Goldman†*


**Type Locality.**—Santa Cruz Island, Santa Barbara County, Calif. **Range.**—Santa Cruz Island.

**Peromyscus maniculatus exterus** Nelson and Goldman†*


**Type Locality.**—San Nicolas Island, Ventura County, Calif. **Range.**—San Nicolas Island.
**Peromyscus maniculatus anacapae** von Bloeker


*Type Locality.*—Fish Camp, West Anacapa Island, Ventura County, Calif. *Range.*—East, Middle, and West Anacapa Islands, Ventura County.

**Peromyscus maniculatus elusus** Nelson and Goldman†


*Type Locality.*—Santa Barbara Island, Ventura County, Calif. *Range.*—Santa Barbara Island.

**Peromyscus maniculatus catalinae** Elliot*


*Type Locality.*—[Near Avalon], Santa Catalina Island, Los Angeles County, Calif. *Range.*—Santa Catalina Island.

**Peromyscus maniculatus elementis** Mearns†


*Type Locality.*—San Clemente [more exactly, Pyramid Cove, southeast end], Los Angeles County, Calif. *Range.*—San Clemente Island.

**Peromyscus maniculatus rufinus** (Merriam)†


*Type Locality.*—San Francisco Mountain, Coconino County, Ariz. Altitude, 9,000 feet. *Range.*—Southern Rocky Mountain region, including greater part of central and western Colorado, except northwestern Counties (Warren, The Mammals of Colorado . . ., p. 199, 1942); in Utah, high plateaus south to Fish Lake Plateau, Uinta Mountains except at lower elevations, and southeastern Utah east of Colorado River and north of San Juan Valley (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 79, Jan. 15, 1951); scattered peaks and ranges in northern and eastern Arizona south to Chiricahua Mountains; and south in elevated part of northern and western New Mexico to Mogollon and Sacramento Mountains and east to Sierra Grande region (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 143, Mar. 1, 1932).

**Peromyscus maniculatus gunnisoni** Goldman†


*Type Locality.*—Gunnison Island, Great Salt Lake, Box Elder County, Utah. Altitude, about 4,300 feet. *Range.*—Gunnison Island.
Peromyscus maniculatus inclarus Goldman† *

Type Locality.—Fremont Island, Great Salt Lake, Weber County, Utah. Altitude, about 4,250 feet. Range.—Fremont Island.

Peromyscus maniculatus osgoodi Mearns*


Peromyscus maniculatus nebrascensis (Coues) *


Peromyscus maniculatus bairdii (Hoy and Kennicott) *

Type Locality.—Bloomington, McLean County, Ill. Range.—Prairie region of upper Mississippi Valley from eastern Kansas (Hibbard, Trans. Kansas Acad. Sci., vol. 47, p. 78, September 1944) and Missouri northward to southwestern Manitoba, Canada; eastward through Iowa, Minnesota, southern Wisconsin,
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Peromyscus maniculatus ozarkiarum Black*


_Type Local._—Three miles south of Winslow, Washington County, Ark. _Range._—In Arkansas, known from Winslow south to Crawford–Washington County line, from Huntsville in Madison County, and from Gravette in Benton County; westward into eastern Oklahoma, except extreme southeastern corner (Blair, Amer. Midl. Nat., vol. 22, No. 1, p. 119, July 1939). Probably ranges throughout most or all of Arkansas and southern Missouri Ozarks.

Peromyscus maniculatus pallescens J. A. Allen*


_Type Local._—San Antonio, Bexar County, Tex. _Range._—Central Texas, from vicinity of northern boundary at Gainesville south to region immediately west of Corpus Christi Bay. Zonal range, Lower Sonoran.

Peromyscus maniculatus blandus Osgood†*


_Type Local._—Escalón, Chihuahua, México. _Range._—Lower Sonoran Zone of western Texas from Pecos Valley westward; north along Pecos and Rio Grande Valleys of southern New Mexico to about lat. 34° N., and westward through southwestern New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 147, Mar. 1, 1932) to southeastern Arizona (Cahalane, Journ. Mamm., vol. 20, No. 4, p. 433, Nov. 14, 1939); and south in México east of Sierra Madre in Chihuahua, southern Coahuila, southwestern Nuevo León, western Tamaulipas, northwestern San Luis Potosí, Durango, and Zacatecas.

Peromyscus maniculatus fulvus Osgood†*


_Type Local._—City of Oaxaca, Oaxaca, México. _Range._—Southeastern Mexico, in parts of Oaxaca, Puebla, Veracruz, Tlaxcala, México and Hidalgo,
extending from city of Oaxaca north to vicinity of Pachuca, Hidalgo. Zonal range, Lower Sonoran.

**Peromyscus maniculatus labecula** Elliot*


**Peromyscus maniculatus sonoriensis** (Le Conte)†**


*Type Locality.—*Santa Cruz, Sonora, México. *Range.—*Narrow strip along northern border of Sonora, México, east as far as Sierra de los Patagones (Burt, Univ. Michigan Mus. Zool. Misc. Publ. 39, p. 58, Feb. 15, 1938); southern, western, and northern Arizona; northeastern Baja California east of Sierra San Pedro Mártir; Colorado and Mohave Deserts, and adjacent mountain ranges to westward, north through Inyo region along eastern boundary of California to Lassen County; westward from valley of Colorado River to western slopes of inner Coast Ranges in western San Diego County, to and including San Jacinto Mountains, most of San Bernardino Mountain area; northwest across Tehachapi country to Mount Pinos, Ventura County, over into southern rim of San Joaquin Valley as far as Carrizo Plain, in western Kern County; and north over high southern Sierra Nevada (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 174, Sept. 26, 1933); Nevada, except northwestern part (Hall, Mammals of Nevada, p. 515, July 1, 1946); Great Basin portion of southern Idaho (Davis, The Recent mammals of Idaho, p. 292, Apr. 5, 1936); western Utah, canyon lands between high plateaus and Green and Colorado Rivers and as far north as San Juan Valley east of Colorado River (Kelson, Univ. Utah. Biol. Ser., vol. 11, No. 3, p. 79, Feb. 15, 1951).
Peromyscus maniculatus coolidgei Thomas*
*Type Locality.*—Santa Anita, cape region of Baja California, México. 
*Range.*—Greater part of Peninsula of Baja California from vicinity of southern base of Sierra San Pedro Mártir southward to Cape San Lucas.

Peromyscus maniculatus assimilis Nelson and Goldman†*
*Type Locality.*—Coronados Island, off west coast of northern Baja California, México. 
*Range.*—Coronados Island.

Peromyscus maniculatus dubius J. A. Allen*
*Type Locality.*—Todos Santos Island off west coast of northern Baja California, México. 
*Range.*—Todos Santos Island.

Peromyscus maniculatus exiguis J. A. Allen*
*Type Locality.*—San Martín Island off west coast of northern Baja California, México. 
*Range.*—San Martín Island.

Peromyscus maniculatus geronimensis J. A. Allen*
*Type Locality.*—San Gerónimo Island, off west coast of northern Baja California, México. 
*Range.*—San Gerónimo Island.

Peromyscus maniculatus dorsalis Nelson and Goldman†*
*Type Locality.*—Natividad Island, off west coast of northern Baja California, México. 
*Range.*—Natividad Island.

Peromyscus maniculatus cineritius J. A. Allen
Type Locality.—San Roque Island, Baja California, México. Range.—San Roque Island.

**Peromyscus maniculatus magdalenae** Osgood†*


Type Locality.—Magdalena Island, off west coast of southern Baja California, México. Range.—Magdalena Island and a narrow strip of adjacent mainland of Baja California.

**Peromyscus maniculatus margaritae** Osgood†*


Type Locality.—Margarita Island, off west coast of southern Baja California, México. Range.—Margarita Island.

**Peromyscus maniciulatus hueyi** Nelson and Goldman*


Type Locality.—Small island in Gonzaga Bay, lat. 29° 50' N., long. 114° 20' E., east coast of Baja California, México. Range.—Known from type locality only.

**Peromyscus sejugis** Burt


Type Locality.—Santa Cruz Island, lat. 25° 17' N., long. 110° 43' W., Gulf of California, Baja California, México. Range.—Santa Cruz and San Diego Islands, Gulf of California.

**Peromyscus slevecini** Mailliard


Type Locality.—Santa Catalina Island, 17 miles northeast of Punta San Marcial, Gulf of California, Baja California, México. Range.—Santa Catalina Island.

**Peromyscus sitkensis sitkensis** Merriam†*


Type Locality.—Sitka, Alaska. Range.—Baranof and Chichagof Islands, Alaska.

**Peromyscus sitkensis oceanicus** Cowan*


Type Locality.—Forrester Island, Alaska. Range.—Restricted to Forrester Island.

**Peromyscus sitkensis prevostensis** Osgood†*


_type Locality._—Prevost Island, Queen Charlotte Group, British Columbia, Canada. _Range._—Prevost Island.

**Peromyscus polionotus polionotus** (Wagner) *


**Peromyscus polionotus phasma** Bangs*


_type Locality._—Point Romo, Anastasia Island, St. Johns County, Fla. _Range._—Anastasia Island.

**Peromyscus polionotus decoloratus** A. H. Howell†*


_type Locality._—Ponce Park, near Mosquito Inlet, Volusia County, Fla. _Range._—Probably occurs from Mosquito Inlet north to Matanzas Inlet, Fla.

**Peromyscus polionotus niveiventris** (Chapman) *


**Peromyscus polionotus rhoadsi** Bangs*


*Peromyscus polionotus peninsularis* A. H. Howell*


Type Locality.—Saint Andrews Point Peninsula, Bay County, Fla. Range.—Known only from type locality and Cape San Blas, Fla.

*Peromyscus polionotus albifrons* Osgood*


*Peromyscus polionotus leucocephalus* A. H. Howell†*


Type Locality.—Santa Rosa Island (opposite Camp Walton), Santa Rosa County, Fla. Range.—Santa Rosa Island.

*Peromyscus melanotis* J. A. Allen and Chapman*


Type Locality.—Las Vegas, Veracruz, México. Range.—Higher slopes of principal mountains of México north of States of Guerrero and Oaxaca. Extending along Cordillera of Veracruz; westward from Volcán de Popocatépetl to El Nevado de Colima; and northward into Sierra Madre of Durango and Chihuahua. Zonal range, Transition and Canadian; vertical range, from 7,000 to 12,000 feet altitude.

leucopus—group

*Peromyscus leucopus leucopus* (Rafinesque) *


Type Locality.—Pine barrens of Kentucky. Range.—Western Kentucky and western Tennessee (Kellogg, Proc. U. S. Nat. Mus., vol. 86, p. 279, Feb. 14,
1939) west through Arkansas to southeastern Oklahoma (Blair, Amer. Mid. Nat., vol. 22, No. 1, p. 120, July 1939), south through western and central Louisiana (Lowery, Occ. Pap. Mus. Zool. Louisiana State Univ. No. 13, p. 243, Nov. 22, 1943) and east through northern Mississippi, Alabama, Georgia, and around southern end of Allegheny Mountains to eastern Virginia.

**Peromyscus leucopus novoaracensis** (Fischer) *

1829. [*Mus. sylvaticus*] & *novoaracensis* Fischer, Synopsis Mammalium, p. 318.


**Peromyscus leucopus caudatus** R. W. Smith*


**Peromyscus leucopus ammodytes** Bangs*


**Peromyscus leucopus fusus** Bangs*


*Type Locality.*—West Tisbury, Martha’s Vineyard, Dukes County, Mass. *Range.*—Island of Martha’s Vineyard.

**Peromyscus leucopus aridulus** Osgood†*


**Peromyscus leucopus ochraceus Osgood†**


**Peromyscus leucopus arizonae (J. A. Allen)***


**Peromyscus leucopus tornillo Mearns†**


**Peromyscus leucopus texanus (Woodhouse) †***


*Type Locality.*—Probably vicinity of Mason, Mason County, Tex. *Range.*—Eastern México and central Texas, west to vicinity of mouth of Pecos River (see Borell and Bryant, Univ. California Publ. Zool., vol. 48, No. 1, p. 32, Aug. 7, 1942) and east to west side of Galveston Bay; north into western Oklahoma.
RODENTIA: CRICETIDAE


**Peromyscus leucopus brevicaudus** Davis*


**Peromyscus leucopus mesomelas** Osgood†*


**Peromyscus leucopus incensus** Goldman†*


*Type Locality.*—Metlatoyuca, Puebla, México. Altitude, 800 feet. *Range.*—Tropical lowlands, bordering steep eastern slope of interior plateau, from southern Tamaulipas (Altamira) and eastern San Luis Potosí south through eastern Puebla to southern Veracruz and northeastern Oaxaca (Guichicovi).

**Peromyscus leucopus affinis** (J. A. Allen) †*


**Peromyscus leucopus castaneus** Osgood†*


**Peromyscus leucopus cozumelae** Merriam†*


*Type Locality.*—Cozumel Island, Quintana Roo, México.  *Range.*—Cozumel Island.

**Peromyscus gossypinus gossypinus** (Le Conte) †*


**Peromyscus gossypinus megacephalus** (Rhoads) *


*Type Locality.*—Woodville, Jackson County, Ala.  *Range.*—Northern Alabama and western Tennessee, west through Arkansas to eastern Oklahoma, and thence south through eastern Texas and western Louisiana.

**Peromyscus gossypinus palmarius** Bangs*


*Type Locality.*—Oak Lodge, East Peninsula, opposite Micco, Brevard County, Fla.  *Range.*—Peninsular Florida.

**Peromyscus gossypinus telmaphilus** Schwartz*


*Type Locality.*—Royal Palm Hammock, Collier County, Fla.  *Range.*—Southwest portion of Florida Peninsula, at least from Naples, Collier County, on the north, south and east to vicinity of Monroe Station, Collier County, but not including 10,000 Island region.

**Peromyscus gossypinus allapaticola** Schwartz*

Type Locality.—Twelve miles northeast of Rock Harbor, Key Largo, Monroe County, Fla. Range.—Known from Key Largo only.

Peromyscus gossypinus restrictus A. H. Howell†*

Type Locality.—Chadwick Beach, near Englewood, Sarasota County, Fla. Range.—Known from type locality only.

Peromyscus gossypinus anastasae Bangs*


Type Locality.—Point Romo, Anastasia Island, St. Johns County, Fla. Range.—Sandy islands off eastern coast of Georgia and Florida; possibly also parts of mainland.

boylii—group

Peromyscus boylii boylii (Baird)‡*


Type Locality.—Middle Fork of American River, near present town of Auburn, El Dorado County, Calif. Range.—Chiefly western flank of Sierra Nevada, from Kings River Canyon and Dunlap, Fresno County, north to vicinity of Mount Shasta, thence west to Trinity Mountain region and south along inner Coast Ranges nearly to San Francisco Bay, Calif. (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 176, Sept. 26, 1933); in Nevada known only from eastern shore of Lake Tahoe, Washoe County (Hall, Mammals of Nevada, p. 519, July 1, 1946).

Peromyscus boylii utahensis Durrant*

Type Locality.—Half mile above lower power station, Millcreek Canyon, Salt Lake County, Utah. Altitude, 5,800 feet. Range.—Utah eastward to Colorado and Green Rivers and westward to western borders of area formerly occupied by Pleistocene Lake Bonneville; limits unknown outside of Utah.

Peromyscus boylii rowleyi (J. A. Allen)†

1893. Sitomys major Rhoads, Amer. Nat., vol. 27, p. 331, September 1893. (Squirrel Inn, San Bernardino County, Calif.)


**Type Locality.**—Noland Ranch, on north side of San Juan River, one and one half miles above present “Four Corners,” San Juan County, Utah (see Hall, Univ. California Publ. Zool., vol. 37, No. 1, p. 2, Apr. 10, 1931).

**Range.**—Mountains of northern Baja California; mountains of southern half of California from Mexican border (east to Mountain Spring, extreme eastern San Diego County) through Coast Ranges to and through Monterey County (as far as Seaside); east around southern end of San Joaquin Valley (through Tehachapi Mountain region) to southern Sierra Nevada; north on west flank of Sierra Nevada at least to Kaweah River, Tulare County, and along east side of Onion Valley, near Independence, Inyo County; also on certain mountain ranges southeast of Owens Valley; northern portion of Panamint Mountains, Inyo County; and Providence Mountains, eastern San Bernardino County (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 176, Sept. 24, 1933); Lincoln and Clark Counties in southern Nevada (Hall, Mammals of Nevada, p. 519, July 1, 1946); southeastern Utah, east of Colorado and Green Rivers (Durrant, Proc. Biol. Soc. Washington, vol. 59, p. 167, Dec. 23, 1946); southern Colorado, Arizona, New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 154, Mar. 1, 1932), western Texas (see Borell and Bryant, Univ. California Publ. Zool., vol. 48, No. 1, pp. 32–33, Aug. 7, 1942) and south in México chiefly on eastern slopes of Sierra Madre to central Zacatecas and northwestern San Luis Potosí; and west in northeastern Sonora as far as Sáric (Burt, Univ. Michigan Mus. Zool. Misc. Publ. 39, p. 59, Feb. 15, 1938).

*Peromyscus boylii* glasselli Burt


**Type Locality.**—San Pedro Nolasco Island, lat. 27°58' N., long. 111°24' W., Gulf of California, Sonora, México. **Range.**—San Pedro Nolasco Island.

*Peromyscus boylii* attwateri J. A. Allen*


*Type Locality.*—Turtle Creek, Kerr County, Tex. *Range.*—South-central and parts of western Texas; north to eastern Oklahoma, northwestern Arkansas, central Missouri, and southeastern Kansas. Chiefly confined to rocky cliffs in Upper Sonoran Zone.

**Peromyscus boylii spicilegus** J. A. Allen*


**Peromyscus boylii simulus** Osgood†*


**Peromyscus boylii madrensis** Merriam†*


**Peromyscus boylii evides** Osgood†*


*Type Locality.*—Juquila, Oaxaca, México. *Range.*—Western México at lower altitudes than *spicilegus*; known from localities in States of Guerrero, Oaxaca, and Michoacán.

**Peromyscus boylii levipes** Merriam†*


*Type Locality.*—Mount Malinche, Tlaxcala, México. Altitude, 8,400 feet. 


*Peromyscus boylii aztecus* (Saussure) *


*Type Locality.*—Southern México. 

*Range.*—Lower Austral Zone (and possibly part of Humid Tropical Zone) in parts of Veracruz and Puebla, México.

*Peromyscus boylii cordillerae* Dickey


*Type Locality.*—Mount Cacaguatique, San Miguel, El Salvador. Altitude, 3,500 feet. 

*Range.*—Known from type locality only.

*Peromyscus boylii sacarensis* Dickey


*Type Locality.*—San José del Sacare (San José del Sacario of maps), Chalatenango, El Salvador. Altitude, 3,600 feet. 


*Peromyscus perfulvus* Osgood


*Type Locality.*—Ten kilometers west of Apatzingán, Michoacán, México. Altitude, 1,040 feet. 

*Range.*—Known only from type locality and vicinity of Tacámbaro, Michoacán.

*Peromyscus oaxacensis* Merriam†*


*Type Locality.*—Cerro San Felipe, Oaxaca, México. Altitude, 10,000 feet. 

*Range.*—High altitudes in southern México, chiefly in Oaxaca; reappearing in mountains of central Chiapas.
Peromyscus *hylocetes* Merriam†*


*Type Locality.*—Pátzcuaro, Michoacán, México. Altitude, 8,000 feet. *Range.*—Mountainous parts of Michoacán and southern Jalisco; east to mountains near Valley of México.

Peromyscus *pectoralis pectoralis* Osgood†*


*Type Locality.*—Jalpan, Querétaro, México. *Range.*—Known from scattered localities in Sonoran Zone of eastern and central México, from central Nuevo León south to Querétaro, and thence west through southern San Luis Potosí and (probably) Guanajuato to eastern Jalisco and southern Zacatecas.

Peromyscus *pectoralis collinus* Hooper*


*Type Locality.*—San José, 12 miles northwest of San Carlos, Sierra San Carlos, Tamaulipas, México. Altitude, 2,000 feet. *Range.*—Foothills of Sierra San Carlos, Sierra de Tamaulipas, and Sierra Madre Oriental, in northeastern México. Known range from vicinity of Monterrey south to Jaumave in Sierra Madre and to vicinity of Acuña in Sierra de Tamaulipas; known vertical range from 1,300 feet at Villagran to 2,900 feet at La Vegonia mine.

Peromyscus *pectoralis eremicoides* Osgood†*


*Type Locality.*—Mapimi, Durango, México. *Range.*—North-central México, chiefly in Durango, Coahuila, and Chihuahua; north to southern Arizona.

Peromyscus *pectoralis laceianus* V. Bailey†*


*Type Locality.*—Lacey Ranch, near Kerrville, Kerr County, Tex. *Range.*—West central Texas, from vicinity of Austin to Big Bend of Rio Grande and Culberson County (Davis and Robertson, Journ. Mamm., vol. 25, No. 3, p. 269, Nov. 8, 1944).

Peromyscus *truei truei* (Shufeldt)†*


1890. *Hesperomys megalotis* Merriam†, North Amer. Fauna No. 3, p. 63, Sept. 11, 1890. (Black Tank, Little Colorado Desert, Coconino County, Ariz.)


_Type Locality._—Fort Wingate, McKinley County, N. Mex. _Range._—From California, east of crest of Sierra Nevada-Cascade Chain and Mohave Desert, across western and southern Nevada, southern and eastern Utah, northern, central, and southeastern Arizona, to southwestern Wyoming and western and southeastern Colorado, extreme northwestern Oklahoma, and to New Mexico, except in eastern parts; vertical range from 3,150 feet at Camp Verde, Ariz., to 11,000 feet in Charleston Mountains, Nev.; zonal range, Upper Sonoran, rarely entering Lower Sonoran or Transition (Hoffmeister, Illinois Biol. Monogr., vol. 21, No. 4, p. 30, Nov. 12, 1951).

**Peromyscus truei nevadensis** Hall and Hoffmeister*


_Type Locality._—Half a mile west of Debbs Creek, Pilot Peak, Elko County, Nev. Altitude, 6,000 feet. _Range._—Northeastern and east-central Nevada and western Utah, particularly slopes bordering Pleistocene Lake Bonneville. Known limits of occurrence: At north, Raft River Mountains, Box Elder County, Utah, and Pilot Peak, Elko County, Nev.; at west, eastern slopes of Ruby Mountains, Elko and White Pine Counties, Nev.; at south, Pine Valley, Utah, and northeastern Lincoln County, Nev.; at east, vicinity of Escalante, Garfield County, and Provo, Utah County, Utah; vertical range from near 5,000 feet near Draper to 7,500 feet near Lehman Cave; zonal range, Upper Sonoran; possibly enters Transition (Hoffmeister, Illinois Biol. Monogr., vol. 21, No. 4, p. 41, Nov. 12, 1951).

**Peromyscus truei preblei** V. Bailey†*


_Type Locality._—Crooked River, 20 miles southeast of Prineville [= 12 miles south and 6 miles east of Prineville], Crook County, Oreg. _Range._—Known only from central Oregon, along Crooked River southeast of Prineville and in Deschutes Valley at Warm Springs; vertical range from near 1,500 feet at Warm Springs to 3,400 feet along Crooked River; zonal range, Upper Sonoran (Hoffmeister, Illinois Biol. Monogr., vol. 21, No. 4, p. 45, Nov. 12, 1951).

**Peromyscus truei sequoiensis** Hoffmeister*


_Type Locality._—One mile west of Guerneville, Sonoma County, Calif. _Range._—Narrow humid northwest coastal belt of California and extreme southwest Oregon, west of crest of Coast Range, from Galice, Oreg., south to Marin County, Calif. Eastward known limits of occurrence: Near Happy Camp and Taylor Creek, Siskiyou County; 3 miles west of summit of Mount Sanhedrin, Mendocino County; Freestone, Sonoma County; and Ross, Marin County; vertical range from 50 feet at Guerneville, Sonoma County, to 5,500 feet at Taylor Creek, Salmon Mountains, Siskiyou County; zonal range, Transition;
possibly entering Canadian, as in Salmon Mountains (Hoffmeister, Illinois Biol. Monogr., vol. 21, No. 4, p. 53, Nov. 12, 1951).

**Peromyscus truei gilberti** (J. A. Allen) *


*Type Locality.*—Bear Valley, San Benito County, Calif. *Range.*—Southwestern (but not coastal) Oregon and foothills bordering Great Valley of California (except around southern end of San Joaquin Valley) and in Coast Range south from area of Monterey Bay to Ventura. In particular, from Josephine County, Oreg., south through Shasta Valley of California above western flank of Sierra Nevada to Fresno County, possibly central Tulare County, and along eastern flank of Coast Range east of Humboldt, Mendocino, (eastern) Sonoma, and Marin Counties, and Santa Clara Valley to Temblor Range, and in Outer Coast Range south of Santa Cruz County to Matilija, Ventura County; locally within Great Valley on Marysville Buttes, Sutter County; vertical range from near sea level at Seaside to 5,900 feet on Santa Lucia Peak, Monterey County; zonal range, Upper Sonoran, rarely Transition (Hoffmeister, Illinois Biol. Monogr., vol. 21, No. 4, p. 58, Nov. 12, 1951).

**Peromyscus truei dyselius** Elliot *


*Type Locality.*—Portola, San Mateo County, Calif. *Range.*—In California, Santa Cruz Mountains and slopes to westward in San Mateo, Santa Clara, and Santa Cruz Counties; vertical range from near sea level at Redwood City and Palo Alto to near 2,787 feet on Black Mountain; zonal range, Upper Sonoran and Transition (Hoffmeister, loc. cit.).

**Peromyscus truei montipinoris** Elliot *


*Type Locality.*—Lockwood Valley, near Mount Pinos, Ventura County, Calif. *Range.*—In California, from Sierra Nevadas south of Kaweah River (and west of south fork of Kern river) south in Tehachapi Mountains to Calabasas, Los Angeles County, and northwest in San Emigdio and Temblor Ranges to lat. 35° 20' N.; vertical range from 1,200 feet at Calabasas to 10,650 feet along Whitney Creek, Tulare County; zonal range, Lower Sonoran to Transition, locally Canadian; principally Upper Sonoran (Hoffmeister, loc. cit.).
**Peromyscus truei chlorus** Hoffmeister*


*Type Locality.*—Lost Horse Mine, southern end of Little San Bernardino Mountains (69 miles east of Riverside), Riverside County, Calif. *Range.*—Interior mountain and adjacent slopes of southern California, particularly those mountain ranges bordering the western edge of Mohave and Colorado Deserts, including eastern San Gabriel and San Bernardino, Little San Bernardino, San Jacinto, and Santa Rosa Mountains; vertical range from 2,000 feet at Hesperia to over 7,500 feet at Saragossa Spring, San Bernardino County; zonal range, Lower and Upper Sonoran; possibly enters Transition (Hoffmeister, Illinois Biol. Monogr., vol. 21, No. 4, p. 71, Nov. 12, 1951).

**Peromyscus truei martirensis** (J. A. Allen) *


*Type Locality.*—Sierra San Pedro Mártir, Baja California, México. Altitude, 7,000 feet. *Range.*—Laguna Mountains of southern California and Sierra Juárez and Sierra San Pedro Mártir of northern Baja California; vertical range from 4,200 feet at Los Pozos to 8,500 feet at Vallecitos; zonal range, Upper Sonoran and Transition (Hoffmeister, Illinois Biol. Monogr., vol. 21, No. 4, p. 75, Nov. 12, 1951).

**Peromyscus truei lagunae** Osgood†


*Type Locality.*—La Laguna, Sierra Laguna, Baja California, México. *Range.*—Restricted to Laguna and Victoria Mountains of southern Baja California; vertical range from 4,000 feet at El Sauce [=El Sauz] to 6,000 feet in Laguna Valley; zonal range, Upper Sonoran (Hoffmeister, Illinois Biol. Monogr., vol. 21, No. 4, p. 76, Nov. 12, 1951).

**Peromyscus truei erasmus** Finley*


*Type Locality.*—West side of Río de la Saucida, 8 miles northeast of Durango, Durango, México. Altitude, 6,200 feet. *Range.*—Known from type locality only.

**Peromyscus truei gentilis** Osgood†


**Peromyscus truei gratus** Merriam†*


Type Locality.—Tlalpan, Distrito Federal, México. Range.—South-central México, from central Jalisco, southern Querétaro, and northern Hidalgo, south to central Oaxaca (Hoffmeister, Illinois Biol. Monogr., vol. 21, No. 4, p. 50, Nov. 12, 1951).

**Peromyscus nasutus nasutus** (J. A. Allen) *


**Peromyscus nasutus comanche** Blair


Type Locality.—Tule Canyon, Briscoe County, Tex. Range.—Tule Canyon and adjacent canyons along Break of Plains in Briscoe and Garza Counties, western Texas.

**Peromyscus nasutus griseus** Benson


Type Locality.—Malpais, 3½ miles west of Carrizozo, Lincoln County, N. Mex. Altitude, 5,150 feet. Range.—Lava beds in Tularosa Basin, N. Mex.

**Peromyscus polius** Osgood†*


Type Locality.—Colonia García, Chihuahua, México. Range.—Known from type locality only.

213756—55—33
Peromyscus difficilis difficilis (J. A. Allen) *

Type Locality.—Sierra de Valparaíso, Zacatecas, México. Range.—Sierra Madre from southwestern Chihuahua south through Durango and Zacatecas, then east and southeast to certain mountainous parts of Nuevo León (Koestner, Journ. Mamm., vol. 25, No. 3, p. 288, Nov. 8, 1944; Hooper, Journ. Mamm., vol. 28, No. 1, p. 51, Feb. 17, 1947), Guanajuato and northern Hidalgo, and thence north through parts of San Luis Potosí to mountains of southern Coahuila. Zonal range, chiefly Transition.

Peromyscus difficilis amplus Osgood†*

Type Locality.—Coixtlahuaca, Oaxaca, México. Range.—Mountains of north-central Oaxaca, Puebla, southeastern Veracruz, Tlaxcala (Davis, Journ. Mamm., vol. 25, No. 4, p. 396, Dec. 12, 1944) and southern Hidalgo, México.

Peromyscus difficilis felipensis Merriam†*

Type Locality.—Cerro San Felipe, Oaxaca, México. Altitude, 10,200 feet. Range.—High elevations (8,000 feet to 11,000 feet) on mountains surrounding Valley of México; reappearing at similar elevations in mountains northeast of city of Oaxaca.

Peromyscus bullatus Osgood†*

Type Locality.—Perote, Veracruz, México. Range.—Recorded also from Limón, Veracruz, México (Hoffmeister, Illinois Biol. Monogr., vol. 21, No. 4, p. 25, Nov. 12, 1951).

melanophrys—group

Peromyscus melanophrys melanophrys (Coues) †*
RODENTIA: CRICETIDAE


*Type Locality.*—Santa Efigenia, Oaxaca, México. *Range.*—Southern part of Mexican Plateau, as far south as southern Chiapas. Marginal localities are: In Distrito Federal, Contreras (2,600 meters); in Puebla, Chalchicomula and Tehuacán (1,700 meters); in Oaxaca, Teotitlán (950 meters), 1 km. north-northwest of Cuicatlán (560 meters), and San Miguel; in Chiapas, San Bartolomé and San Vicente; in Oaxaca, near Tehuantepec, Las Vacas, near Totalapa, and San Bartolo [=Coyotepec]; in Guerrero, 15 miles south of Chilpancingo (4,500 feet), Los Sabinos (1,210 meters), and 14 miles south and 1 mile west of Iguala (2,600 feet) (Baker, Univ. Kansas Publ. Nat. Hist., vol. 5, No. 18, p. 254, Apr. 10, 1952).

*Peromyscus melanophrys zamorae* Osgood†*


*Peromyscus melanophrys consobrinus* Osgood‡*


*Type Locality.*—Berriozábal, Zacatecas, México. *Range.*—Northern part of Mexican table-land. Marginal localities are: In Zacatecas, 2 miles east-southeast of Troncosa (7,000 feet); in San Luis Potosí, Hacienda La Parada, 2 miles northwest of Tepeyac (3,400 feet), and 14 miles north and 29 miles west of Ciudad del Maíz; in Guanajuato, Silao; in Zacatecas, 3 miles southwest of Jalpa (4,600 feet) and Monte Escobedo (Baker, Univ. Kansas Publ. Mus. Nat. Hist., vol. 5, No. 18, pp. 254–255, Apr. 10, 1952).

*Peromyscus melanophrys xenurus* Osgood‡*


*Type Locality.*—Durango, Durango, México. *Range.*—Southeastern Durango. Marginal localities in Durango are: 3 miles north-northeast of Cuencame, and 4 miles west of Durango (Baker, loc. cit.).

*Peromyscus melanophrys coahuiliensis* Baker


*Type Locality.*—Seven miles south and one mile east of Gomez Farias, Coahuila, México. Altitude, 6,500 feet. *Range.*—Known only from desert areas of Lower Sonoran Zone in southeastern Coahuila; probably found in similar country in other parts of southern Coahuila and in part of southwestern Nuevo León, northern San Luis Potosí, and northeastern Zacatecas. Marginal localities in Coahuila are: 17 miles north and 8 miles west of Saltillo, 7 miles...
south and 1 mile east of Gomez Farias, and 2 miles east and ½ mile south of La Ventura.

**Peromyscus melanophrys micropus** Baker*


*Type Locality.*—Three miles north of Guadalajara, Jalisco, México. *Range.*—Eastern and central Jalisco, México. Marginal localities in Jalisco are: 2 miles northwest of Magdalena (4,500 feet), 2 miles east-southeast of Tequila (4,000 feet), 3 miles north of Guadalajara, and 4 miles northeast of Ocotlán (5,050 feet).

**Peromyscus mekiisturus** Merriam†*


*Type Locality.*—Chalchicomula, Puebla, México. Altitude, 8,400 feet. *Range.*—Known from type locality only.

**lepturus**—group

**Peromyscus lepturus** Merriam†*


*Type Locality.*—Mount Zempoaltepec, Oaxaca, México. Altitude, 8,200 feet. *Range.*—Known from type locality only.

**Peromyscus lophurus** Osgood†*


*Type Locality.*—Todos Santos, Huehuetenango, Guatemala. Altitude, 8,500 feet. *Range.*—Highlands of Chiapas, México, and of western Guatemala.

**Peromyscus hondurensis** Goodwin*


**Peromyscus simulatus** Osgood†*


*Type Locality.*—Near Jico, Veracruz, México. Altitude, 6,000 feet. *Range.*—Known from type locality only.

**Peromyscus guatemalensis guatemalensis** Merriam†*


*Type Locality.*—Todos Santos, Huehuetenango, Guatemala. Altitude, 10,000 feet. *Range.*—High altitudes of southern Chiapas and highlands of western

**Peromyscus guatemalensis tropicalis** Goodwin*


**Peromyscus nudipes nudipes** (J. A. Allen) *


**Peromyscus nudipes hesperus** Harris


**Peromyscus nudipes orientalis** Goodwin*


**Peromyscus altilaneus** Osgood†*


Type Locality.—Todos Santos, Huehuetenango, Guatemala. Altitude, 10,000 feet. Range.—Known from type locality only.

**Peromyscus furvus** J. A. Allen and Chapman*


Type Locality.—Jalapa, Veracruz, México. Range.—Known from a few localities in humid tropical parts of northern Veracruz and Puebla, México.
Peromyscus latirostris Dalquest*

*Type Locality.*—Apetesco, near Xilitla, San Luis Potosí, México. Altitude, 2,700 feet. *Range.*—Known only from a few localities near type locality, from an elevation of 2,000 to 6,000 feet, in southeastern San Luis Potosí.

**Peromyscus ochraventer** Baker

*Type Locality.*—Seventy kilometers by highway south of Ciudad Victoria and 6 kilometers west of Pan-American highway at El Carrizo, Tamaulipas, México. *Range.*—Known from type locality only; probably found in other localities along humid, east face of Sierra Madre Oriental in Tamaulipas.

**mexicanus**—group

**Peromyscus mexicanus mexicanus** (Saussure) *

*Type Locality.*—México; assumed to be vicinity of Mirador, Veracruz. [Restricted to 10 kilometers east of Mirador by Dalquest, Occ. Pap. Mus. Zool. Louisiana State Univ. No. 23, p. 8, July 10, 1950.] *Range.*—Tropical parts of eastern and southern México from northern Puebla and southward to southern Veracruz and then south and west to southern Oaxaca and northern Chiapas (Tuxtla Gutiérrez; see Hooper, Journ. Mamm., vol. 28, No. 1, p. 52, Feb. 17, 1947). Recorded also at Xilitla, San Luis Potosí, México (Dalquest, loc. cit.).

**Peromyscus mexicanus totontepecus** Merriam‡

*Type Locality.*—Totontepec, Oaxaca, México. Altitude, 6,500 feet. *Range.*—Western Veracruz and east-central Oaxaca west of range of *mexicanus*.

**Peromyscus mexicanus teapensis** Osgood†


**Peromyscus mexicanus gymnotis** Thomas*


*Peromyscus mexicanus saxatilis* Merriam†*


*Peromyscus mexicanus philombrius* Dickey


*Type Localit*y.—Los Esesmiles, Chalatenango, El Salvador. Altitude, 8,000 feet. *Range.*—Rain forest, above 8,000 feet, on range of mountains known as Los Esesmiles.

*Peromyscus mexicanus salvadorensis* Dickey*


*Type Localit*y.—Mount Cacaguatique, San Miguel, El Salvador. Altitude, 3,500 feet. *Range.*—Shaded ravines and damp jungle growth on Mount Cacaguatique, El Salvador, at altitudes ranging from 3,500 to 4,000 feet, and in dry stream beds, brush, and even up into pines on nearby Pine Peaks, Volcán Conchagua, at from 3,300 to 3,500 feet. *Zonal range,* Upper Tropical.

*Peromyscus allophylus* Osgood†*


*Type Localit*y.—Huehuetán, Chiapas, México. Altitude, 200 feet. *Range.*—Known from type locality; and recorded also at Finca Esperanza and Cerro Ovando, Chiapas (Hooper, Journ. Mamm., vol. 28, No. 1, p. 52, Feb. 17, 1947).

*Peromyscus banderanus banderanus* J. A. Allen*


*Type Localit*y.—Valle de Banderas, Nayarit, México. *Range.*—Pacific coast of México from Bahía Banderas, Nayarit, to vicinity of Acapulco, Guerrero.

*Peromyscus banderanus vicinior* Osgood†*


*Type Localit*y.—La Salada, Michoacán, México. *Range.*—Western México in Michoacán and Guerrero, occupying hot valleys immediately east of range of

**Peromyscus banderanus angelensis** Osgood†*


*Type Locality.*—Puerto Angel, Oaxaca, México. *Range.*—Coast of southern Oaxaca; known from two localities only.

**Peromyscus yucatanicus yucatanicus** J. A. Allen and Chapman*


**Peromyscus yucatanicus badius** Osgood†*


*Type Locality.*—Apazote, Campeche, México. *Range.*—Known from type locality only.

**Peromyscus stirtoni** Dickey


**Peromyscus megalops megalops** Merriam†*


*Type Locality.*—Mountains near Ozolotepec, Oaxaca, México. *Range.*—Known from type locality only.

**Peromyscus megalops auritus** Merriam†*


*Type Locality.*—Mountains 15 miles west of Oaxaca, Oaxaca, México. Altitude, 9,300 feet. *Range.*—High altitudes in mountains of western Oaxaca and southeastern Guerrero, México.

**Peromyscus megalops melanurus** Osgood†*


*Type Locality.*—Pluma, Oaxaca, México. Altitude, 4,600 feet. *Range.*—Known from type locality only.
Peromyscus melanocarpus Osgood†*
_Type Locality._—Mount Zempoaltepec, Oaxaca, México. Altitude, 8,000 feet.
*Range._—Known from upper slopes of Mount Zempoaltepec only.

Peromyscus zarhynchus Merriam†*
_Type Locality._—Tumbalá, Chiapas, México. Altitude, 5,500 feet.
*Range._—Highlands of Chiapas, México, and Guatemala.

Peromyscus grandis Goodwin
_Type Locality._—Finca Concepción, 35 miles east of Cobán, Alta Verapaz, Guatemala. Altitude, 3,750 feet.
*Range._—Known from type locality only.

Subgenus MEGADONTOMYS ‡ Merriam

Peromyscus thomasi Merriam†*
_Type Locality._—Mountains near Chilpancingo, Guerrero, México. Altitude, 9,700 feet.
*Range._—High altitudes in mountains of central Guerrero.

Peromyscus nelsoni Merriam†*
_Type Locality._—Jico, Veracruz, México. Altitude, 6,000 feet.
*Range._—Known from type locality only.

Peromyscus flavidus (Bangs) *
_Type Locality._—Bóquete, south slope of Volcán de Chiriquí, Chiriquí, Panamá.

Peromyscus pirrensis Goldman†*

‡ Revised by Osgood, North Amer. Fauna No. 28, pp. 218–222, Apr. 17, 1909.

Subgenus OCHROTOMYS 18 Osgood

1909. Ochrotomys Osgood, North Amer. Fauna No. 28, p. 222, Apr. 17, 1909. (Type, Arvicola nuttalli Harlan.)

Peromyscus nuttalli nuttalli (Harlan) *


Peromyscus nuttalli lewisi A. H. Howell†*


Type Locality.—Amelia Court House, Amelia County, south-central Virginia. Range.—South-central Virginia, from Campbell and Amelia Counties south to Brunswick County (Handley and Patton, Wild mammals of Virginia, p. 166, 1947).

Peromyscus nuttalli aureolus (Audubon and Bachman) *


Peromyscus nuttalli flammeus Goldman†*


Type Locality.—Delight, Pike County, southwestern Arkansas. Range.—Southeastern Missouri, eastern and southern Arkansas, northern Louisiana, and west to eastern Oklahoma and eastern Texas.

SUBGENUS PODOmys \textsuperscript{17} Osgood

(Type, \textit{Hesperomys floridanus} Chapman.)

\textbf{Peromyscus floridanus} (Chapman) \textsuperscript{*}

1890. \textit{Hesperomys macropus} Merriam\textsuperscript{†}, North Amer. Fauna No. 4, p. 53, Oct. 8, 1890. (Lake Worth, Palm Beach County, Fla.)

\textit{Type Locality}.—Gainesville, Alachua County, Fla. \textit{Range}.—Central part of peninsular Florida from coast to coast.

\textbf{Genus BAIOMYS \textsuperscript{18} True}


\textbf{Baiomys taylori taylori} (Thomas) \textsuperscript{*}


\textit{Type Locality}.—San Diego, Duval County, Tex. \textit{Range}.—Southern Texas from vicinity of Matagorda Bay westward to Bexar County and thence south to Rio Grande; south into Nuevo León and thence to southern Tamaulipas. Zonal range, Lower Sonoran.

\textbf{Baiomys taylori ater} Blossom and Burt


\textit{Type Locality}.—Seven miles west of Hereford, Cochise County, Ariz. \textit{Range}.—Known from type locality only, but may occur in other parts of southern Arizona and in northern Sonora east of Nogales.

\textbf{Baiomys taylori subater} (V. Bailey) \textsuperscript{†}\textsuperscript{*}


\textbf{Baiomys taylori paulus} (J. A. Allen) \textsuperscript{*}


\textsuperscript{17} Revised by Osgood, North Amer. Fauna No. 28, pp. 226-228, Apr. 17, 1909.


**Type Locality.**—Río Sestín, northwestern Durango, México. **Range.**—Lower Sonoran and Arid Tropical parts of western México, from central Chihuahua south and west through Durango, Sinaloa, and Jalisco to Colima.

*Baiomys taylori analogus* (Osgood) †*


**Type Locality.**—Zamora, Michoacán, México. **Range.**—West-central México, from Jalisco and Michoacán eastward to Valley of México.

*Baiomys musculus musculus* (Merriam) †*


*Baiomys musculus infernatis* Hooper*


**Type Locality.**—Teotitlán, Oaxaca, México. **Range.**—Arid interior basin drained by Río Salado and Río Quiotepec in northern Oaxaca and southeastern Puebla. Known vertical range from Teotitlán, 3,100 feet, Oaxaca, northwest to Tepanco, 6,000 feet, Puebla.

*Baiomys musculus pallidus* Russell*


**Type Locality.**—Twelve kilometers northwest of Axochiapan, Morelos, México. Altitude, 3,500 feet. **Range.**—Known from State of Morelos only. Probably occurs throughout Balsas Basin; specimens from Chilpancingo, Guerrero, show intergradation with *musculus*.

*Baiomys musculus brunneus* (J. A. Allen and Chapman) *


Type Locality.—Jalapa, Veracruz, México. Range.—East-central México, in slightly more humid parts than those inhabited by musculus.

Baiomys musculus nigrescens (Osgood)†*


Baiomys musculus grisescens Goldman†*


Genus ONYCHOMYS* Baird (grasshopper-mice)


*Onychomys leucogaster leucogaster* (Wied-Neuwied) *


Type Locality.—Mandan Indian village, near Fort Clark, northeastern Oliver County, N. Dak. (see V. Bailey, North Amer. Fauna No. 49 (December 1926), p. 82, Jan. 8, 1927). Range.—From Roberts County (Lake Traverse and Sisseton) in northeastern South Dakota; near West Lake Okoboji, Dickinson County, northwestern Iowa (regarded as breviauratus by Dice, Journ. Mamm., vol. 5, No. 1, p. 66, Feb. 9, 1924) ; Brown’s Valley in Traverse County and Parker’s Prairie in southeastern Otter Tail County, western Minnesota (Swanson, Minnesota Dept. Conserv. Techn. Bull. 2, p. 85, 1945) ; and Red River Valley (Hankinson and Pembina) westward in prairie region of North Dakota to Linton, Fort Clark and Minot; and northward into southwestern Manitoba (Oak Lake), north to border of Riding Mountain National Park, and intergrading with missourien-


**Onychomys leucogaster missouriensis** (Audubon and Bachman) *


*Type Locality.*—Fort Union, near present town of Buford, Williams County, N. Dak. *Range.*—Northeastern Wyoming, western North Dakota (V. Bailey, North Amer. Fauna No. 49 (December 1926), p. 84, Jan. 8, 1927), and eastern and northern Montana; north to southeastern Alberta (Calgary, Medicine Hat, Little Sandhill Creek, near Steveville) and southern Saskatchewan (Carlton, Dundurn, Indian Head, Last Mountain Lake, Osler, Weyburn, Wood Mountain, and east of Frenchman River); zonal range, chiefly arid Transition and Upper Sonoran (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 134, Jan. 24, 1947); east to Glen Ullin, N. Dak.; and west and south along Missouri River to Bozeman, Mont.; and southwest along branches of Powder and Little Missouri Rivers into northeastern Wyoming.

**Onychomys leucogaster arcticeps** Rhoads *


*Type Locality.*—Clapham, Union County, N. Mex. *Range.*—Upper Sonoran Great Plains, from Wyoming and South Dakota to Texas. North to Big Horn River in Wyoming and to Cheyenne River in South Dakota; east to Bonesteel, Gregory County, near Missouri River in South Dakota; western third of Kansas, intergrading with *breviauritus* in Meade and Ellis Counties, Kansas (Black, Kansas State Board Agric. Thirtieth Biennial Rept., 1935-1936, p. 187, 1937); south to Fort Lancaster, southwestern Pecos County, Tex.; and west to Bear River Divide in southwestern Wyoming, western edge of Great Plains (Golden, Salida, and Westcliffe) in eastern Colorado, Panhandle of Oklahoma (Blair, Amer. Midl. Nat., vol. 22, No. 1, p. 117, July 1939), and Upper Sonoran plains of eastern New Mexico, including Pecos River Valley from Santa Rosa to Carlsbad, and grading insensibly into *ruidosae* farther west (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 139, Mar. 1, 1932).

**Onychomys leucogaster brevicaudus** Merriam† *


*Type Locality.*—Blackfoot, Bingham County, Idaho. *Range.*—Southern Idaho, extreme southwestern Wyoming, northwestern Utah, and west across northern half of Nevada into eastern California. Semiarid southern Idaho from Owyhee County east into Wyoming and north to Pahsimeroi Valley, Custer County (Davis, The Recent mammals of Idaho, p. 278, Apr. 5, 1939); in Utah, east to Wasatch foothills (Hall, Univ. California Publ. Zool., vol. 37, No. 1, p. 5, Apr. 10, 1931) and south to Sevier County (Stanford, Journ. Mamm., vol. 12, No. 4, p. 360,
Nov. 11, 1931); throughout Upper Sonoran Zone of Nevada north of about lat. 37° N. except northern Washoe County (Hall, Mammals of Nevada, p. 493, July 1, 1946); and extreme eastern border of California, within edge of Great Basin; recorded from Amedee, Lassen County, south to Benton and Long Valley, Mono County; vertical range, from 4,000 feet (Amedee, near Honey Lake) up to 6,900 feet (Farrington Ranch, near Mono Lake); zonal range, characteristically Upper Sonoran, but also Transition locally (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 167, Sept. 26, 1933).

Onychomys leucogaster utahensis Goldman†*


_Type Locality._—South end of Stansbury Island, Great Salt Lake, Toole County, Utah. Altitude, 4,250 feet. _Range._—Western Utah, approximately the area formerly occupied by Pleistocene Lake Bonneville (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 6, p. 324, Aug. 10, 1952).

Onychomys leucogaster aldousi Goldman†*


_Type Locality._—Desert Range Experiment Station, 50 miles west of Milford, Beaver County, Utah. _Range._—Known only from type locality, but may have an extensive range in desert region of southwestern Utah and adjoining territory in Nevada.

Onychomys leucogaster fuscogriseus Anthony*


_Type Locality._—Ironside, Malheur County, Oreg. Altitude, 4,000 feet. _Range._—Eastern Washington and Oregon, southwestern Idaho, and northeastern California. Columbian Plateau in southeastern Washington, and Yakima Valley north to Douglas, west to Yakima, east to Asotin, and south to Wallula (Dalquest, Univ. Kansas Publ. Mus. Nat. Hist., vol. 2, p. 323, Apr. 9, 1948); arid Upper Sonoran sagebrush plains of eastern Oregon (V. Bailey, North Amer. Fauna No. 55 (June), p. 178, Aug. 29, 1936); in southwestern Idaho recorded at Weiser in Washington County and at Nampa in Canyon County (Davis, The Recent mammals of Idaho, p. 278, Apr. 5, 1939); northern Washoe County in northwestern Nevada (Hall, Mammals of Nevada, p. 493, July 1, 1946); and valleys of extreme northeastern California; recorded west to Picard, near Lower Klamath Lake, Siskiyou County, and south to Box Springs, on Madeline Plains, at north base of Observation Peak, Lassen County; vertical range, from 4,150 feet (near Tule Lake) up to 5,300 feet (on Madeline Plains); zonal range, Upper Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 167, Sept. 26, 1933).

Onychomys leucogaster melanophrys Merriam†*

Type Locality.—Kanab, Kane County, Utah.  Range.—Canyon lands west of Colorado and Green Rivers in Utah (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 87, Feb. 15, 1951).

Onychomys leucogaster pallescens Merriam†*


Onychomys leucogaster fuliginosus Merriam†*


Type Locality.—Black Tank lava beds [12 to 15 miles north of Dead Man Flat], northeast of San Francisco Mountain, Coconino County, Ariz.  Range.—Lava beds and piñon and cedar belt, east and northeast of San Francisco Mountain, Ariz.

Onychomys leucogaster ruidosae Stone and Rehn*


Onychomys leucogaster capitulatus Hollister†*


Type Locality.—Lower end of Prospect Valley [about 25 miles west-southwest of Supai], Hualpai Indian Reservation, Grand Canyon, Coconino County, Ariz.  Altitude, 4,500 feet.  Range.—Known from type locality and from Aubrey Valley, Ariz.
Onychomys leucogaster albescens Merriam†*


Onychomys leucogaster longipes Merriam†*


Onychomys leucogaster breviauritus Hollister†*


Onychomys torridus torridus (Coues)†*


*Type Locality.*—Camp Grant, Graham County, Ariz. *Range.*—From Brewster and Presidio Counties in Big Bend region of Texas (Blair, Univ. Michigan Mus. Zool. Misc. Publ. 46, p. 29, June 28, 1940; and Borell and Bryant, Univ. California Publ. Zool., vol. 48, No. 1, p. 28, Aug. 7, 1942), northwest along Pecos River Valley in Texas to Carlsbad in southeastern New Mexico, and west across southern New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931),

**Onychomys torridus perpallidus** Mearns†*


*Type Locality.*—East bank of Colorado River at Mexican boundary monument No. 204, Yuma County, Ariz. *Range.*—Colorado River Valley in western Arizona; eastward along Bill Williams Fork to Big Sandy Creek and along Gila River and its tributaries to Phoenix and to near Wickenberg (Hatfield, Bull. Chicago Acad. Sci., vol. 6, No. 8, p. 154, Jan. 12, 1942).

**Onychomys torridus pulcher** Elliot*


*Type Locality.*—Morongo Pass, east end of San Bernardino Mountains, San Bernardino County, Calif. *Range.*—Valley of Colorado River south of Dead Mountains, Clark County, Nev. (Hall, Mammals of Nevada, p. 497, July 1, 1946); Colorado and Mohave Deserts in California; west from Colorado River to Palm Springs and Cabezon, Riverside County, Fairmont, in Antelope Valley, northern Los Angeles County, and over Walker Pass to Onyx, Kern County; north to Purdy and Granite Springs, San Bernardino County, and Little Lake, Inyo County; vertical range, from about 500 feet (near Needles, San Bernardino County) up to 4,900 feet (near Walker Pass, Kern County); zonal range, chiefly Lower Sonoran, but into Upper Sonoran locally (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 168, Sept. 26, 1933); and northeastern Baja California, México.

**Onychomys torridus longicaudus** Merriam†*


*Type Locality.*—Saint George, Washington County, Utah. *Range.*—Southwestern Utah; northwestern Arizona north of Colorado River; southern and low western part of Nevada, except extreme southern tip, and north to southern Pershing County (Hall, Mammals of Nevada, p. 495, July 1, 1946); and in California, valleys east of high southern Sierra Nevada, in Mono and Inyo Counties; recorded from Benton, Mono County, southeast to Maturango Springs and Resting Springs, Inyo County; vertical range, from 178 feet below sea level (Furnace Creek Ranch, Death Valley) up to 6,200 feet (3 miles east of Jackass Spring, north end of Panamint Mountains); zonal range, Lower Sonoran and locally Upper Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 168, Sept. 26, 1933).
Onychomys torridus clarus Hollister†*

_Type Locality._—Keeler, east shore of Owens Lake, Inyo County, Calif. Range.—Near vicinity of Owens Lake, Inyo County; recorded north to near Lone Pine, south to Hot Springs Valley near Coso Mountains, and west to neighborhood of Olancha; vertical range, all capture records about 3,600 feet; zonal range, Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 168, Sept. 26, 1933).

Onychomys torridus tularensis Merriam†*

_Type Locality._—Bakersfield, Kern County, Calif. Range.—Southern (upper) end of San Joaquin Valley; recorded east to Weldon, on South Fork of Kern River, Kern County, west to Carrizo Plain, San Luis Obispo County, north to Little Panoche Creek, in San Benito County, and south to Caliente Creek Wash, Kern County, Calif.; vertical range, from 500 feet (on Panoche Creek, Fresno County) up to 5,000 feet (in Kelso Valley, northwestern Kern County); zonal range, chiefly Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 168, Sept. 26, 1933).

Onychomys torridus ramona Rhoads*


_Type Locality._—San Bernardino Valley [more exactly, Reche Canyon, altitude, 1,250 feet, 4 miles southeast of Colton], San Bernardino County, Calif. Range.—San Diegan district in southwestern California, chiefly on its Pacific slope, from Mexican border northwest as far as San Fernando, Los Angeles County; recorded east to Valle Vista, in Jacinto Valley, Riverside County, and to La Puerta Valley and Jacumba, San Diego County; vertical range, from near sea level (mouth of Tia Juana River) up to 3,000 feet (near Banner, San Diego County); zonal range, Lower Sonoran and locally Upper Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 169, Sept. 26, 1933); and northwestern Baja California south to Tecarte Valley.

Onychomys torridus macrotis Elliot*


_Type Locality._—Head of San Antonio River, west slope of Sierra San Pedro Mártir, Baja California, México. Range.—From Sierra San Pedro Mártir and southern Hanson Laguna Mountains west to Pacific coast, and south at least to San Quintín, Baja California.
Onychomys torridus yakiensis Merriam†*

Onychomys torridus canus Merriam†*
_Type Locality._—San Juan Capistrano, Zacatecas, México. _Range._—Zacatecas, Aguas Calientes, and southwestern San Luis Potosí; south and east to Río Verde, San Luis Potosí.

Onychomys torridus surrufus Hollister†*
_Type Locality._—Miquihuana, Tamaulipas, México. _Range._—East side of Mexican tableland, in extreme southeastern Coahuila, southern Nuevo León, and southwestern Tamaulipas.

Genus ZYGODONTOMYS J. A. Allen

Zygodontomys cherriei cherriei (J. A. Allen) *

Zygodontomys cherriei ventriosus Goldman†*
_Type Locality._—Tabernilla, Canal Zone, Panamá. _Range._—Canal Zone (Goldman, Smithsonian Misc. Coll., vol. 69, No. 5, p. 94, Apr. 26, 1920).

Zygodontomys seorsus Bangs*
_Type Locality._—San Miguel Island [Isla del Rey], Archipiélago de las Perlas, Golfo de Panamá, Panamá. _Range._—Known from type locality only.

Genus SCOTINOMYS Thomas
Scotinomys harrisi Goodwin

*Type Locality.*—On savanna at Las Vueltas, Cartago, Costa Rica. Altitude, 8,000 feet. *Range.*—Known from type locality only.

Scotinomys longipilosus Goodwin

*Type Locality.*—Volcán Irazú, Cartago, Costa Rica. Altitude, 9,400 feet. *Range.*—Known from type locality only.

Scotinomys teguina teguina (Alston) *


Scotinomys teguina subnubilus Goldman†*

*Type Locality.*—Ocuilapa, 10 miles northwest of Ocozocoautla, and about 25 miles west of Tuxtla Gutiérrez, Chiapas, México. Altitude, 3,500 feet. *Range.*—Known from type locality only, in valley of Río Chiapas, western Chiapas.

Scotinomys teguina rufoniger Sanborn


Scotinomys teguina cacabatus Goodwin

Scotinomys teguina escazuensis Goodwin*


Scotinomys teguina endersi Goodwin


_Type Locality._—Agua Buena, locally known as Cañas Gordas, but west of the real Cañas Gordas, Sabanna de Potrero Grande, Puntarenas, Costa Rica. Altitude, about 3,500 feet. _Range._—Known only from vicinity of type locality.

Scotinomys teguina irazu (J. A. Allen) *


_Type Locality._—Volcán de Irazú, Cartago, Costa Rica. _Range._—Volcán de Irazú; altitude, 7,000 to about 10,000 feet.

Scotinomys teguina apricus (Bangs) *


Scotinomys teguina episcopi Enders and Pearson


_Type Locality._—Siolo, Río Colorado, tributary of Río Chiriquí Viejo, 10 miles west-northwest of El Volcán Post Office, Chiriquí, Panamá. Altitude, 4,100 feet. _Range._—Pacific slopes of Continental Divide, southwestern Panamá, and probably southwestern Costa Rica at altitudes from 3,800 to 5,600 feet. Recorded in Panamá from Valley of Río Colorado, Río Cotito, Río Santa Clara, and slopes of Cerro Pando, where it was found abundantly around milpa clearings (Goodwin, Bull. Amer. Mus. Nat. Hist., vol. 87, p. 411, Dec. 31, 1946).

Scotinomys teguina garichensis Enders and Pearson


Scotinomys teguina leridensis Enders and Pearson


Type Locality.—Casita Alta, Finca Lerida, Bóquete, Chiriquí, Panamá. Altitude, 7,000 feet. Range.—Known from type locality only.

Scotinomys xerampelinus (Bangs) *


Genus SIGMODON ** Say and Ord. (cotton-rats)


hispidus—group

Sigmodon hispidus hispidus Say and Ord*


Sigmodon hispidus floridanus A. H. Howell†*


Type Locality.—Canal Point, Palm Beach County, Fla. Range.—Greater part of central Florida (except coastal beaches) from Orange Lake, Marion County, south to southern side of Okeechobee Lake, Palm Beach County.

Sigmodon hispidus littoralis Chapman*


**Sigmodon hispidus insulicola** A. H. Howell*


**Sigmodon hispidus spadicipygus** Bangs*


*Type Locality.*—Cape Sable, Monroe County, Fla. *Range.*—Extreme southern part of Peninsula of Florida.

**Sigmodon hispidus exsputus** G. M. Allen*


*Type Locality.*—Big Pine Key, one of southern Florida Keys, Monroe County, Fla. *Range.*—Known from Big Pine Key only.

**Sigmodon hispidus virginianus** Gardner†*


*Type Locality.*—Triplet, Brunswick County, Va. Altitude, 160 feet. *Range.*—Probably southern portions of Mecklinburg and Brunswick Counties in Virginia, in Carolinian province and Carolinian Zone.

**Sigmodon hispidus komareki** Gardner†*


*Type Locality.*—Woodville, Jackson County, Ala. Altitude, 616 feet. *Range.*—Not completely known but includes most of area above 100 feet altitude in Alabama, southern Tennessee, Georgia, North Carolina, and South Carolina. Zonal range, Carolinian and Austroriparian.

**Sigmodon hispidus texianus** (Audubon and Bachman) *


Sigmodon hispidus alfredi Goldman and Gardner†*


Type Locality.—I. N. Pruitt Farm, near William's Corner, 11 miles north of Springfield, Baca County, Colo. Range.—Known from localities in Baca County, southeastern Colorado.

Sigmodon hispidus berlandieri (Baird) †*


Sigmodon hispidus solus Hall


Type Locality.—Island, 88 miles south and 10 miles west of Matamoros, Tamaulipas, México. Range.—Known only from type locality, but probably occurring on most of chain of islands off coast of Tamaulipas.

Sigmodon hispidus cienegae A. B. Howell *


Sigmodon hispidus confinis Goldman\textdagger*  
Type Locality.—Safford, Graham County, Ariz. Range.—Upper part of Gila River Valley in southeastern Arizona.

Sigmodon hispidus arizonae Mearns\textdagger*  

Sigmodon hispidus jacksoni Goldman\textdagger*  
Type Locality.—Three miles north of Fort Whipple, near Prescott, Yavapai County, Ariz. Altitude, 5,000 feet. Range.—Known only from plateau region near Prescott, Ariz.

Sigmodon hispidus plenus Goldman\textdagger*  
Type Locality.—Parker, Yuma County, Ariz. Altitude, 350 feet. Range.—Colorado River Valley, above confluence of Colorado and Gila Rivers, as far north as Needles, San Bernardino County, Calif.; and extreme southern Nevada (Hall, Mammals of Nevada, p. 525, July 1, 1946. See also Hall and Davis, Proc. Biol. Soc. Washington, vol. 47, fig. 1, p. 54, Feb. 9, 1934).

Sigmodon hispidus eremicus Mearns\textdagger*  

Sigmodon hispidus toltecus (Saussure)*  
Type Locality.—Mountains of Veracruz, México. Range.—Eastern México from Altamira, southern Tamaulipas, to Orizaba, Veracruz.

Sigmodon hispidus baileyi J. A. Allen*


Type Locality.—La Cienega de las Vacas, northwest Durango, México. Altitude, 8,500 feet. Range.—Northwestern Durango.

Sigmodon hispidus major V. Bailey†*


Sigmodon hispidus mascotensis J. A. Allen*


Sigmodon hispidus inexoratus Elliot*


Type Locality.—Ocotlán, north of Lake Chapala, Jalisco, México. Range.—Known from type locality only.

Sigmodon hispidus obvelatus Russell*


Type Locality.—Five miles south of Alpuyeca, Morelos, México. Altitude, 3,700 feet. Range.—Known from several localities in eastern and western Morelos; probably occurs in adjacent arid sections of Guerrero and Puebla; limits of range unknown.

Sigmodon hispidus atratus Hall*


Type Locality.—Six and one-half miles west of Zamora, Michoacán, México. Altitude, 5,950 feet. Range.—Known from Zamora and type locality only.
Sigmodon hispidus tonalensis V. Bailey†
_Type Locality._—Tonalá, Chiapas, México. _Range._—Western Chiapas and eastern Oaxaca, México.

Sigmodon hispidus saturatus V. Bailey†

Sigmodon hispidus microdon V. Bailey†

Sigmodon hispidus zanjonensis Goodwin*

Sigmodon hispidus furvus Bangs*
1904. Sigmodon hispidus fervidus Lydekker, Zool. Record, vol. 40 (1903), Mammals, p. 34. (Accidental renaming of _furvus._)

Sigmodon hispidus griseus J. A. Allen
Sigmodon hispidus borucae J. A. Allen*

Sigmodon hispidus austerulus Bangs
Type Locality.—Volcán de Chiriquí, Chiriquí, Panamá. Altitude, 10,000 feet. Range.—Volcán de Chiriquí, and probably adjacent parts of Costa Rica at high elevations.

Sigmodon hispidus chiriquensis J. A. Allen*

fulviventer—group

Sigmodon fulviventer J. A. Allen*
Type Locality.—Zacatecas, Zacatecas, México. Range.—Known only from near city of Zacatecas at about 8,000 feet altitude and from Durango, Durango, México.

Sigmodon alleni V. Bailey†*
Type Locality.—San Sebastián, Mascota, Jalisco, México. Range.—Western Jalisco and southern Nayarit in western México.

Sigmodon vulcani J. A. Allen
Type Locality.—Volcán de Fuego, Jalisco, México. Altitude, 10,000 feet. Range.—Known from type locality only.
**Sigmodon guerrerensis** Nelson and Goldman†*


*Type Locality.*—Omilteme, Guerrero, México. Altitude, 8,000 feet. *Range.*—Known from type locality only.

**Sigmodon melanotis** V. Bailey†*


**Sigmodon minimus minimus** Mearns†*


**Sigmodon minimus goldmani** V. Bailey†*


*Type Locality.*—Seven miles north of Las Palomas (at Hot Springs), Sierra County, N. Mex. (see Gardner, Journ. Mamm., vol. 28, No. 2, p. 190, June 1, 1947). Altitude, 4,200 feet. *Range.*—Known from type locality only.

**Sigmodon minimus woodi** Gardner†*


*Type Locality.*—East side of Rio Grande, 51 miles south of Albuquerque (near Bernardo), Socorro County, N. Mex. Altitude, 5,000 feet. *Range.*—Known from type locality only.

**Sigmodon ochrognathus ochrognathus** V. Bailey†*


**Sigmodon ochrognathus montanus** Benson*

Type Locality.—Peterson's Ranch ("Sylvania"), Huachuca Mountains, 2 miles north of Sunnyside, Cochise County, Ariz. Altitude, 6,100 feet. Range.—Known only from Huachuca Mountains in southeastern Arizona and Animas Valley in southwestern New Mexico, but probably also occurring in suitable habitats in adjacent area.

**Sigmodon ochrognathus madrensis** Goldman and Gardner†*  
*Type Locality.*—Foothills of Sierra Madre, about 30 miles northwest of Parral, southern Chihuahua, México. Altitude, 6,200 feet. *Range.*—Known only from type locality in eastern foothills of Sierra Madre, southern Chihuahua, but may have an extensive range in neighboring mountains of Sierra Madre Occidental biotic province. Zonal range, Upper Austral.

**Sigmodon leucotis** V. Bailey†*  

**Sigmodon alticola alticola** V. Bailey†*  
*Type Locality.*—Cerro San Felipe, Oaxaca, México. Altitude, 10,000 feet. *Range.*—Mountains of Oaxaca.

**Sigmodon alticola amoles** V. Bailey†*  
*Type Locality.*—Pinal de Amoles, Querétaro, México. Altitude, 7,000 feet. *Range.*—Known from type locality only.

**Sigmodon planifrons** Nelson and Goldman†*  
*Type Locality.*—Juquila, southwestern Oaxaca, México. Altitude, 5,000 feet. *Range.*—Known from type locality only.

**Genus NEOTOMODON**  

**Neotomodon alstoni alstoni** Merriam†*  

Type Locality.—Nahuatzen, Michoacán, México. Altitude, 3,500 feet.


**Neotomodon alstoni perotensis** Merriam†


Type Locality.—Cofre de Perote, Veracruz, México. Altitude, 9,500 feet.

Range.—East of Río Balsas in Perote–Orizaba region in Veracruz and Puebla (Davis and Follansbee, op. cit., p. 411.).

**Genus NEOTOMA** Say and Ord (wood-rats)


Subgenus NEOTOMA Say and Ord

**floridana**—group

**Neotoma floridana floridana** (Ord) *


Range.—Atlantic coast region from South Carolina to Sebastian, Fla.; and westward through greater part of Alabama from Tennessee River Valley southward (A. H. Howell, North Amer. Fauna No. 45, p. 52, Oct. 28, 1921).

**Neotoma floridana haematoreia** A. H. Howell*


Neotoma floridana rubida Bangs*  

Neotoma floridana illinoensis A. H. Howell‡*  

Neotoma floridana baileyi Merriam‡*  
Type Locality.—Valentine, Cherry County, Neb.  Range.—From southwestern South Dakota to wooded hillsides along Republican River and its tributaries in northeastern Kansas (Hibbard, Trans. Kansas Acad. Sci., vol. 47, p. 80, September 1944); west to Pueblo, Colo.

Neotoma floridana campestris J. A. Allen*  
Type Locality.—Pendennis, Lane County, Kan.  Range.—Chalk cliffs along Smoky Hill River and its tributaries in western Kansas (Hibbard, Trans. Kansas Acad. Sci., vol. 47, p. 80, September 1944) and eastern Colorado.

Neotoma floridana osagensis Blair*  

Neotoma floridana attwateri Mearns*  
213756—55—35
Type Locality.—Lacey's Ranch, Turtle Creek, Kerr County, Tex. Range.—Mainly Lower Sonoran Zone in central Texas.

**Neotoma micropus micropus** Baird†*


Type Locality.—Charco Escondido, Tamaulipas, México. Range.—From Barber, Comanche, and Clark Counties in south-central Kansas (Hibbard, Trans. Kansas Acad. Sci., vol. 47, p. 81, September 1944) south through western Oklahoma, central Texas, eastern Coahuila, and Nuevo León to southern Tamaulipas.

**Neotoma micropus canescens** J. A. Allen*


Type Locality.—North Beaver Creek [=North Canadian River], Cimarron County, Okla. Range.—From southwestern Kansas (Hibbard, Trans. Kansas Acad. Sci., vol. 47, p. 81, September 1944), southeastern Colorado, and northwestern Oklahoma southward through western Texas to southern Coahuila; west in New Mexico to Rio Grande Valley (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 171, Mar. 1, 1932).

**Neotoma micropus leucophaea** Goldman†*


Type Locality.—White Sands, 10 miles west of Point of Sands, White Sands National Monument, Otero County, N. Mex. Altitude, 4,100 feet. Range.—Dunes of whitish drifted sands in vicinity of type locality.

**Neotoma micropus littoralis** Goldman†*


Type Locality.—Altamira, Tamaulipas, México. Altitude, 100 feet. Range.—Arid Tropical Zone in southern Tamaulipas.

**Neotoma micropus planiceps** Goldman†*


Neotoma albigena albigena Hartley*


*Type Locality.*—Vicinity of Fort Lowell, near Tucson, Pima County, Ariz.


Neotoma albigena venusta Trueį*


*Type Locality.*—Carrizo Creek, Imperial County, Calif. *Range.*—Colorado River Valley from northwestern Arizona southward to Gulf of California and into northeastern Baja California; a narrow strip along gulf coast of Sonora to Costa Rica ranch (Burt, Univ. Michigan Mus. Zool. Misc. Publ. 39, p. 64, Sept. 26, 1933); and bed of Colorado Desert, from Mexican line northwest at least to Mecca, Riverside County, west to Carrizo Creek, in extreme eastern San Diego County, and north along Colorado at least to near Riverside Mountain, north-eastern Riverside County, Calif.; vertical range, 200 feet below sea level near Mecca up to not more than 350 feet above sea level; zonal range, Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 178, Sept. 26, 1933).

Neotoma albigena brevicauda Durrant


*Type Locality.*—Castle Valley, about 15 miles northeast of Moab, Grand County, Utah. *Range.*—Known from type locality only.
Neotoma albigula laplataensis F. W. Miller
_Type Locality._—Near Bondad, La Plata County, Colo. _Range._—Mancos-San Juan River region in Montezuma and La Plata Counties, southwestern Colorado; and San Juan County, southeastern Utah (Kelso, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 89, Feb. 15, 1951).

Neotoma albigula warreni Merriam†*
_Type Locality._—Gaume Ranch, Baca County (northwest corner), Colo. _Altitude,_ 4,600 feet. _Range._—Plains region of southeastern Colorado, northeastern New Mexico; and northwestern corner of Oklahoma Panhandle (Blair, Amer. Midl. Nat., vol. 22, No. 1, p. 125, July 1939).

Neotoma albigula robusta Blair*
_Type Locality._—Limpia Canyon, 16 miles north of Fort Davis, Jeff Davis County, Tex. _Altitude,_ 4,300 feet. _Range._—Davis Mountains of southwestern Texas.

Neotoma albigula melas Dice*
_Type Locality._—Malpais Spring, malpais lava beds near Carrizozo, Lincoln County, N. Mex. _Range._—Malpais lava beds west of Carrizozo, Lincoln County.

Neotoma albigula mearnsi Goldman†*
_Type Locality._—Tinajas Altas, Gila Mountains, Yuma County, Ariz. _Range._—Probably the extremely arid desert area extending from near type locality southward along eastern side of Gulf of California.

Neotoma albigula shelldoni Goldman†*

Neotoma albigula seri Townsend†*
_Type Locality._—Tiburón Island, Gulf of California, Sonora, México. _Range._—Tiburón Island.

Neotoma albigula melanura Merriam†*

**Type Locality.**—Ortiz, Sonora, México. **Range.**—Western basal slopes of Sierra Madre in southern Sonora and southwestern Chihuahua. Zonal range, Lower Sonoran and upper part of Arid Tropical.

**Neotoma albigula leucodon** Merriam†*


**Neotoma albigula durangae** J. A. Allen*


**Type Locality.**—San Gabriel, northwestern Durango, México. **Range.**—Eastern basal slopes of Sierra Madre west of and above range of albigula, from central Durango to southwestern Chihuahua, México. Zonal range, Upper Sonoran.

**Neotoma albigula zacatecae** Goldman†*


**Type Locality.**—Plateado, Zacatecas, México. **Range.**—Sierra Madre in western Zacatecas. Zonal range, Transition.

**Neotoma latifrons** Merriam†*


**Type Locality.**—Queréndaro, Michoacán, México. **Range.**—Known from type locality only. Zonal range, lower part of Lower Sonoran.

**Neotoma nelsoni** Goldman†*


**Type Locality.**—Perote, Veracruz, México. **Range.**—High plains along eastern edge of Mexican Plateau region in eastern Puebla and extreme west-central Veracruz. Zonal range, Upper Sonoran.

**Neotoma palatina** Goldman†*


**Type Locality.**—Bolaños, Jalisco, México. **Range.**—Known only from type locality in canyon of Bolaños River. Zonal range, Arid Tropical.
Neotoma montezumae Goldman†*


Neotoma variia Burt


*Type Locality.*—Turner Island, lat. 28°43' N., long. 112°19' W., Gulf of California, Sonora, México. *Range.*—Turner Island.

*lepida*—group

Neotoma lepida lepida Thomas*


*Type Locality.*—Somewhere on “Simpson’s route” between Camp Floyd (a few miles west of Utah Lake), Utah, and Carson City, Nev. (see Goldman, op. cit., p. 61). *Range.*—Colorado and Mohave Deserts in California from north base of San Jacinto Mountains (near Whitewater) in Riverside County, Antelope Valley (near Fairmont) in northern Los Angeles County, and into Walker Pass in Kern County, eastward to Colorado River and northward through Inyo region to head of Owens Valley (near Benton) in Mono County (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 179, Sept. 26, 1933), through northwestern Arizona, most of Nevada, except southern Clark, northern Washoe and Humboldt, and western and central Elko Counties (Hall, Mammals of Nevada, p. 531, July 1, 1946) and western Utah in area formerly occupied by Pleistocene Lake Bonneville as well as west of Beavardam Mountains in Washington County (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 6, p. 337, Aug. 10, 1952).

Neotoma lepida sanrafaeli Kelson


*Type Locality.*—Rock Canyon Corral, 5 miles southeast of Valley City, Grand County, Utah. Altitude, 4,500 feet. *Range.*—Eastern Utah between Colorado River and High Plateaus, north to Book Cliffs, south to northern Garfield County.

Neotoma lepida marshalli Goldman†*


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Neotoma lepida nevadensis Taylor*


**Type Locality.**—Carrington Island, Great Salt Lake, Tooele County, Utah. Altitude, about 4,250 feet. **Range.**—Known from Carrington and Stansbury Islands.

Neotoma lepida monstrabilis Goldman†*


**Type Locality.**—Ryan, Kaibab National Forest, Coconino County, Ariz. Altitude, 6,000 feet. **Range.**—Southwestern Utah west of Colorado River and south of Water Pocket Flexure (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 90, Feb. 15, 1951) and northwestern Arizona west of Colorado River.

Neotoma lepida devia Goldman†*


**Type Locality.**—Tanner Tank, Painted Desert, Coconino County, Ariz. Altitude, 5,200 feet. **Range.**—Known only from a narrow strip along eastern side of Colorado River extending from points in Painted Desert south through Grand Canyon to Parker, western Arizona.

Neotoma lepida harteri Huey


Neotoma lepida auripila Blossom*


**Type Locality.**—Agua Dulce Mountains, 9 miles east of Papago Well, Pima County, Ariz. **Range.**—Known only from type locality and from Crow Butte, Yuma County, Ariz.
Neotoma lepida flava Benson

**Type Locality.**—Tinajas Altas, Yuma County, Ariz. Altitude, 1,150 feet. **Range.**—Known from type locality only. Probably restricted to southern end of Tinajas Altas Mountains.

Neotoma lepida bensoni Blossom

**Type Locality.**—Papago Tanks, Sierra Pinacate, Sonora, México. **Range.**—Known only from nearly black lava of Sierra Pinacate in Sonora, but doubtless occurs also on Pinacate lava plain, which extends from these mountains northeastward into Yuma County, Ariz.

Neotoma lepida aureotunicata Huey

**Type Locality.**—Punta Peñasco, Sonora, México. **Range.**—Known from type locality only.

Neotoma lepida grinnelli Hall

**Type Locality.**—Colorado River 20 miles above (by river; about 12¼ air-line miles north) Picacho, Imperial County, Calif. **Range.**—Colorado River Valley from southern Clark County, Nev., south to Mexican boundary and west in Colorado Desert to Beal Well.

Neotoma lepida gilva Rhoads*


**Type Locality.**—Banning, Riverside County, Calif. **Range.**—Occurs irregularly along eastern edge of main range of *intermedia*, where conditions become more arid, approaching those of deserts proper; recorded from Stanley, western Fresno County, southeast, mostly along east-facing slopes of innermost Coast Ranges to near Mountain Spring, extreme eastern San Diego County; east from Mount Pinos, Ventura County, through Tehachapi region to valley of South Fork of Kern River, in Kern County; vertical range from 600 feet (Wheeler Ridge, Kern County) up to 8,500 feet (Mount Pinos); zonal range, Lower and Upper Sonoran, locally Transition (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 180, Sept. 26, 1933) ; south at least to Gaskill's Tank, near Laguna Salada, northeastern Baja California (Huey, Trans. San Diego Soc. Nat. Hist., vol. 10, No. 16, p. 310, Aug. 31, 1945).
Neotoma lepida californica Price*


Type Locality.—Bear Valley, San Benito County, Calif. Range.—Inner Coast Range from Mount Hamilton, Santa Clara County, east to Herrero Canyon, Merced County, and south through Gabilan–Diablo Range at least to Lewis Creek, Monterey County. Vertical range, from 200 feet to 4,000 feet. (See also Kelson, Univ. Kansas Publ. Mus. Nat. Hist., vol. 5, No. 16, p. 237, Apr. 10, 1952.)

Neotoma lepida petricola von Bloeker*


Type Locality.—Abbotts Ranch, Arroyo Seco, Monterey County, Calif. Altitude, 670 feet. Range.—Santa Lucia mountains and Sierra de Salinas, Monterey County, Calif., from Big Pines south at least to Mount Mars. Vertical range, from 600 to 5,000 feet.

Neotoma lepida intermedia Rhoads*


Type Locality.—Dulzura, San Diego County, Calif. Range.—Northwestern Baja California north to near Lewis Creek and Mount Mars, Monterey County; easternmost station at north, Sweeney's Hill, Merced County; easternmost station at south, Julian, San Diego County; also recorded along western foothills of extreme southern Sierra Nevada, in Tulare County, north to near Porterville; vertical range, from close to sea level up to at least 5,000 feet; zonal range, Upper Sonoran, locally Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 180, Sept. 26, 1933).

Neotoma lepida felipensis Elliot*


Type Locality.—San Felipe, Baja California, México. Range.—Desert region, east of Sierra San Pedro Mártir, in northeastern Baja California.

Neotoma lepida egressa Orr*


Type Locality.—El Rosario (one mile east of), Baja California, México. Altitude, 200 feet. Range.—Coastal region of northwestern Baja California from lat. 31° N. south at least to El Rosario, lat. 30°03' N.
Neotoma lepida molagrandis Huey*


*Type Locality.*—Santo Domingo Landing (more precisely, at site of old well near edge of mesalike shelf, some 3 miles inland from landing beach), lat. 28°15' N., Baja California, México. Altitude, about 50 feet. *Range.*—So far as known, northern and western coastal section of Vizcaíno Desert region of Baja California.

Neotoma lepida ravida Nelson and Goldman†*


*Type Locality.*—Comondú, southern Baja California, México. Altitude, 700 feet. *Range.*—Volcanic region, including extensive lava beds, along backbone of Peninsula of Baja California from about lat. 28° N. south to Sierra de la Giganta.

Neotoma lepida pretiosa Goldman†*


*Type Locality.*—Matancita (also called Soledad), 50 miles north of Magdalena Bay, Baja California, México. Altitude, 100 feet. *Range.*—West coast and islands of Baja California, from San Jorge (southwest of Comondú) south to Margarita Island.

Neotoma lepida notia Nelson and Goldman†*


*Type Locality.*—La Laguna, Sierra de la Victoria, southern Baja California, México. Altitude, 5,000 feet. *Range.*—Known only from mountains of Cape region of Baja California.

Neotoma lepida arenacea J. A. Allen*


*Type Locality.*—San José del Cabo, Baja California, México. *Range.*—Coastal plains and basal mountain slopes in Cape region of Baja California, north at least to La Paz.

Neotoma lepida vicina Goldman†*


RODENTIA: CRICETIDAE

Type Locality.—Espíritu Santo Island, Gulf of California, Baja California, México. Range.—Espíritu Santo Island.

Neotoma lepida abbreviata Goldman*
Type Locality.—San Francisco Island (near southern end of San José Island), Gulf of California, Baja California, México. Range.—San Francisco Island.

Neotoma lepida perpallida Goldman†*
Type Locality.—San José Island, Gulf of California, Baja California, México. Range.—San José Island.

Neotoma lepida latirostra Burt
Type Locality.—Danzante Island, lat. 25°47' N., long. 111°11' W., Gulf of California, Baja California, México. Range.—Danzante Island.

Neotoma lepida nudicauda Goldman†*
Type Locality.—Carmen Island, Gulf of California, Baja California, México. Range.—Carmen Island.

Neotoma lepida marcosensis Burt
Type Locality.—San Marcos Island, lat. 27°13' N., long. 112°05' W., Gulf of California, Baja California, México. Range.—San Marcos Island.

Neotoma lepida insularis Townsend†*
Type Locality.—Angel de la Guarda Island, Gulf of California, Baja California, México. Range.—Angel de la Guarda Island.

Neotoma bryanti Merriam†*
**Type Locality.**—"Cerros" [=Cedros] Island, Baja California, México.

Neotoma anthonyi J. A. Allen*


**Type Locality.**—Todos Santos Island, off west coast of Baja California, México.

Neotoma martinensis Goldman†*


**Type Locality.**—San Martín Island, Baja California, México. **Range.**—San Martín Island.

Neotoma bunkerii Burt


**Type Locality.**—Coronados Island, lat. 26°06' N., long. 111°18' W., Gulf of California, Baja California, México. **Range.**—Coronados Island.

Neotoma stephensi stephensi Goldman†*


**Type Locality.**—Hualpai Mountains, Mohave County, Ariz. Altitude, 6,300 feet. **Range.**—From Harquahala and Hualpai Mountains in western Arizona, south to Pinal Mountains, Gila County (Doutt, Ann. Carnegie Mus., vol. 23, p. 266, Aug. 4, 1934), and eastward along slopes of Mogollon Plateau to Burro and Zuni Mountains in western New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 188, Mar. 1, 1932).

Neotoma stephensi relicta Goldman†*


**Type Locality.**—Kcams Canyon, Navajo County, Ariz. **Range.**—Plateau region of northeastern Arizona, north of Little Colorado River; southwestern San Juan County in southeastern Utah (Benson, Univ. California Publ. Zool., vol. 40, No. 14, p. 454, Dec. 31, 1935); and northwestern New Mexico south to Gallup, grading to southward into *stephensi*.

Neotoma goldmani Merriam†*


Neotoma mexicana mexicana Baird†*

_Type Locality._—Mountains near Chihuahua, State of Chihuahua, México.

_Range._—Desert ranges along eastern side of Sierra Madre in Chihuahua and northwestern Durango, and thence northward in mountains to western Texas, southern New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 181, Mar. 1, 1932), and southeastern Arizona. Zonal range, Upper Sonoran and Transition.

Neotoma mexicana fallax Merriam†*


Neotoma mexicana inopinata Goldman†*

_Type Locality._—Chuska Mountains, San Juan County, N. Mex. Altitude, 8,800 feet. _Range._—Broken or mountainous areas in northwestern New Mexico, northeastern Arizona, southwestern Colorado, and southeastern Utah (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 95, Feb. 15, 1951).

Neotoma mexicana atrata Burt

_Type Locality._—Four miles west of Carrizozo, Lincoln County, N. Mex. _Range._—Probably the entire lava field that extends south and west from type locality into Otero County, N. Mex.

Neotoma mexicana pinetorum Merriam†*

_Type Locality._—San Francisco Mountain, Coconino County, Ariz. _Range._—Plateau region from San Francisco Mountain, north to Grand Canyon and southeastward along Mogollon Mesa to Mogollon and Mimbres Mountains in western New Mexico. Zonal range, Transition.
Neotoma mexicana bullata Merriam†
*Type Locality.*—Santa Catalina Mountains, Pima County, Ariz. *Range.*—Known from Santa Catalina Mountains only. Zonal range, Transition.

Neotoma mexicana madrensis Goldman†
*Type Locality.*—Sierra Madre, near Guadalupe y Calvo, Chihuahua, México. Altitude, 7,000 feet. *Range.*—Sierra Madre from northwestern Chihuahua and northeastern Sonora southward to western Zacatecas, México. Zonal range, Transition.

Neotoma mexicana sinaloae J. A. Allen*

Neotoma mexicana inornata Goldman†
*Type Locality.*—Sierra del Carmen, Coahuila, México. Altitude, 6,100 feet. *Range.*—Known from type locality only.

Neotoma navus Merriam†

Neotoma angustapalata Baker
*Type Locality.*—Seventy kilometers by highway south of Ciudad Victoria and 6 kilometers west of Pan-American Highway at El Carrizo, Tamaulipas, México. *Range.*—Known from type locality only; probably found in other localities along humid, east face of Sierra Madre Oriental in Tamaulipas.

Neotoma torquata Ward*
*Type Locality.*—Abandoned mine between Tetela del Volcán and Zacualpan, Morelos, México. *Range.*—High mountains of south-central México, from north-

**Neotoma distincta** Bangs*


*Type Locality.*—Teocelo, near Jalapa, Veracruz, México. *Range.*—Known from type locality only. Zonal range, Humid Tropical.

**Neotoma tropicalis** Goldman†*


**Neotoma parvidens** Goldman†*


*Type Locality.*—Juquila, Oaxaca, México. Altitude, 5,000 feet. *Range.*—Known only from type locality in mountains of southwestern Oaxaca. Zonal range, Humid Tropical.

**Neotoma ferruginea ferruginea** Tomes


**Neotoma ferruginea solitaria** Goldman†*


**Neotoma ferruginea vulcani** Sanborn


*Type Locality.*—Volcán Tajumulco, south slope, San Marcos, Guatemala. Altitude, 13,200 feet. *Range.*—Volcán Tajumulco and probably through Sierra Madre to the north.

**Neotoma ferruginea chamula** Goldman†*


Neotoma ferruginea isthmica Goldman†*
*Type Locality.*—Huilotepc, 8 miles south of Tehuantepec, Oaxaca, México. Altitude, 100 feet. *Range.*—From Pacific coast region on south side of Isthmus of Tehuantepec, eastward into valley of Chiapas River and northwestward to Coixtlahuaca, Oaxaca. Zonal range, Arid Tropical and Lower Sonoran.

Neotoma ferruginea picta Goldman†*

Neotoma ferruginea tenuicauda Merriam†*

Neotoma ferruginea ochracea Goldman†*

Neotoma ferruginea griseoventer Dalquest

Neotoma chrysomelas J. A. Allen*
Neotoma magister Baird†


*Subgenus Homodontomys* 24 Goldman


Neotoma fusiceps fusiceps 25 Baird†


*Type Locality.*—Petaluma, Sonoma County, Calif. *Range.*—Inner Coast Range of California, north from San Francisco Bay to Oregon line; at north,
westward to Siskiyou Mountains and eastward through Siskiyou County at least to Crescent Butte (3 miles west of Modoc County line) and through Shasta County as far as Haydenville, Lassen County; vertical range from approximately 300 feet near Petaluma, Sonoma County, to 5,500 feet on Horse Ridge, southeast of Ruth, Trinity County; zonal range, Lower Sonoran into Transition (Hooper, Univ. California Publ. Zool., vol. 42, No. 4, p. 220, March 1, 1938).

**Neotoma fuscipes monochroura** Rhoads*


*Type Locality.*—Grants Pass, Josephine County, Oreg. *Range.*—Coastal belt of Oregon and California; west of Cascade and Coast Ranges, south from Columbia River to San Francisco Bay; vertical range, from near sea level to 4,700 feet (on Horse Mountain, Humboldt County); zonal range, chiefly Transition, but extending from Lower Sonoran to Canadian (Hooper, Univ. California Publ. Zool., vol. 42, No. 4, p. 217, Mar. 1, 1938).

**Neotoma fuscipes annectens** Elliot*


*Type Locality.*—Portola, San Mateo County, Calif. *Range.*—Coastal region, entirely west of Diablo Range, south from San Francisco Bay to Monterey Bay; vertical range, from near sea level up at least to 3,000 feet on Mount Diablo, Contra Costa County; zonal range, chiefly Transition, but into Upper Sonoran in certain regions (Hooper, Univ. California Publ. Zool., vol. 42, No. 4, p. 222, Mar. 1, 1938).

**Neotoma fuscipes riparia** Hooper


*Type Locality.*—Kincaid's Ranch, 2 miles northeast of Vernalis, Stanislaus County, Calif. *Range.*—Known only from type locality, but probably ranging along west side of San Joaquin River south to southern Merced County or northern Fresno County and north to region of Suisun Straits, Contra Costa County. Zonal range, Lower and Upper Sonoran.

**Neotoma fuscipes perplexa** Hooper*


*Type Locality.*—Sweeney’s Ranch, 22 miles south of Los Banos, Merced County, Calif. *Range.*—In general, Diablo Range, and region south of Monterey Bay east of Salinas Valley. More specifically, from region of Suisun Straits southward along slopes of Diablo Range to northern Benito County, thence west to Salinas River and south to extreme southern Monterey County and vicinity of Coalinga, Fresno County. Vertical range, from 500 to 2,400 feet; zonal range, Lower and Upper Sonoran.
Neotoma fuscipes bulliator Hooper*


*Type Locality.*—Two miles south of San Miguel, San Luis Obispo County, Calif. Altitude, 620 feet. *Range.*—From type locality southeastward through Temblor Range and southern end of Diablo Range to southern end of hills (east of Pine Mountains) bounding Carrizo Plains in extreme southeastern San Luis Obispo County; in brief, chiefly area drained by Cholame, Estrelia, and San Juan Creeks. Vertical range, from 620 to 2,600 feet; zonal range, Lower and Upper Sonoran.

Neotoma fuscipes streatori Merriam†*


*Type Locality.*—Carbondale, Amador County, Calif. *Range.*—Western slope of Sierra Nevada Range, from southeastern Tehama County south to central Tulare County (entirely west of Sierran crest); east at south of San Joaquin Valley floor and at north of Sacramento River; vertical range, from 200 feet on Butte Creek, Butte County, and at Minkler, Fresno County, to 5,000 feet in King's River Canyon, Fresno County; zonal range, Upper Sonoran into Transition (Hooper, Univ. California Publ. Zool., vol. 42, No. 4, p. 226, Mar. 1, 1938).

Neotoma fuscipes simplex True†*


*Type Locality.*—Old Fort Tejon, Tehachapi Mountains, Kern County, Calif. *Range.*—Eastern and southern basal slopes of southern Sierra Nevada, Inyo and Kern Counties, south through Tehachapi region, Kern County, thence southeastward along northern slopes of San Gabriel Mountains, Los Angeles and San Bernardino Counties, through San Bernardino Mountains in extreme southern San Bernardino County; vertical range, from approximately 400 feet on north side of Buena Vista Lake, Kern County, to 9,000 feet at Dry Lake, San Bernardino Mountains, San Bernardino County; zonal range, chiefly Upper Sonoran, but extending from Lower Sonoran to Transition (Hooper, Univ. California Publ. Zool., vol. 42, No. 4, p. 228, Mar. 1, 1938).

Neotoma fuscipes luciana Hooper*

Type Locality.—Seaside, Monterey County, Calif. Range.—Coastal central California, from Monterey Bay southward through Santa Lucia Mountains to vicinity of Paso Robles and Morro, San Luis Obispo County. Vertical range, from near sea level at least to 3,000 feet at 11/4 miles south of Chalk Peak, Monterey County; zonal range, Upper Sonoran into Transition.

**Neotoma fuscipes macrotis** Thomas*


Type Locality.—San Diego, San Diego County, Calif. Range.—In general, coastal southern California and northern Baja California; from Santa Margarita (west of Pine Mountains), San Luis Obispo County, southward through mountains of Ventura and Santa Barbara Counties, along southern drainage of San Gabriel Mountains, through San Jacinto and Palomar Mountains to vicinity of Los Pozos, Baja California (at lat. 32° N., approximately); vertical range, from near sea level to 6,800 feet on Thomas Mountain, Riverside County; zonal range, from Lower Sonoran into Transition (Hooper, Univ. California Publ. Zool., vol. 42, No. 4, p. 230, Mar. 1, 1938).

**Neotoma fuscipes martirensis** Orr*


Type Locality.—Valladares, Sierra San Pedro Mártir, Baja California, México. Altitude, 2,700 feet. Range.—Chiefly Sierra San Pedro Mártir region of Baja California, but occurring intermittently to coast, northward to approximately lat. 32° N. and southward at least to lat. 30° N.; vertical range, from 25 feet to 8,500 feet; zonal range, Lower Sonoran into Transition (Hooper, Univ. California Publ. Zool., vol. 42, No. 4, p. 232, Mar. 1, 1938).

Subgenus **Teonoma** Gray


**Neotoma cinerea cinerea** (Ord) *


Neotoma cinerea drummondii (Richardson)*


Neotoma cinerea saxamans Osgood‡*

*Type Locality.*—Bennett City, head of Lake Bennett, Skeena [Cassiar] District, British Columbia, Canada. *Range.*—Western British Columbia on both sides of coast range from north side of Rivers Inlet north to Bella Coola region (Hagensborg, Stuie), Dean Channel (Hot Springs, Kimsquit) and on east side of Coast Range from Skeena River (Hazelnut) and Burns Lake (Wistaria) north to Lake Bennett; through most of southern Yukon (Teslin Lake) and Lapie River, Mile 132, near junction of Pelly and Ross Rivers on Canol Road (Anderson, Nat. Mus. Canada, Bull. 102 (1946), p. 143, Jan. 24, 1947).

Neotoma cinerea occidentalis Baird‡*

Neotoma cinerea fusca Truef*  

1897. [*Neotoma cinerea*] fusca Trouessart, Catalogus Mammalium . . ., fasc. 3, p. 544.


**Type Locality.**—Fort Umpqua, Douglas County, Oreg. **Range.**—Humid coastal belt of Cascade Range in Oregon, from Columbia River south to Gardiner, Douglas County; east at north to Portland, Multnomah County, and at south to Eugene, Lane County; zonal range, probably confined to Transition (Hooper, Univ. California Publ. Zool., vol. 42, No. 9, p. 419, May 17, 1940).

Neotoma cinerea pulla Hooper*  

**Type Locality.**—Kohnenberger's Ranch, South Fork Mountain, Trinity County, Calif. Altitude, 3,200 feet. **Range.**—In general, higher regions of Coast and Cascade Ranges of northwestern California and southwestern Oregon; from vicinity of Elk Creek, Glenn County, north and east through Trinity Mountains, western Shasta County, southern Cascade Range in eastern Siskiyou County, Calif., to vicinity of Fort Klamath, Klamath County, Oreg.; north and west (from Elk Creek) through South Fork Mountain and Horse Mountain, Humboldt County, to Doctor Rock Peak, Del Norte County, Calif. Vertical range, from 3,000 feet (at Sisson, Siskiyou County) to 9,000 feet (on Mount Shasta, Siskiyou County); zonal range, Transition, Canadian, and locally into Hudsonian. (See also Kelson, Univ. Kansas Publ. Mus. Nat. Hist., vol. 5, No. 16, p. 237, Apr. 10, 1952.)

Neotoma cinerea alticola Hooper*  


Neotoma cinerea lucida Goldman†*  

Type Locality.—Charleston Peak, Charleston Mountains, Clark County, Nev. Range.—Spring Mountains in Clark County from Charleston Peak south to Potosi Mountain (Hall, loc. cit.).

**Neotoma cinerea acraia** (Elliot) *


Type Locality.—Jordan Hot Springs, near Kern River, Sierra Nevada, Tulare County, Calif. (See Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 182, Sept. 26, 1933). Range.—In general, southern Sierra Nevada and southern Great Basin. In California, Sierra Nevada from Monache Meadows and Jackass Meadows, Tulare County, north to vicinity of Woodfords, Alpine County; in White, Inyo, and Panamint Mountains and probably in other neighboring high desert ranges; from Sierra Nevada south of Lake Tahoe across central Nevada and from northeastern corner south to Sheep Mountains (Hall, Mammals of Nevada, p. 536, July 1, 1946); mountainous areas of Utah, except east of Colorado and Green Rivers and the northwest; perhaps into northern Arizona, at south, and southwestern Wyoming, at north; vertical range, in California from 5,000 feet on Kings River, Fresno County, to 11,000 feet at Cottonwood Lakes, Inyo County (Hooper, loc. cit.). (See also Kelso, Univ. Kansas Publ. Mus. Nat. Hist., vol. 5, No. 16, p. 240, Apr. 10, 1952.)

**Neotoma cinerea arizonae** Merriam†*


Type Locality.—Keams Canyon, Navajo County, Ariz. Range.—Upper Sonoran Zone in northeastern Arizona, southeastern Utah, and probably northward along Green River Valley in southwestern Colorado, and northwestern New Mexico.

**Neotoma cinerea macrodon** Kelson


Type Locality.—East side of confluence of Green and White Rivers, 1 mile southeast of Ouray, Uintah County, Utah. Altitude, 4,700 feet. Range.—Known only from northern edge of East Tavaputs Plateau, Uintah County, Utah.

**Neotoma cinerea orolestes** Merriam†*


Type Locality.—Saguache Valley, 20 miles west of Saguache, Saguache County, Colo. Range.—Rocky Mountain region from northern New Mexico north through Colorado and Wyoming to southern Montana and thence eastward to Black Hills in west-central South Dakota; west to eastern end of Uinta Mountains and Uinta Basin, Utah (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 93, Feb. 15, 1951). Zonal range mainly Transition and Canadian.

Neotoma cinerea cinnamomea J. A. Allen*  

Type Locality.—Kinney Ranch, Bitter Creek, Sweetwater County, Wyo. Range.—Southwestern Wyoming, apparently restricted to arid lands between Uinta and Wind River Ranges (Hooper, loc. cit.) and northwestern Colorado (Warren, The mammals of Colorado, . . ., p. 221, 1942).

Neotoma cinerea rupicola J. A. Allen*  

Type Locality.—Corral Draw, southeastern base of Black Hills, Fall River County, S. Dak. Altitude, about 3,700 feet. Range.—Big Badlands region from southwestern South Dakota, through southeastern Wyoming and western Nebraska to northeastern Colorado. Zonal range, Upper Sonoran.

Subgenus HODOMYS** Merriam


Neotoma alleni alleni Merriam†*  


Neotoma alleni guerrerensis (Goldman)†*  

RODENTIA: CRICETIDAE

*Type Locality.*—Acapulco, Guerrero, México. Altitude, sea level. *Range.*—Known from type locality only, but probably has an extensive range at low elevations along Pacific coast of México.

**Neotoma alleni vetula** (Merriam)†*


**Neotoma alleni elattura** (Osgood)


**Genus TEANOPUS** ‡ Merriam


**Teanopus phenax** Merriam†*


**Genus NELSONIA** Merriam


**Nelsonia goldmani** Merriam†*


Nelsonia neotomodon Merriam†
Type Locality.—Mountains near Plateado, Zacatecas, México. Altitude, 8,200 feet.

Genus RHEOMYS Thomas

Rheomys thomasi thomasi Dickey

Rheomys thomasi stirtoni Dickey
Type Locality.—Los Esesmiles, Chalatenango, El Salvador. Humid Upper Tropical Zone. Altitude, 8,000 feet. Range.—Known from type locality only.

Rheomys thomasi chiapensis Hooper
Type Locality.—Prusia, Chiapas, México. Altitude, 1,100 meters. Range.—Known from type locality only; probably ranges southward in cloud and rain forests in Sierra Madre.

Rheomys underwoodi Thomas
Type Locality.—Tres Rios, Cartago, Costa Rica. Range.—Known from type locality only.

Rheomys hartmanni Enders
Type Locality.—Hot Springs on Río Cotito, Chiriquí, Panamá. Altitude, 4,900 feet. Range.—Known from type locality only.

Rheomys raptor Goldman†
Type Locality.—Near head of Río Limón, Mount Pirri, Darién, eastern Panamá. Altitude, 4,500 feet. Range.—Known from type locality only.

Genus XENOMYS Merriam
Xenonyx nelsoni Merriam\(^*\)


*Type Locality.*—Hacienda Magdalena, between city of Colima and Manzanillo, Colima, México.

Subfamily Microtinae \(^{28}\) (voles and lemmings)

*Tribe* Lemni

Genus *Dicrostonyx* \(^{29}\) Gloger (collared lemmings)


Subgenus *Dicrostonyx* Gloger

*Dicrostonyx hudsonius* (Pallas) \(^*\)


*Type Locality.*—Labrador, Canada. *Range.*—Barren-ground area of Ungava Peninsula and Labrador; south side of Hudson Strait and along Atlantic coast at least as far south as Hamilton Inlet and possibly to Strait of Belle Isle, and on east side of Hudson Bay to about Great Whale River, lat. 55° N.; also on many islands along east side of Hudson Bay from Digges Islands to Belcher Islands (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 148, Jan. 24, 1947).

Subgenus *Misothermus* Hensel


*Dicrostonyx groenlandicus* groenlandicus (Traill) \(^*\)


*Type Locality.*—Jameson Land, Greenland. *Range.*—From about lat. 69° N. on east coast of Greenland northward to limit of land, lat. 83°24' N., and thence westward along the coast of north Greenland to Kane Basin, and across Robeson Channel, Ellesmere Island, and Axel Heiberg Island, south through Baffin Island, to Melville Peninsula, Southampton Island, and Baker Lake,


Dicrostonyx groenlandicus richardsoni Merriam†*


Dicrostonyx groenlandicus kilangmiutak Anderson and Rand*


Type Locality.—DeHaven Point, southeastern point of Victoria Land, west side of Victoria Strait, District of Franklin, Northwest Territories, Canada; lat. about 69° N., long. about 101°30' W. Range.—Arctic coast mainland at least from mouth of Mackenzie River to Coronation Gulf, and south to Aylmer Lake, in District of Mackenzie; and Banks, Borden, Melville, Taylor, and Victoria Islands in District of Franklin, Northwest Territories (Anderson, Nat. Mus. Canada, Bull. 102 (1946), p. 148, Jan. 24, 1947).

Dicrostonyx groenlandicus rubricatus (Richardson) *

1839. Arvicola rubricatus Richardson, The zoology of Captain Beechey’s voyage in His Majesty’s ship Blossom . . . , p. 7.

Type Locality.—American side of Bering Strait, Alaska. Range.—Tundra or unforested regions of northwestern and northern coast of Alaska, from mouth of Kuskokwim River and around to Arctic coast of Yukon (Herschel Is-

_Dicrostonyx groenlandicus unalascensis_ Merriam†*


_Type Locality._—Unalaska, Unalaska Island, Alaska. _Range._—Confined, so far as known, to Unalaska Island.

_Dicrostonyx groenlandicus stevensoni_ Nelson†*


_Type Locality._—Umnak Island, about 6 miles from western end of Unalaska Island, Alaska. _Range._—Umnak Island.

_Dicrostonyx exsul_ G. M. Allen*


_Type Locality._—St. Lawrence Island, Bering Sea, Alaska. _Range._—St. Lawrence Island.

Genus _SYNAPTOMYS_*† Baird (bog-lemmings)


Subgenus _SYNAPTOMYS_ Baird

_Synaptomys cooperi cooperi_ Baird†*


Synaptomys cooperi stonei Rhoads*


_Type Locality._—Mays Landing [on Egg River], Atlantic County, N. J. [About half way between Mare Run (on the north) and Mays Landing dam on Great Egg Harbor River (on the south) in a cedar swamp between said pond and main highway on the west, Hamilton Township, Atlantic County, N. J. (personal communication from Witmer Stone).] _Range._—Occurs as far north as Massachusetts; south along Atlantic Coast to southern part of eastern Peninsula of Maryland (E. L. Poole, Journ. Mamm., vol. 24, No. 1, p. 103, Feb. 20, 1943); southward in Appalachian Mountains into North Carolina and Great Smoky Mountains in Tennessee (E. V. Komarek and R. Komarek, Bull. Chicago Acad. Sci., vol. 5, No. 6, p. 157, Aug. 15, 1938); recorded also in central eastern Ohio (Bole and Moulthrop, Sci. Publ. Cleveland Mus. Nat. Hist., vol. 5, No. 6, p. 149, Sept. 11, 1942) and Rowan County, eastern Kentucky (Welter and Sollberger, Journ. Mamm., vol. 20, No. 1, p. 81, Feb. 15, 1939).

Synaptomys cooperi helaletes Merriam†*


_Type Locality._—Lake Drummond, Dismal Swamp, Norfolk County, Va. _Range._—Extreme southeastern Virginia and northeastern North Carolina.

Synaptomys cooperi saturatus Bole and Moulthrop*  


_Type Locality._—Bloomington, McLean County, Ill. _Range._—Southern half of Wisconsin (from Kelly Lake southward), southwestern Michigan (Cassopolis), south to Ohio River in western Ohio (Clermont County), Indiana (Ohio County), and Illinois (Pope County), and through eastern Missouri to northeastern Arkansas (Craighead County); west at least to Callaway County, Mo., and east to Clermont County, Ohio (Hall and Cockrum, Univ. Kansas Publ. Mus. Nat. Hist., vol. 5, No. 23, pp. 296–297, Nov. 17, 1952).

Synaptomys cooperi gossii (Coues)†*

1877. Arvicola (Synaptomys) gossii Coues, in Coues and Allen, Monographs of North American Rodentia (U. S. Geol. and Geogr. Surv. Terr., Rep., vol. 11, Washington), p. 235. (Published as a synonym of Synaptomys cooperi, but name stated to apply to Kansas specimens, description and measurements of which are printed on p. 236.)


**Synaptomys cooperi paludis** Hibbard and Rinker


**Type Locality.**—Bog area surrounding brooder pond No. 1, Meade County State Park, 14 miles southwest of Meade, Meade County, Kan. *Range.*—Known only from bog areas of Meade County State Park

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**Subgenus MICTOMYS True**


**Synaptomys borealis borealis** (Richardson) *


**Synaptomys borealis dalli** Merriam†*


**Type Locality.**—Nulato, Yukon River, Alaska. *Range.*—Hudsonian Zone in central and southern Alaska, southwestern Yukon, and northwestern British

**Synaptomys borealis chapmani** J. A. Allen*


**Synaptomys borealis artemisiae** Anderson


**Type Locality.**—Stevenson Creek [=Sixmile Creek], on Hope–Princeton trail, southwest of Princeton, eastern slope of Cascade Range, British Columbia, Canada; lat. 49°23' N., long. 120°25' W. Altitude, about 2,400 feet. *Range.*—Known only from Similkameen River Valley, eastern slope of Cascade Range, British Columbia, from dry Transition Zone country near Princeton, at 2,400 feet altitude, to head of Whipsaw Creek just east of Cascade Mountains Divide at 5,600 feet altitude (Anderson, Nat. Mus. Canada Bull. 102 (1946)), p. 145, Jan. 24, 1947).

**Synaptomys borealis smithi** Anderson and Rand*


**Type Locality.**—Thicket Portage, Mile 165, Hudson Bay Railway, Manitoba, Canada. *Range.*—From Ilford (Mile 286, Hudson Bay Railway) south to Riding Mountain National Park, Sandilands Forest Reserve, and other points in southeastern Manitoba, and west to Prince Albert National Park, Saskatchewan, Canada (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 146, Jan. 24, 1947). Recorded also from Williams, Lake of the Woods County, and from Warroad, Roseau County, Minn. (Wetzel and Gunderson, Journ. Mamm., vol. 30, No. 4, p. 437, Nov. 17, 1949), and eastward in Canada to Port Severn and Moosonee in Ontario (Anderson and Rand, Canadian Field Nat., vol. 57, No. 6 (September), p. 102, Dec. 10, 1943).

**Synaptomys borealis wrangeli** Merriam†*


Type Locality.—Wrangell, Alexander Archipelago, Alaska. Range.—Coastal strip in Canadian Zone from Alexander Archipelago southward to northwestern Washington.

Synaptomys borealis innuitus (True) †*


Type Locality.—Fort Chimo, Quebec, Canada. Range.—Interior of northern Quebec, from Chimo south to upper part of St. Marguerite River about 100 miles north of Gulf of St. Lawrence (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 145, Jan. 24, 1947).

Synaptomys borealis medioximus Bangs*  


Type Locality.—L’Anse au Loup, Strait of Belle Isle, Labrador, Canada. Range.—Coast district of southern Labrador from Strait of Belle Isle north to Hamilton Inlet and Nain (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 146, Jan. 24, 1947).

Synaptomys borealis sphagnicola Preble†*


Type Locality.—Fabyans, near base of Mount Washington, Coos County, N. H. Range.—Canadian Zone in northern New England States from type locality north to include New Brunswick and portion of Quebec east and south of St. Lawrence River.

Genus LEMMUS a1 Link (lemmings)

1795. Lemmus Link, Beyträge zur Naturgeschichte, vol. 1, pt. 2, p. 75. (Type, Mus lemmus Linnaeus.)

Lemmus trimucronatus trimucronatus (Richardson) *


a1 American species revised by Davis, Murrelet, vol. 25, No. 2, pp. 19–25, Sept. 19, 1944.

213756—55—37
Type Locality.—Point Lake, Mackenzie District, Northwest Territories, Canada. Range.—Boreal America, in the east from Hudson Strait north to northern Baffin Island (Admiralty Inlet, Pond Inlet, Strathcona Sound); and southern part of Somerset Island near Fort Ross, Bellot Strait; west of Hudson Bay north of about lat. 62° N. to near eastern end of Great Slave Lake, Clinton Colden Lake, west and north to Cape Bathurst and Cape Kellett on west coast of Banks Island (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 147, Jan. 24, 1947).

Lemmus trimucronatus alascensis Merriam†*
Type Locality.—Point Barrow, Alaska. Range.—Alaska, north of lat. 62° N., northwestern Arctic Canada, including northern part of Yukon and northwestern part of Mackenzie District, Northwest Territories, east to Cape Bathurst.

Lemmus trimucronatus helvolus (Richardson) *
Type Locality.—Near headwaters of one of southern tributaries of Peace River, or between there and Jasper House region, Alberta, Canada (Preble, loc. cit.). Range.—Rocky Mountains region of northwestern Alberta and in British Columbia from headwaters of Peace River, Babine Mountains, Omineca Mountains, Stikine Mountains, and Coast Mountains as far south as Stuie at head of Bella Coola River, and Rainbow Mountains (about lat. 52°30' N.), and north to Tantalus and Teslin Lake in southern Yukon (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 147, Jan. 24, 1947).

Lemmus trimucronatus minusculus Osgood†*
Type Locality.—Kakhtul River, near its junction with Malchatna River, Alaska.

Range.—Southwestern Alaska, at base of Alaskan Peninsula, south, and east of Kuskokwim River.

Lemmus trimucronatus harroldi Swarth*


Type Locality.—Nunivak Island, Alaska. Range.—So far as known, restricted to Nunivak Island.

Lemmus nigripes (True)‡*


Type Locality.—Saint George Island, Pribilof Islands, Alaska. Range.—Known from Saint George Island only.

Tribe Microt (voles)

Genus CLETHRIONOMYS Tilesius (red-backed mice)

1850. Clethrionomys Tilesius, Isis, Encyclopaedische Zeitschrift vorzuglich für Naturgeschichte, Physiologie, etc. (Münchner Verein für Naturkunde), No. 2, p. 28. (Type, Mus rutilus Schreber.)

rutilus—group

Clethrionomys albiventer Hall and Gilmore*


Type Locality.—Sevoonga, 2 miles east of North Cape, St. Lawrence Island, Bering Sea, Alaska. Range.—St. Lawrence Island.

Clethrionomys rutilus dawsoni (Merriam)*


**Type Locality.**—Finlayson River, a northern source of Liard River, lat. 61°30’ N.; long. 129°30’ W., Yukon, Canada. Altitude, 3,000 feet. *Range.*—From Thelon Game Sanctuary along north shore of Great Slave Lake, including adjacent islands, and upper Mackenzie River, Liard River, northwest British Columbia (Alaska Highway), southeastern Yukon (Canol Road), Canada (Anderson, Nat. Mus. Canada, Bull. 102 (1946), p. 154, Jan. 24, 1947); west to Juneau and Yakutat, and north along coast to Norton Sound and nearly to Bering Strait (Teller), Alaska (Orr, Journ. Mamm., vol. 26, No. 1, pp. 70–71, Feb. 27, 1945). Recorded from northern edge of Brooks Range (2,000 to 3,500 feet) and from Uniat (300 to 500 feet) at edge of Arctic Coastal Plain (Rausch, loc. cit.).

*Clethrionomys rutilus washburni* Hanson


**Type Locality.**—Perry River, Mackenzie District, Northwest Territories, Canada, lat. 67°34’ N., long. 102°07’ W. *Range.*—Known from type locality only.

*Clethrionomys rutilus orca* (Merriam) † *


*Clethrionomys rutilus insularis* (Heller)


*Clethrionomys rutilus watsoni* Orr


Clethrionomys rutilus glacialis Orr


gapperi—group

Clethrionomys gapperi gapperi (Vigors) *


Clethrionomys gapperi ochraceus (Miller) *


Clethrionomys gapperi paludicola Doubt


Type Locality.—Pymatuning Swamp, 4 miles west of Linesville, Crawford County, Pa. Altitude, 1,000 feet. Range.—Swampy hemlock forest of Pymatuning in Ashtabula County, Ohio, and Crawford County, Pa., as well as valley of Conneaut Creek in Ohio (Bole and Moulthrop, Sci. Publ. Cleveland Mus. Nat. Hist., vol. 5, No. 6, p. 152, Sept. 11, 1942).

Clethrionomys gapperi rhoadsii (Stone) *


Clethrionomys gapperi rupicola E. L. Poole*


Type Locality.—The Pinnacle, Berks County, Pa. Range.—Kittatinny Ridge of Berks and Schuylkill Counties, east-central Pennsylvania. Specimens from South Mountain region of Berks County, as well as those from southern portions of Pocono Plateau (Pocono Lake), Monroe County, and from Summit Mills, Somerset County, Pa., approach this race.

Clethrionomys gapperi maurs R. Kellogg†*


Type Locality.—Black Mountains, 4½ miles southeast of Lynch, Harlan County, Ky. Altitude, 4,100 feet. Range.—From Black Mountains, Harlan County, Ky., eastward to Big Stone Gap, Cumberland Mountains, Wise County, Va.

Clethrionomys gapperi carolinensis (Merriam) †+


**Clethrionomys gapperi gaspeanus** Anderson


*Type Locality.*—Berry Mountain Camp, near junction of Berry Mountain
Brook with Grand Cascapedia River, Matane County, Quebec, Canada. Altitude,
1,500 feet. *Range.*—Gaspé Peninsula, Quebec, and Madawaska County in north-
western New Brunswick (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 152,

**Clethrionomys gapperi pallescens** Hall and Cockrum*

No. 1, p. 233, July 1940. (Homonym of *Arvicola rufescens* de Selys Long-
champs, 1836.)


*Type Locality.*—Wolfville, Kings County, Nova Scotia, Canada. *Range.*—
Nova Scotia.

**Clethrionomys gapperi proteus** (Bangs) *

May 13, 1897.

1938. *Clethrionomys gapperi proteus* C. F. Jackson, Journ. Mamm., vol. 19,
No. 4, p. 433, Nov. 14, 1938.

*Type Locality.*—Hamilton Inlet, Labrador, Canada. *Range.*—Atlantic coast
of Labrador (Hamilton Inlet, Davis Inlet, and north at least to Assiwaban River)
and along north shore of Gulf of St. Lawrence westward to Bay of Seven Islands

**Clethrionomys gapperi ungava** (V. Bailey) †*

May 13, 1897.


*Type Locality.*—Fort Chimo, Ungava District, Quebec, Canada. *Range.*—
Northern parts of Ungava Peninsula, Quebec; probably meeting and intergrading
with *proteus* on southeast and with *hudsonius* on southwest (Anderson, Nat. Mus.

**Clethrionomys gapperi hudsonius** Anderson*

Soc. Nat. Hist., Quebec, 1939, p. 73, Feb. 29, 1940.

*Type Locality.*—Kapuskasing, on Kapuskasing River, about 64 miles west of
Cochrane, Ontario, Canada. *Range.*—From Churchill and northern part of
Hudson Bay Railway northwest to Sandhill Lake (lat. 59°21' N., long. 98°43'
W.) and as far south as Ilford, Manitoba, southeastward in region south of
Hudson Bay and west of James Bay to Kapuskasing and Lake Abitibi on trans-
continental line of Canadian National Railways in Ontario; south and east sides
of James Bay and north on east side of Hudson Bay as far as Richmond Gulf,
Quebec, Canada (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 152, Jan. 24,
1947).
Clethrionomys gapperi athabascae (Preble) †*

Clethrionomys gapperi loringi (V. Bailey) †*

Clethrionomys gapperi brevicaudus (Merriam) †*

Clethrionomys gapperi galei (Merriam) †*
Clethrionomys gapperi gauti Cockrum and Fitch


_Type Locality._—Twining, Taos County, N. Mex. Altitude, 10,700 feet. _Range._—Rocky Mountains of north-central New Mexico and south-central Colorado.

Clethrionomys gapperi limitis (V. Bailey) †*


_Type Locality._—Willow Creek, a branch of the Gilita, Mogollon Mountains, Catron County, N. Mex. Altitude, 8,500 feet. _Range._—Mogollon, San Mateo, and Magdalena Mountains of New Mexico.

Clethrionomys gapperi arizonensis Cockrum and Fitch† *


_Type Locality._—Little Colorado River, White Mountains, Apache County, Ariz. Altitude, 8,300 feet. _Range._—White Mountains of eastern Arizona.

Clethrionomys gapperi uintaensis Doutt


_Type Locality._—Paradise Park, 45 miles northwest of Vernal, Uintah County, Utah. Altitude, 10,050 feet. _Range._—From Beaver Dams, Daggett County, westward along Uinta Mountains, and as far south in central mountains as southern end of Wasatch Mountains in eastern Salt Lake County, Utah (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 104, Feb. 15, 1951), and Uinta County, Utah, and southwestern Wyoming (Cockrum and Fitch, Univ. Kansas Publ. Mus. Nat. Hist., vol. 5, No. 22, p. 286, Nov. 15, 1952).

Clethrionomys gapperi idahoensis (Merriam) †*


_Type Locality._—Sawtooth (or Alturas) Lake, east base of Sawtooth Mountains, Blaine County, Idaho. Altitude, 7,200 feet. _Range._—Blue Mountains of southeastern Washington (Dalquest, Univ. Kansas Mus. Nat. Hist., vol. 2, p. 342, Apr. 9, 1948); Blue Mountain section of northeastern Oregon (V. Bailey, North Amer. Fauna No. 55 (June), p. 193, Aug. 29, 1936); in Idaho, from Clearwater County south to Snake River Plains (Davis, the Recent mammals of Idaho, p. 310, April 5, 1939) and mountains in southeastern part of State to Utah and Wyoming.
Clethrionomys gapperi stikinensis Hall and Cockrum


*Type Locality.*—Great Glacier, Stikine River, British Columbia. *Range.*—Known only from lower Stikine River Valley of British Columbia and Cleveland Peninsula (Bradfield Canal and Helm Bay) of Alaska.

Clethrionomys gapperi wrangeli (V. Bailey)†*


Clethrionomys gapperi solus Hall and Cockrum†*


Clethrionomys gapperi phaeus (Swarth) *


*Type Locality.*—Martien Arm, Boca de Quadra, Alaska. *Range.*—Recorded from Chickamin River (Behm Canal), Alaska, south to Port Simpson, British Columbia (Hall and Cockrum, op. cit., p. 303).

Clethrionomys gapperi saturatus (Rhoads) *


Clethrionomys gapperi cascadensis Booth*

Type Locality.—Two miles south of Blewett Pass, Kittitas County, Wash. Altitude, 3,000 feet. Range.—Cascade Mountains of Washington, extending from Skamania and Klickitat Counties in southern part of State northward along both slopes of Cascade Mountains at least to northern Whatcom and northern Okanogan Counties, and probably into southern British Columbia; limits of range not determined (see also, Dalquest, Univ. Kansas Publ. Nat. Hist., vol. 2, p. 343, Apr. 9, 1948).

occidentalis—group

Clethrionomys occidentalis occidentalis (Merriam) †*
1890. Evotomys occidentalis Merriam, North Amer. Fauna No. 4, p. 25, Oct. 8, 1890.

Type Locality.—Aberdeen, Grays Harbor County, Wash. Range.—Lowlands of western Washington, east at least to Cottage Lake (Dalquest, loc. cit.), and northward into southern British Columbia.

Clethrionomys occidentalis caurinus (V. Bailey) ‡*

Type Locality.—Lund, east shore of Malaspina Inlet, British Columbia, Canada. Range.—Coast region of southwestern British Columbia from near Washington boundary (Chilliwack Valley, Cultus Lake, Lihumiton Park, Skagit), Vancouver, Malaspina Inlet, Horseshoe Lake, Stillwater, and north to Loughborough Inlet, Kingcome Inlet, Rivers Inlet, and Bella Coola region (Hagensborg, Stuie, Caribou Mountains, Rainbow Mountains), and Kimsquit at head of Dean Inlet (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 152, Jan. 24, 1947). Recorded also northward to Inverness, mouth of Skeena River, British Columbia (Hall and Cockrum, op. cit., p. 300).

Clethrionomys occidentalis nivarius (V. Bailey) †*

Clethrionomys occidentalis mazama (Merriam) †*

Type Locality.—Crater Lake, Mount Mazama, Klamath County, Oreg. Altitude, 7,000 feet. Range.—Canadian zone area of Cascade Mountains in Oregon, grading into obscurus on lower slopes (V. Bailey. North Amer. Fauna No. 55 (June), p. 192, Aug. 29, 1936); and southward into northern California and extreme northern Sierra Nevada; recorded from Mount Shasta, Siskiyou County; Carberry Ranch, near Montgomery Creek, Shasta County; vicinity of Lassen Peak, Tehama County; and near Quincy, Plumas County; vertical range, 3,500 to 7,700 feet; zonal range, Transition and Canadian (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 184, Sept. 26, 1933).

Clethrionomys occidentalis obscurus (Merriam) †*

Type Locality.—Prospect, Upper Rogue River Valley, Jackson County, Oreg. Altitude, about 2,600 feet. Range.—Northwestern, interior, mountainous portion of California immediately east of humid coast belt, and south from Trinity Mountains to vicinity of Yola Bolly Mountain; recorded from Jackson and Castle Lakes, Siskiyou County; South Fork Mountain near Blake Lookout, eastern Humboldt County; divide 12 miles north of North Yolla Bolly Mountain, Trinity County; 2 miles south of South Yolla Bolly Mountain, western Tehama County; vertical range from 4,400 feet up to 7,500 feet; zonal range, Transition and Canadian (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 185, Sept. 26, 1933); and northward into Oregon through open Transition Zone valleys between heavy timber of humid Coast Ranges and Canadian Zone forests of Cascade Mountains along edges of Rogue, Umpqua, and Willamette River Valleys (V. Bailey, loc. cit.).

Clethrionomys occidentalis californicus (Merriam) †*


**Type Locality.**—Eureka, Humboldt County, Calif. **Range.**—Humid northwest coastal belt of California, chiefly in or near redwood forests, south from near Oregon line to Sonoma County; southernmost record station, 7 miles west of Cazadero; interiormost station, near Fair Oaks, Humboldt County, and Willits, Mendocino County; vertical range, from near sea level (Gualala) up to 2,300 feet (near Sherwood, Mendocino County); zonal range, Transition and Canadian (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 185, Sept. 26, 1933); northward through coastal area of western Oregon to Columbia River, ranging from near ocean to 2,500 feet in Coast Range (Saddle Mountain) and inland as far as west slope of Cascade Mountains in Willamette Valley (Estacada, 500 feet) and east slope of Coast Range Mountains (Wells, 223 feet) in Benton County (J. A. Macnab and J. C. Macnab, Journ. Mamm., vol. 22, No. 2, pp. 174–180, May 13, 1941).

**Genus PHENACOMYS*** Merriam

(Type, *Phenacomys intermedius* Merriam.)

(Type, *Phenacomys longicaudus* True.)

**intermedius**—group

**Phenacomys intermedius intermedius** Merriam*


(Near head of Timber Creek, Salmon River Mountains, Lemhi County, Idaho. Altitude, 10,500 feet.)

(Black Hills, now Laramie Mountains, Wyo.)

(Twin Peak, near Long’s Peak, Boulder County, Colo. Altitude, 9,000 feet.)

(Telegraph Creek, British Columbia, Canada.)


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**Phenacomys intermedius levis** A. B. Howell‡*


**Phenacomys intermedius laingi** Anderson


**Type Locality.**—Kimsquit River, Cornice Creek, near head of Dean Inlet, about lat. 52°54' N., long. 127° W., British Columbia. Altitude, 2,500 feet. **Range.**—Coast Range of British Columbia at heads of Dean Inlet (Kimsquit River) and Bella Coola Inlet (Atnarko River and Rainbow Mountains, near southern boundary of Tweedsmuir Provincial Park).

**Phenacomys intermedius oramontis** Rhoads*


**Phenacomys intermedius celsus** A. B. Howell†*


**Type Locality.**—Muir Meadow, Tuolumne Meadows, Yosemite National Park, Calif. Altitude, 9,300 feet. **Range.**—High central Sierra Nevada, from Pyramidal Peak, El Dorado County, south at least to Humphreys’ Basin, Fresno County, Calif.; vertical range, 7,700 to 10,800 feet; zonal range, chiefly Hudsonian (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 183, Sept. 26, 1933).
Rodentia: Cricetidae

Ungava—group

Phenacomys ungava ungava Merriam†*

1889. *Phenacomys celatus* Merriam†, North Amer. Fauna No. 2, p. 33, Oct. 30, 1889. (Godbout, Saguenay County, Quebec, Canada.)

1889. *Phenacomys latimanus* Merriam†, North Amer. Fauna No. 2, p. 34, Oct. 30, 1889. (Fort Chimo, Ungava District, Quebec, Canada.)


*Type Locality.*—Fort Chimo, Ungava District, Quebec, Canada. *Range.*—The most eastern records are from Chimo near Hudson Strait, and Godbout, Saguenay County, on north shore of Gulf of St. Lawrence, both in Quebec; specimens from various points in northern Ontario (Abitibi, Manitoulin, and Nipissing Districts, and various points north of Lake Superior) west to Favourable Lake in Kenora District near Manitoba boundary, Canada (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 150, Jan. 24, 1947).

*Phenacomys ungava crassus* Bangs*


*Phenacomys ungava soperi* Anderson*


*Type Locality.*—Near Swanson Creek, in middle of Section 34, Township 19, Range 17, Riding Mountain National Park, Manitoba, Canada, about 10 miles east of Park Headquarters at Wasagaming, on Clear Lake. Altitude, 2,016 feet. *Range.*—From southwestern Manitoba and south-central Saskatchewan, west to south-central Alberta; in forested areas on edge of northern Great Plains region.

*Phenacomys ungava mackenzii* Preble†*


*Type Locality.*—Fort Smith, Slave River, Mackenzie District, lat. 60° N., Northwest Territories, Canada. *Range.*—North nearly to Great Bear Lake in Northwest Territories (Lake St. Croix, 120 miles slightly west of north of Fort Rae) and southeastern Yukon (Lapie Lakes and Lapie River, Mile 132, on Canol Road); west to eastern foothills of Rocky Mountains in western Alberta.
(Bearberry Creek west of Olds), and northeastern British Columbia (Peace River); south to Red Deer River in central Alberta and Athabaska Lake in northwestern Saskatchewan; and east to Churchill, Manitoba (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 151, Jan. 24, 1947).

\[ \text{albipes—group} \]

**Phenacomys albipes** Merriam†*  
*Type Locality.*—Redwoods, near Arcata, Humboldt Bay, Humboldt County, Calif.  
*Range.*—Occurs in a coastal strip of unknown width from Arcata, Humboldt County, Calif., north to vicinity of Columbia River probably, and east as far as Vida, Oreg.

\[ \text{longicaudus—group} \]

**Phenacomys longicaudus** True†*  
*Type Locality.*—Marshfield, Coos County, Oreg.  

**Phenacomys silvicola** A. B. Howell*  
*Type Locality.*—Five miles southeast of Tillamook, Tillamook County, Oreg.  
*Range.*—Known only from type locality, and from Corvallis, Oreg.; undoubtedly confined to forested area of humid coast belt.

**Genus ORTHRIOMYS**  

**Orthriomys umbrosus** (Merriam) †*  
*Type Locality.*—Mount Zempoaltepec, Oaxaca, México.  
*Range.*—Known only from east slope of Mount Zempoaltepec.  
*Zonal range,* humid Upper Austral.

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**Genus HERPETOMYS** Merriam


**Herpetomys guatemalensis** (Merriam)†*


*Type Locality.*—Todos Santos, Huehuetenango, Guatemala. Altitude, 10,000 feet. *Range.*—Known from type locality only.

**Genus MICROTUS** Schrank (meadow-mice)


**Subgenus CHILOTUS** Baird


**Microtus oregoni oregoni** (Bachman) *


**Microtus oregoni bairdi** Merriam†*


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† Revised by V. Bailey North Amer. Fauna No. 17, pp. 1–86, June 6, 1900.
‡ Subspecies of *Microtus oregoni* reviewed by Hatfield and Hooper, Murrelet, vol. 16, No. 2, pp. 33–34, May 1935.

_Type Locality._—Glacier Peak, Crater Lake, Klamath County, Oreg. Altitude, 7,800 feet. _Range._—Known only from type locality on an open timberline ridge northwest of Crater Lake (V. Bailey, North Amer. Fauna No. 55 (June), p. 213, Aug. 29, 1936) and Beswick, Siskiyou County, Calif. (Taylor, loc. cit.).

*Microtus oregoni adocetus* Merriam†*


_Type Locality._—South Yolla Bolly Mountain [2 miles south of], Tehama County, Calif. Altitude, 7,500 feet. _Range._—Region of type locality in Tehama and Trinity Counties, Calif., northwest to South Fork Mountain, Humboldt County, Calif.; thence northward to Medford, Jackson County, Oreg.; zonal range, Canadian, Transition and Upper Sonoran (Hatfield and Hooper, Murrelet, vol. 16, No. 2, p. 34, May 1935).

*Microtus oregoni serpens* Merriam†*


_Subgenus AULACOMYS* Rhoads


*Microtus richardsoni richardsoni* (DeKay) *


_Type Locality._—“Near the foot of the Rocky Mountains.” According to V. Bailey (North Amer. Fauna No. 17, p. 60, June 6, 1900) the type was collected by Drummond in the vicinity of Jasper House, Alberta, Canada. _Range._—High altitudes in Alberta from Waterton Lakes National Park north at least to Jasper National Park in Rocky Mountains (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 162, Jan. 24, 1947).

*Microtus richardsoni arvicoloides* (Rhoads) *

1894. *Aulacomys arvicoloides* Rhoads, Amer. Nat., vol. 28, p. 182, February 1894. (Regarded as identical with *richardsoni* by Anderson and Rand,


Type Locality.—Lake Keechelus, Kittitas County, Wash. Altitude, 8,000 feet. [=3,000 feet]. Range.—From various mountain ranges (Monashee Mountains, Rossland; Cascade Mountains, Hope-Princeton summit; McGillivray Creek; Coast Range, Lihumitson Park, Alta Lake) in southern British Columbia (regarded as richardsoni by Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 162, Jan. 24, 1947); southward through Cascade Mountains (Tomyhoi Lake south to Potato Hill) of Washington (Dalquest, loc. cit.) and of Oregon to Crater Lake (V. Bailey, North Amer. Fauna No. 55 (June), p. 211, Aug. 29, 1936).

Microtus richardsoni macropus (Merriam) †*


Subgenus MICROTUS Schrank


pennsylvanicus—group 89

Microtus pennsylvanicus pennsylvanicus (Ord) *


* Canadian subspecies reviewed by Rand, Canadian Field-Nat., vol. 57, Nos. 7-8 (October-November 1943), pp. 115-123, Jan. 24, 1944.

**Microtus pennsylvanicus nigrans** Rhoads*


Type Locality.—Currituck, Currituck County, N. C. Range.—Near the coast from southeastern Maryland south to northeastern North Carolina; in Virginia inland at least to Richmond County (Handley and Patton, Wild mammals of Virginia, p. 174, 1947). Probably ranges southward to near Santee River, Charleston County, South Carolina (A. L. Nelson, Journ. Mamm., vol. 15, No. 4, p. 253, Nov. 15, 1934).

**Microtus pennsylvanicus shattucki** Howe*


Type Locality.—Tumble Down Dick Island, near Long Island, Penobscot Bay, Maine. Range.—Known from type locality only.

**Microtus pennsylvanicus acadicus** Bangs*


**Microtus pennsylvanicus terraenovae** (Bangs)*


**Microtus pennsylvanicus enixus** Bangs*


**Microtus pennsylvanicus labradorius** V. Bailey†*


**Microtus pennsylvanicus fontigenus** Bangs*


**Microtus pennsylvanicus aphorodemus** Preble†*


**Microtus pennsylvanicus insperatus** (J. A. Allen)*


*Microtus pennsylvanicus drummondii* (Audubon and Bachman) *


**Type Locality.**—“Valleys of the Rocky Mountains”; probably in the vicinity of Jasper House, Alberta, Canada. *Range.*—Rocky Mountains northward from Crowsnest Pass, through central and northern British Columbia from mountains east of Bella Coola, British Columbia, north to southern and central Yukon, to mouth of Mackenzie River, Northwest Territories, following northern limit of trees to lower Anderson and Horton Rivers, southeastward to Churchill, Manitoba, and Fort Albany on James Bay, and Lake Attawapiskat, Thunder Bay, and Rainy River, in western Ontario; nearly the whole of Manitoba, all of Saskatchewan except in extreme southwest, and all of Alberta except in extreme southeast; intergrading with *fontigenus* in western Ontario, with *aphorodemus* in northeastern Manitoba, and with *insperatus* in semi-arid parts of southern Saskatchewan and Alberta (Anderson, loc. cit.) ; and southward to high glacial-prairie region between Missouri and Red River Valleys of North Dakota (V. Bailey, North Amer. Fauna No. 49 (1926), p. 93, Jan. 8, 1927), grading toward *drummondii* in northwestern Minnesota (Swanson, Minnesota Dept. Conserv. Techn. Bull. 2, p. 20, 1945).

*Microtus pennsylvanicus arcticus* Cowan

Type Locality.—Kidluit Bay, northeast corner of Richards Island, lat. 69°31' N., long. 133°49' W., Mackenzie District, Northwest Territories, Canada. Range.—Known from type locality only.

**Microtus pennsylvanicus alcorni** Baker*


Type Locality.—Six miles southwest of Kluane, Yukon Territory, Canada. Altitude, 2,550 feet. Range.—Extreme southwestern Yukon Territory and adjacent parts of Alaska as far south as Haines, as far north as Northway, and as far west along Alaskan coast as Anchorage and Tyonek.

**Microtus pennsylvanicus tananaensis** Baker*


Type Locality.—Yerrick Creek, 21 miles west and 4 miles north of Tok Junction, Alaska. Range.—East-central Alaska as far south as Tok Junction, as far west as Mount McKinley and Nulato (V. Bailey, North Amer. Fauna No. 17, p. 24, June 6, 1900), as far north as Fairbanks, and as far east as Eagle.

**Microtus pennsylvanicus admiraltiae** Heller*


Type Locality.—Windfall Harbor, Admiralty Island, Alaska. Range.—Known from Admiralty Island only.

**Microtus pennsylvanicus modestus** (Baird) †*


Microtus pennsylvanicus aztecs (J. A. Allen)*


Microtus pennsylvanicus funebris F. H. Dale*


*Type Locality.—Coldstream, 3½ miles southeast of Vernon, British Columbia, Canada. Altitude, 1,450 feet. Range.—Southern part of arid, interior belt and southern Coast Ranges east of main summit, from Okanagan Valley, on southeast, to Anahim Lake, near head of Dean River, on northwest, including lower Fraser and Thompson River Valleys, British Columbia; in northeastern Washington, west to Conconully and east to Newport (Dalquest, loc. cit.); and extreme northern Idaho south to Cocolalla, Bonner County.

Microtus pennsylvanicus kincaidi Dalquest


*Type Locality.—The Potholes, 10 miles south of Moses (Neppel) Lake, Grant County, Wash. Range.—Columbian Plateau, in Grand Coulee area, Wash.

Microtus breweri (Baird)†*


†Type Locality.—Muskeget Island, off Nantucket, Mass. Range.—Muskeget Island.

Microtus nesophilus V. Bailey‡*


‡Type Locality.—Great Gull Island, off eastern extremity of Long Island, Suffolk County, N. Y. Range.—Great Gull Island, at entrance to Long Island Sound, and adjacent Little Gull Island (Miller, Bull. New York State Mus., vol. 6, p. 324, Nov. 18, 1899).
**Microtus provectus** Bangs*


*Type Locality*—Block Island, Newport County, Rhode Island. *Range*—Known from type locality only.

*montanus*—group 40

**Microtus montanus montanus** (Peale) *

1843. *Arvicola montana* Peale, Mammalia and ornithology, in United States exploring expedition, during the years 1838–42, under the command of Charles Wilkes, U. S. N., Philadelphia, vol. 8, p. 44.

1897. [*Microtus*] *montanus* Trouessart, Catalogus Mammalium . . . , fasc. 3, p. 563.

*Type Locality*—Headwaters of Sacramento River, near Mount Shasta [probably close to Sisson (=Mount Shasta City)], Siskiyou County, Calif. *Range*—Siskiyou region of extreme north-central portion of California, south from Oregon line to Fort Crook [near Burgettville], Shasta County, west to Stud Horse Canyon, Siskiyou Mountains, Siskiyou County, and east to east side of Tule Lake, Modoc County; vertical range, 2,700 feet up to 6,500 feet; zonal range, Transition and Canadian (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 185, Sept. 26, 1933); and east of Cascade Mountains in western Oregon.

**Microtus montanus dutcheri** V. Bailey†*


*Type Locality*—Big Cottonwood Meadows, southeast of Mount Whitney, Inyo County, Calif. *Altitude*, 10,100 feet. *Range*—High southern Sierra Nevada of California in vicinity of Mount Whitney; recorded south to Jackass Meadow, Tulare County, north to Whitney Creek, Tulare County, and east to Little Cottonwood Creek, Inyo County; vertical range, 6,700 feet (Jordan Hot Springs, Tulare County) to 11,000 feet (Cottonwood Lakes, Inyo County); zonal range, Canadian and Hudsonian (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 186, Sept. 26, 1933).

**Microtus montanus yosemite** Grinnell*


*Type Locality*—Yosemite Valley, Mariposa County, Calif. *Altitude*, 4,000 feet. *Range*—Central and northern Sierra Nevada and northeast through Modoc region to southeastern Oregon; recorded from Goose Lake, Modoc County, south to head of San Joaquin River, in Fresno County; west at north to vicinity of Cassel, Shasta County; vertical range, from 3,000 feet (Cassel) up to 10,350 feet

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(Vogelsang Lake, Yosemite National Park); zonal range, Transition to Hudsonian (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 186, Sept. 26, 1933); recorded also at 12,000 feet at McAfee Meadow and at 10,400 feet at Big Prospector Meadow, both in White Mountains, Mono County, Calif.; and west-central Nevada from Pyramid Lake south to Mount Grant and eastward along Truckee Canal at least to eastern border of Lyon County (Hall, Mammals of Nevada, p. 546, July 1, 1946).

**Microtus montanus canicaudus** Miller†*


*Type Locality.—*McCoy, Willamette Valley, Polk County, Oreg. *Range.—*Willamette Valley eastward at least to Hood River and Wapinitia, Oreg.

**Microtus montanus canescens** V. Bailey†*


**Microtus montanus nanus** (Merriam) †*


**Microtus montanus pratincolus** Hall and Kelson*

**Type Locality.**—Six miles east of Hamilton, Ravalli County, Mont. Altitude, 3,700 feet. **Range.**—Flathead and Bitterroot Valleys of western Montana.

**Microtus montanus micropus** Hall*


**Type Locality.**—Cleveland Ranch, Spring Valley, White Pine County, Nev. Altitude, 6,000 feet. **Range.**—Northern part of Nevada (extreme northeastern corner excepted) south to Eagle Valley, Lincoln County; Monitor and Reese River Valleys, Nye County; and northern end of Virginia Mountains, Washoe County (Hall, Mammals of Nevada, p. 544, July 1, 1946); and Utah, generally along western margins of Pleistocene Lake Bonneville (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 6, p. 51, Aug. 10, 1952).

**Microtus montanus undosus** Hall*


**Type Locality.**—Lovelock, Pershing County, Nev. **Range.**—Humboldt and Carson sinks and lower reaches of Humboldt River in west-central Nevada (Hall, Mammals of Nevada, p. 547, July 1, 1946).

**Microtus montanus nevadensis** V. Bailey†*


**Type Locality.**—Big salt marsh below Watkins Ranch, Ash Meadows, Nye County, Nev. **Range.**—Known from type locality only.

**Microtus montanus fucosus** Hall


**Type Locality.**—Hiko, Pahranagat Valley, Lincoln County, Nev. Altitude, 4,000 feet. **Range.**—Pahranagat Valley.

**Microtus montanus rivularis** V. Bailey†*


**Type Locality.**—St. George, Washington County, Utah. **Range.**—Tule marshes along Virgin River, Washington County.

**Microtus montanus amosus** Hall and Hayward


**Type Locality.**—Torrey, Wayne County, Utah. **Range.**—Southern end of high plateaus in Colorado River drainage and northward at lower elevations, and in that part of Uinta Basin west of Green River, Utah (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 97, Feb. 15, 1951).
Microtus montanus nexus Hall and Hayward*


_Type Locality._—West Canyon, Oquirrh [Oquirrah] Range, Utah County, Utah. _Range._—Valleys and mountains of central Utah from Ogden south to Fish Lake Plateau; limits of range undetermined.

Microtus montanus caryi V. Bailey†*


_Type Locality._—Milford, Fremont County, Wyo. _Range._—Meadows along Bear, Green, and Wind River Valleys in arid sagebrush sections of western and southwestern Wyoming.

Microtus montanus fusus Hall*


_Type Locality._—Two and one-half miles east of summit of Cochetopa Pass, Saguache County, Colo. _Range._—Rocky Mountain region southward from Kinney Ranch, Sweetwater County, in southern Wyoming, to Florida, La Plata County, in southern Colorado; presumably also in San Juan Range (8,700 to 9,900 feet) in north-central New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 198, Mar. 1, 1932).

Microtus montanus arizonensis V. Bailey†*


_californicus_—group 41

Microtus californicus californicus (Peale)†‡


_Type Locality._— Vicinity of San Francisco Bay, Calif.; probably at San Franciscoquito Creek, near Palo Alto, Santa Clara County. _Range._—Coastal region

of west-central California, west of San Joaquin Valley, from upland area on south side of San Francisco Bay south into San Luis Obispo County (except salt marshes and sand hills along Monterey Bay); recorded from San Francisco and Berkeley south to Pozo, San Luis Obispo County, and east to Sweeney’s Ranch. 22 miles southwest of Los Banos, in southwestern Merced County; vertical range. up to at least 2,800 feet (slopes of Mount Diablo. Contra Costa County); zonal range, chiefly Upper Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 186, Sept. 26, 1933).

**Microtus californicus halophilus** von Bloeker*


*Type Locality.*—Moss Landing, Monterey County, Calif. *Range.*—Salt marshes and sand hills of Monterey County, from mouth of Elkhorn Slough south to Seaside.

**Microtus californicus paludicola** Hatfield*


*Type Locality.*—Melrose Marsh, Alameda County, Calif. *Range.*—Salt marsh areas of southern end of San Francisco Bay region, from west base of El Cerrito, Albany, Alameda County, around south end of bay to Redwood, San Mateo County.

**Microtus californicus constrictus** V. Bailey†*


*Type Locality.*—Cape Mendocino, near Capetown, Humboldt County, Calif. *Range.*—Northwest humid coast belt of California, in Mendocino and Humboldt Counties; recorded from Capetown north to Eureka and interiorly to Cuddeback and Fair Oaks. Vertical range, from sea level up to at least 1,000 feet; zonal range, Transition.

**Microtus californicus eximius** R. Kellogg*


*Type Locality.*—Lierly’s Ranch, 4 miles south of Mount Sanhedrin, Mendocino County, Calif. Altitude, 2,340 feet. *Range.*—Northwestern California (excepting narrow coastal strip from Cape Mendocino northward), and northward to Roseburg and Drain in Rogue and Umpqua River Valleys in south-central Oregon; recorded at south from Olema, Marin County, east to Rumsey, Yolo County; thence north to Scott River and Mayten, in Siskiyou County; east at north across head of Sacramento Valley in vicinity of Red Bluff and Tehama to Manton and Turner’s. in Tehama County; vertical range, from sea level (western Marin County) up to 7,500 feet (South Yolla Bolly Mountain, in western Tehama County); zonal range, Lower Sonoran up through Transition (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 187, Sept. 26, 1933).

**Microtus californicus aestuarinus** R. Kellogg*

Type Locality.—Grizzly Island, Suisun Bay, Solano County, Calif. Range.—San Joaquin and Sacramento River Valleys, from Tulare Lake Basin, Kings County, north to least at Chico, Butte County, and east to near Galt, in San Joaquin County; also west along north side of San Francisco Bay at least to Petaluma, Sonoma County. Vertical range, from sea level up to almost 500 feet; zonal range, Lower and Upper Sonoran.

**Microtus californicus mariposae** R. Kellogg*


Type Locality.—A mile and three-quarters west of El Portal, Mariposa County, Calif. Altitude, 1,800 feet. Range.—Western foothill region of Sierra Nevada, from Minkler, Fresno County, north to Dutch Flat, Placer County. Vertical range, from 200 feet up to at least 3,800 feet; zonal range, Upper Sonoran and Transition.

**Microtus californicus vallicola** V. Bailey†*


Type Locality.—Lone Pine Creek, where it cuts through Alabama Hills, near Lone Pine, Inyo County, Calif. Altitude, 4,500 feet. (A. B. Howell, Journ. Mamm., vol. 4, No. 4, p. 266, Nov. 1, 1923.) Range.—Owens Valley region of California, east of Sierra Nevada, from Olancha, Inyo County, north to Benton, Mono County; recorded also from head of Willow Creek in north end of Panamint Mountains, Inyo County. Vertical range, from 3,700 feet up to at least 5,400 feet; zonal range, Lower and Upper Sonoran.

**Microtus californicus scirpensis** V. Bailey†*


Type Locality.—Spring near Shoshone, on Amargosa River, eastern Inyo County, Calif. Altitude, 1,560 feet. Range.—Known only from small marsh at spring near Shoshone on Amargosa River, in eastern Inyo County.

**Microtus californicus kernensis** R. Kellogg*


Type Locality.—Fay Creek, near South Fork of Kern River, Kern County, Calif. Altitude, 4,100 feet. Range.—Drainage basin of Kern River, from Taylor Meadow, Tulare County, southwest to Buena Vista Lake, San Emigdio Creek, and Fort Tejon, in Kern County; vertical range, 290 feet up to 7,000 feet; zonal range, Lower Sonoran to Transition (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 183, Sept. 26, 1933).

**Microtus californicus mohavensis** R. Kellogg


Type Locality.—Victorville, San Bernardino County, Calif. Altitude, 2,700 feet. Range.—Moist bottomlands of Mohave River, on Mohave Desert; re-
corded from vicinities of Victorville and Oro Grande, in San Bernardino County. Vertical range, 2,500 feet up to 2,700 feet; zonal range, Lower Sonoran.

**Microtus californicus stepphensi** von Bloeker


Type Locality.—Playa del Rey, Los Angeles County, Calif. Range.—Coastal marshes in Orange, Los Angeles, and Ventura Counties, Calif.; from Sunset Beach, Orange County, to Point Mugu, Ventura County.

**Microtus californicus sanctidiegi** R. Kellogg*


Type Locality.—Escondido, San Diego County, Calif. Altitude, 640 feet. Range.—San Diegan subfaunal district from Mountain Spring and mouth of Tiajuana River, San Diego County, northwest to Gaviota Pass, Santa Barbara County, and north to Bluff Lake, San Bernardino Mountains, San Bernardino County, Calif. Vertical range, from near sea level (San Diego) up to least 9,000 feet (Round Valley, San Jacinto Mountains); zonal range, Lower Sonoran to Canadian.

**Microtus californicus hyperuthrus** Elliot*


Type Locality.—La Grulla, Sierra San Pedro Mártir, Baja California, México. (In the original account the type locality was said to be San Quintín, Baja California, but this designation was later declared to have been an “inexplicable inadvertence.” See Elliot, Field Columb. Mus. Publ. 115, Zool. Ser., vol. 8, p. 292, Mar. 4, 1904.) Range.—Sierra San Pedro Mártir at altitudes varying from 6,000 to 8,500 feet.

**Microtus californicus equivocatus** Osgood*


Type Locality.—San Quintín, on coast, west of Sierra San Pedro Mártir, Baja California, México. (See Grinnell, Journ. Mamm., vol. 7, No. 3, pp. 221–222, Aug. 9, 1926.) Range.—Coast region, at altitudes below 3,000 feet, near San Quintin.

**Microtus californicus grinnelli** Huey

Type Locality.—Sanbre de Cristo, lat. 31°52' N., long. 116°06' W., in Valle San Rafael, on western base of Sierra Juárez, Baja California, México. Range.—So far as known, in region immediately west of Sierra Juárez.

townsendii—group

Microtus townsendii townsendii (Bachman) *


Microtus townsendii pugeti Dalquest *


Microtus townsendii tetramerus (Rhoads) *

Type Locality.—Beacon Hill Park, Victoria, Vancouver Island, British Columbia, Canada. Range.—Known only from vicinity of Victoria, at southern end of Vancouver Island.

Microtus townsendii laingi Anderson and Rand

Type Locality.—Port Hardy, on Queen Charlotte Strait, northeastern Vancouver Island, British Columbia, Canada. Range.—From northern part of Van-
couver Island, south to Beaver Creek west of Alberni (Cape Scott, Hurst Island, Port Hardy, Sayward, Shushartie, upper Campbell River), British Columbia (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 158, Jan. 24, 1947).

**Microtus townsendii cummingi** Hall


*Type Locality.*—Bowen Island, Howe Sound, British Columbia, Canada.

*Range.*—Known from Bowen Island only.

*longicaudus*—group

**Microtus longicaudus longicaudus** (Merriam) ĺ*


*Type Locality.*—Custer, Black Hills, Custer County, S. Dak. Altitude, 5,500 feet. *Range.*—Boreal cap of Black Hills and down some cold streams well into Transition Zone.

**Microtus longicaudus mordax** (Merriam) ĺ*


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Microtus longicaudus leucophaeus (J. A. Allen)*
Type Locality.—Graham Mountains, Graham County, Ariz. Range.—Graham Mountains, south-central Arizona.

Microtus longicaudus alticola (Merriam)†‡
Type Locality.—Little Spring, San Francisco Mountain, Coconino County, Ariz. Altitude, 8,200 feet. Range.—Boreal Zone of San Francisco Mountain, from 8,200 feet altitude up to timberline at 11,000 feet; and eastern Utah east of Green and Colorado Rivers (Kelson, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 99, Feb. 15, 1951).

Microtus longicaudus baileyi Goldman†
Type Locality.—Greenland Spring, head of Bright Angel Creek, Kaibab Plateau, Grand Canyon National Park, Coconino County, Ariz. Altitude, 8,000 feet. Range.—Apparently restricted to higher parts of Kaibab Plateau, northern Arizona.

Microtus longicaudus latus Hall*
Type Locality.—Wisconsin Creek, Toyabe Mountains, Nye County, Nev. Altitude, 8,500 feet. Range.—Most of Nevada in Boreal Zone, excepting Sierra Nevada, Elko County, and northern parts of Humboldt and Washoe Counties; not found even in high mountains south of lat. 37°30' N. (Hall, Mammals of Nevada, p. 552, July 1, 1946). Also found in western and south-central Utah (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 6, p. 371, Aug. 10, 1952) and presumably also in eastern California.

Microtus longicaudus bernardinus Merriam†*
Type Locality.—Dry Lake, San Bernardino Mountains, San Bernardino County, Calif. Altitude, 9,050 feet. Range.—Higher parts of San Bernardino Mountains, in San Bernardino County; vertical range, 7,500 feet (Bluff Lake) up to 9,050 feet (Dry Lake); zonal range, high Transition and Canadian (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 190, Sept. 26, 1933).
Microtus longicaudus sierrae R. Kellogg*


Type Locality.—Tuolumne Meadows, Yosemite National Park, Tuolumne County, Calif. Altitude, 8,600 feet. Range.—In general, entire length of Sierra Nevada in California, and northwest to include Trinity Mountain region; recorded south from Goose Nest Mountain (near Oregon line) and South Fork of Salmon River, in Siskiyou County, to Taylor Meadow, in extreme southern Tulare County; also on White Mountains, in Mono and Inyo Counties (not typical); vertical range, from 2,000 feet (El Portal, Mariposa County) up to 11,500 feet (McAfee Meadow, White Mountains); zonal range, Transition to Hudsonian, even entering Arctic-Alpine in places (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 190, Sept. 26, 1933); and Sierra Nevada in western Nevada from vicinity of Lake Tahoe south to Desert Creek in Douglas County (Hall, Mammals of Nevada, p. 553, July 1, 1946).

Microtus longicaudus angusticeps V. Bailey†*


Type Locality.—Crescent City, Del Norte County, Calif. Range.—Extreme northwest coast belt of California; recorded from Mendocino City and Fort Bragg, Mendocino County, north to Crescent City, Del Norte County; vertical range, below 300 feet; zonal range, Canadian, or (and) Transition (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 191, Sept. 26, 1933); and coast of southwestern Oregon (V. Bailey, North Amer. Fauna No. 55 (June), p. 210, Aug. 29, 1936).

Microtus longicaudus abditus A. B. Howell*


Type Locality.—Walker’s Ranch, Pleasant Valley, 8 miles south of Tillamook, Tillamook County, Oreg. Range.—Recorded from type locality, Netarts, and Blaine, in Tillamook County.

Microtus longicaudus macrurus Merriam†*


Type Locality.—Lake Cushman, Olympic Mountains, Mason County, Wash. Range.—Olympic Mountains, coast region of western Washington, and Cascade Mountains, except in southeastern part (Dalquest, Univ. Kansas Publ. Mus.
Microtus longicaudus halli Hayman and Holt*


Type Locality.—Godman Springs, Blue Mountains, Columbia County, Wash. Altitude, 5,700 feet. Range.—Restricted to Blue Mountains of southeastern Washington.

Microtus longicaudus vellerosus J. A. Allen*


Type Locality.—Upper Liard River, British Columbia, Canada. Range.—Southern Yukon (Canol Road—Lapie River, Macmillan Pass, Nisutlin River, Ross River, Sheldon Lake) and adjacent parts of Alaska, southwestern Mackenzie District in Northwest Territories, and southward over British Columbia (excluding coastal mountains and interior dry belt) to Pend-d’Oreille, Rossland, and Yahk; on western slope of Rocky Mountains to Fernie and Morrissey and on Alberta side of Mountains to Jasper, Banff, Crowsnest, and Waterton Lakes where it intergrades with mordax; two isolated specimens from Great Plains region in southern Alberta just north of Sweet Grass Hills are somewhat larger and paler but are provisionally referred to vellerosus (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 159, Jan. 24, 1947).

Microtus longicaudus littoralis Swarth*


Type Locality.—Shakan, Prince of Wales Island, southeastern Alaska. Range.—Mainland coast and most of the islands of southeastern Alaska; along coast from Yakutat south at least to Bradfield Canal; and most of the islands of Alexander Archipelago that lie east of Chatham Strait and to the southward.

Microtus coronarius Swarth

Type Locality.—Egg Harbor, Coronation Island, Alaska. Range.—Recorded from Coronation, Forrester, and Warren Islands, Alaska.

**Microtus mexicanus**—group

**Microtus mexicanus mexicanus** (Saussure) *


*Type Locality.*—Volcán de Orizaba, Puebla, México. Range.—Known only from Mount Tancitaro at elevations of 7,800 to 11,400 feet.

**Microtus mexicanus salvus** Hall*


*Type Locality.*—Mount Tancitaro, Michoacán, México. Altitude, 11,400 feet. Range.—Known only from Mount Tancitaro at elevations of 7,800 to 11,400 feet.

**Microtus mexicanus fundatus** Hall


*Type Locality.*—Three and one-half miles south of Pátzcuaro, Michoacán, México. Altitude, 7,900 feet. Range.—Known from vicinity of type locality only.

**Microtus mexicanus phaeus** (Merriam) †


*Type Locality.*—North slope of El Nevado de Colima, Jalisco, México. Altitude, 10,000 feet. Range.—Southern Jalisco and northward to northwestern Durango; eastwardly grading into *mexicanus*. Zonal range, Boreal and Transition.

**Microtus mexicanus subsimus** Goldman†


*Type Locality.*—Sierra Guadalupe, southeastern Coahuila, México. Range.—High, isolated mountain ranges from southeastern Coahuila to southwestern Tamaulipas, México. Recorded also from near Galeana, Nuevo León, México (Hooper, Journ. Mamm., vol. 28, No. 1, p. 55, Feb. 17, 1947).

**Microtus mexicanus madrensis** Goldman†


*Type Locality.*—Río Gavilán, 5 miles west of Colonia García, about 60 miles southwest of Casas Grandes, Chihuahua, México. Altitude, 6,700 feet. Range.—Sierra Madre of Chihuahua, and probably adjacent mountains of northeastern Sonora.
Microtus mexicanus mogollonensis (Mearns) *

Type Locality.—Baker’s Butte, Mogollon Mountains, Coconino County, Ariz.
Range.—Plateau country of central Arizona, and yellow-pine forest area of Mogollon Mountain region of New Mexico; recorded from Mount Taylor, Datil, Mimbres, Magdalena, San Mateo, and Zuni Mountains (V. Bailey, North Amer. Fauna No. 53 (December 1931), pp. 204–205, Mar. 1, 1932).

Microtus mexicanus hualpaiensis Goldman†

Type Locality.—Hualpai Peak, Hualpai Mountains, Mohave County, Ariz. Altitude, 8,400 feet. Range.—Probably restricted to upper slopes of Hualpai Mountains.

Microtus mexicanus navaho Benson*


Microtus mexicanus guadalupensis V. Bailey†*


Microtus fulviventer Merriam†*

Type Locality.—Cerro San Felipe, Oaxaca, México. Altitude, 10,200 feet. Range.—Central part of State of Oaxaca.

xanthognathus—group

Microtus xanthognathus (Leach) *

chrotorrhinus—group 43

Microtus chrotorrhinus chrotorrhinus (Miller) *

Type Locality.—Head of Tuckerman’s Ravine, Mount Washington, Coos County, N. H. Altitude, 5,300 feet. Range.—Eastern Quebec (Mount Albert, Gaspé, altitude 3,500 feet) and central Quebec, northern New Brunswick (Grand River), and central Ontario west to east side of Lake Superior (Pancake Bay) and north side as far west as Schreiber (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 159, Jan. 24, 1947); southward to northern Minnesota (Swanson, Minnesota Dept. Conserv. Techn. Bull. 2, p. 91, 1945), Maine, New Hampshire, and Adirondacks and Catskills in New York and Pennsylvania.

Microtus chrotorrhinus ravus Bangs *

Type Locality.—Black Bay, Strait of Belle Isle, Labrador, Canada. Range.—From type locality northward on Atlantic coast of Labrador to Port Manvers and Curlew Harbour (See also Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 159, Jan. 24, 1947).

Microtus chrotorrhinus carolinensis Komarek *

Type Locality.—About 5 miles north of Smokemont, on a tributary of Bradley Fork, a small branch of Oconalufy River, Swain County, Great Smoky Mountains, N. C. Altitude, 3,200 feet. Range.—Wooded slopes above 3,000 feet in Great Smoky Mountains of Sevier County, Tenn., and Swain County, N. C.; and north to Randolph County, W. Va. (Handley and Patton, Wild mammals of Virginia, p. 174, 1947).

oeconomus—group

Microtus oeconomus operarius (Nelson) † *

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*Microtus oeconomus innuitus* Merriam†*


*Type Locality.*—Northeast Cape, St. Lawrence Island, Bering Sea, Alaska. *Range.*—Known from St. Lawrence Island only.

*Microtus oeconomus punukensis* Hall and Gilmore


*Type Locality.*—Big Punuk Island, near east end of St. Lawrence Island, Bering Sea, Alaska. *Range.*—Big Punuk Island.

*Microtus oeconomus amakensis* Murie†


*Type Locality.*—Amak Island, Bering Island, Alaska. *Range.*—Known from type locality only.

*Microtus oeconomus unalascensis* Merriam†*


**Microtus oeconomicus popofensis** Merriam†*  
**Type Locality.**—Popof Island, Shumagin Islands, Alaska.  
**Range.**—Known from Popof Island only.

**Microtus oeconomicus kadiacensis** Merriam†*  
**Type Locality.**—Kodiak Island, Alaska.  

**Microtus oeconomicus elymocetes** Osgood†*  
**Type Locality.**—East side of Montague Island, Prince William Sound, Alaska.  

**Microtus oeconomicus yakutatensis** Merriam†*  
**Type Locality.**—North shore of Yakutat Bay, Alaska.  
**Range.**—Mainland of Alaska from Glacier Bay to Prince William Sound.

**Microtus oeconomicus sitkensis** Merriam†*  
**Type Locality.**—Sitka, Alaska.  
**Range.**—Baranof and Chichagof Islands,

**Microtus oeconomus gilmorei** Setzer†*


*Type Locality.*—Point Lay, lat. 69°46' N., long. 163°04' W., Alaska. *Range.*—Arctic slope of Alaska from Point Lay on west at least to Umiat on east and from Meade River on north at least to crest of Brooks Range on south.

**Microtus oeconomus macfarlani** Merriam†*


*Type Locality.*—Fort Anderson, Anderson River, Mackenzie District, Northwest Territories, Canada. *Range.*—From inland tundra areas of Yukon River Valley in eastern Alaska through central and northern Yukon (Canol Road at higher altitudes, Rose River and Macmillan Pass area in both Yukon and Northwest Territories); Lapierre House, Old Crow River, Firth River; to northern part of Mackenzie delta (Aklavik, Tuktuyaktok, Toker Point); Anderson River, Franklin Bay, Langton Bay, and south side of Coronation Gulf (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 157, Jan. 24, 1947).

*Subgenus STENOCRANIUS* Kastchenko


*abbreviatus*—group 44

**Microtus abbreviatus abbreviatus** Miller†*


*Type Locality.*—Hall Island, Bering Sea, Alaska. *Range.*—Known from Hall Island only.

**Microtus abbreviatus fisheri** Merriam†*


*Type Locality.*—St. Matthew Island, Bering Sea, Alaska. *Range.*—Known from St. Matthew Island only.

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Microtus miurus miurus Osgood†*


_Type Locality._—Head of Bear Creek, in mountains near Hope City, south side of Turnagain Arm, Cook Inlet, Alaska. _Range._—Mountains on Kenai Peninsula, Alaska (Nelson, Journ. Mamm., vol. 12, No. 3, p. 311, Aug. 24, 1931).

Microtus miurus oreas Osgood†*


Microtus miurus muriei Nelson†*


_Type Locality._—Kutuk River, tributary to Alatna River, Endicott Mountains, Alaska. _Range._—Endicott Mountains and Brooks Range, Alaska; recorded north to Uníat on Colville River, Alaska (Rausch, loc. cit.). Specimens recorded from Seward Peninsula (Quay, Journ. Mamm., vol. 32, No. 1, p. 95, Feb. 15, 1951) are regarded by Hall and Cockrum (loc. cit.) as resembling _muriei_ more closely than _oreas_.

Microtus miurus andersoni Rand


_Type Locality._—Near headwaters of Little Keele River, 82 miles west of Mackenzie River on Canol Road, Mackenzie District, Northwest Territories, Canada. Altitude, 5,500 feet. _Range._—Known from type locality only.

Microtus miurus cantator Anderson


_Type Locality._—Above timber line on north slope of Saint Elias Range near Tepee Lake at head of Harris Creek, which runs west-northwest into Genero River, which runs north into White River, a tributary of Yukon River; about 21 miles east of Alaska—Yukon international boundary; about lat. 61°35' N., long. 140°22' W.; about 18 miles southeast of Canyon City (on White River);
about 18 miles northeast of Mount Constantine and Klutlan Glacier; and about 45 miles northwest of northwest arm of Kluane Lake, Canada. Range.—Known from type locality, but singing mice are reported from region west of Kluane Lake, Yukon.

Genus *PEDOMYS* 4a Baird


*Pedomys ochrogaster ochrogaster* (Wagner) *


*Pedomys ochrogaster ohionensis* (Bole and Moulthrop) *


Type Locality.—Symmes Creek, 2 miles north of Chesapeake, Lawrence County, Ohio. Range.—Central southern and southwestern Ohio, north to central western Ohio (Shelby County), and in less typical form to central eastern Indiana (Jay County). Recorded also from Morehead, Rowan County, eastern Kentucky (Barbour, Journ. Mamm., vol. 33, No. 3, p. 399, Aug. 19, 1952).

Pedomyis ochrogaster minor (Merriam)†*  
 Type Locality.—Bottineau, at base of Turtle Mountains, Bottineau County, N. Dak.  Range.—Eastern North Dakota (V. Bailey, North Amer. Fauna No. 49 (1926), p. 99, Jan. 8, 1927) and western and northern Minnesota (Swanson, Minnesota Dept. Conserv. Techn. Bull. 2, p. 92, 1945) northward to Edmonton in central Alberta, and Dunburn and Indian Head in Saskatchewan, Canada (Bole and Moulthrop, loc. cit.).  

Pedomyis ochrogaster haydenii (Baird)†*  

Pedomyis ochrogaster taylori Hibbard and Rinker  
 Type Locality.—Bog area on the farm of H. H. Hildebrand, a mile and a half north of Fowler, Meade County, Kan.  Range.—Southwestern Kansas; specimens recorded from northern Oklahoma may represent this subspecies (see Blair, Amer. Midl. Nat., vol. 22, No. 1, p. 126, July 1939).  

Pedomyis ludovicianus V. Bailey†*  
 Type Locality.—Iowa, Calcasieu Parish, La.  Range.—Coast prairie of southwestern Louisiana; recorded also from Sour Lake, Tex. (V. Bailey, North Amer. Fauna No. 25, p. 119, Oct. 24, 1905).  

Genus Psammomys  
1831. Psammomys McMurtrie, The animal kingdom . . . by the Baron Cuvier, vol. 1, p. 434, footnote. (Type, Psammomys pinetorum Le Conte.)

Pitymys pinetorum pinetorum (Le Conte) *


Type Locality.—Pine forests of Georgia, probably on the Le Conte plantation, near Riceboro, Liberty County. Range.—Southern half of Alabama (recorded from Autaugaville, Prattville, Greensboro, and Ashford by A. H. Howell, North Amer. Fauna No. 45, p. 54, Oct. 21, 1921), Georgia, South and North Carolina, and southern Virginia (recorded from Patrick to Prince George Counties by Handley and Patton, Wild mammals of Virginia, p. 175, 1947).

Pitymys pinetorum auricularis (V. Bailey) †*


Pitymys pinetorum scalopsoides (Audubon and Bachman) *


**Pitymys pinetorum carbonarius** Handley†*


*Type Locality.*—Eubank, Pulaski County, Ky. *Range.*—Austral and Transition Zones of southwestern Virginia, northeastern Tennessee, eastern Kentucky, extreme southeastern Ohio, and probably southern West Virginia (east to Russell County, Va., and Carter County, Tenn.; south to Jefferson and Campbell Counties, Tenn.; west to Pulaski County, Ky.; and north to Lawrence County, Ohio).

**Pitymys pinetorum schmidti** Jackson†*


*Type Locality.*—Worden Township, Clark County, Wis. *Range.*—Known from Clark County only.

**Pitymys pinetorum nemoralis** (V. Bailey)†*


**Pitymys parvulus** A. H. Howell†*


Pitymys quasiater (Coues) *


_Genus LAGURUS_ "*" Gloger

1841. Lagurus Gloger, Gemeinnütziges Hand- und Hilfsbuch der Naturgeschichte, vol. 1, p. 97. (Type, Lagurus migratorius Gloger = _Mus lagurus_ Pallas.)

_Subgenus LEMMISCUS_ "*" Thomas


_Lagurus curtatus curtatus_ (Cope) †*


_Type Locality._—Pigeon Spring, Mount Magruder, Esmeralda County, Nev., near boundary between Inyo County, Calif., and Esmeralda County. _Range._—East-central border of California, in Mono and Inyo Counties; recorded from Mono Mills near Mono Lake southeast to Inyo Mountains; vertical range, from 6,550 feet (west of Benton) up to 10,500 feet (Big Prospector Meadow, White Mountains); zonal range, chiefly Transition (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 191, Sept. 26, 1933); and southwestern Nevada from Pahute Mesa northwest to southern Washoe County (Hall, Mammals of Nevada, p. 560, July 1, 1946).

_Lagurus curtatus pallidus_ (Merriam) †*


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*American forms revised by V. Bailey, North Amer. Fauna No. 17, pp. 67-70, June 6, 1900.
Type Locality.—Fort Buford, Williams County, N. Dak. Range.—Restricted to local areas of sagebrush and shortgrass on high plains of semiarid division of Transition Zone at elevations of 2,000 to 3,400 feet from northwestern North Dakota (recorded from Fort Buford and Glen Ullin by V. Bailey, North Amer. Fauna No. 49 (Dec. 1926), p. 101, Jan. 8, 1927), eastern Montana, southwestern Saskatchewan (recorded from Battle Creek, Cypress Lake, Eastend, Frenchman River, Prairie Dog Buttes, Rocky Creek, Fife Lake, Big Muddy Coulee, and Big Muddy Lake by Soper, Journ. Mamm. vol. 27, No. 2, p. 148, May 14, 1946), and southern Alberta as far north as Calgary and Little Sandhill Creek, Red Deer River (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 164, Jan. 24, 1947).

*Lagurus curtatus pauperrimus* (Cooper)†*


*Lagurus curtatus intermedius* (Taylor) *


Type Locality.—Head of Big Creek, Pine Forest Mountains, Humboldt County, Nev. Altitude, 8,000 feet. Range.—Nevada north of lat. 38°30’ N., except 213756–55—40

**Lagurus curtatus levidensis** (Goldman)†*


_Type Locality._—Sandhills 5 miles east of Canadian River, at west base of Medicine Bow Range, east of Walden, North Park, Jackson County, Colo. Altitude, about 8,000 feet. _Range._—Rocky Mountain region, from northwestern Colorado northwest through northeastern Utah (Kelso, Univ. Utah Biol. Ser., vol. 11, No. 3, p. 100, Feb. 15, 1951), and southwestern Wyoming to eastern Idaho (Salmon River Mountains) and southwestern Montana.

**Genus NEOFIBER** True

1884. *Neoiber True*, Science, vol. 4, p. 34, July 11, 1884. (Type, *Neoiber alleni* True.)

**Neoiber alleni alleni** True†*


_Type Locality._—Georgia, Brevard County, Fla. _Range._—Possibly confined to salt-water regions on east coast of Florida; recorded from Canaveral, Georgiana, Oak Lodge on East Peninsula opposite Micco, and Titusville in Brevard County, and Eden in St. Lucie County (Sherman, Proc. Florida Acad. Sci. vol. 1 (1936), p. 120, 1937).

**Neoiber alleni nigrescens** A. H. Howell†*


**Neoiber alleni struix** Schwartz*†


_Type Locality._—Twenty-one miles west of Miami, Dade County, Fla. _Range._—Everglades in region of type locality and presumably over remainder of tip of Florida Peninsula.
Genus **ONDATRA** * Link (muskrats)


**Ondatra obscurus** (Bangs) *


**Ondatra zibethicus zibethicus** (Linnaeus) *

1766. *[Castor] zibethicus* Linnaeus, Systema naturae, ed. 12, vol. 1, p. 79.


**Ondatra zibethicus macrodon** (Merriam) † *


**Type Locality.**—Lake Drummond, Dismal Swamp, Norfolk County, Va. **Range.**—Middle Atlantic coast region of United States, from Delaware Bay to Pamlico Sound; inland to Washington, D. C., all counties east of Blue Ridge

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Mountains in Virginia (Handley and Patton, Wild mammals of Virginia, p. 177, 1947), and to Raleigh, N. C.

**Ondatra zibethicus albus** (Sabine)*

1823. *Fiber zibethicus-albus* Sabine *in* Franklin, Narrative of a journey to the shores of the Polar Sea in . . . 1819−22, p. 660.


*Type Locality.*—Cumberland House, Saskatchewan, Canada. *Range.*—Waters draining into Hudson Bay from the west, in eastern Saskatchewan and Manitoba; north to Barren Grounds.

**Ondatra zibethicus aquilonius** (Bangs)*


*Type Locality.*—Rigolet, Hamilton Inlet, Labrador, Canada. *Range.*—Labrador from Strait of Belle Isle northward (Black Bay, Hamilton Inlet, Lance au Loup), and eastern part of Ungava Peninsula, Quebec, north to Chimo (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 164, Jan. 24, 1947).

**Ondatra zibethicus spatulatus** (Osgood)†*

1900. *Fiber spatulatus* Osgood, North Amer. Fauna No. 19, p. 36, Oct. 6, 1900


**Ondatra zibethicus zalophus** (Hollister)†*


*Type Locality.*—Becharof Lake, Alaska Peninsula, Alaska. *Range.*—Alaska Peninsula, north of Nushagak and east to head of Cook Inlet.
Ondatra zibethicus osoyoosensis (Lord) *


Ondatra zibethicus occipitalis (Elliot) *


Ondatra zibethicus mergens (Hollister) †*


Type Locality.—Fallon, Churchill County, Nev. Range.—Drainages of Smoke Creek, and Truckee, Carson, Walker, Humboldt, and Reese Rivers in northern half of Nevada (Hall, Mammals of Nevada, p. 567, July 1, 1946); and larger streams and fresh-water lakes, tributary to Great Basin, along extreme eastern border of California; recorded from Eagle Lake, Willow Creek, Susan River, Honey Lake, and Secret Valley, in Lassen County; Truckee River, a little below Tahoe City, Placer County; Rowlands Marsh, Lake Tahoe, El Dorado County; West Fork of the Carson River, near Woodfords, Alpine County; West Walker River, near Topaz, Mono County; vertical range, from 4,000 feet on Susan River

**Ondatra zibethicus goldmani** Huey*


*Type Locality.*—St. George, Washington County, Utah. *Range.*—Probably limited to riparian association along Virgin River in southwestern Utah, from near Zion National Park westward at least to St. George and perhaps farther westward along course of Virgin River into extreme northwestern tip of Arizona; and southeastern Nevada (Hall, Mammals of Nevada, p. 567, July 1, 1946).

**Ondatra zibethicus bernardi** Goldman†*


*Type Locality.*—Four miles south of Gadsden, Yuma County, Ariz. *Range.*—Colorado River and tributary sloughs along southeastern border of Nevada (Hall, Mammals of Nevada, p. 568, July 1, 1946); in California from Nevada line in San Bernardino County to Mexican boundary; also, since 1911, irrigation canals throughout Imperial Valley, Imperial County; vertical range, below 500 feet; zonal range, Lower Sonoran (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 192, Sept. 26, 1933); northeastern Baja California, southwestern Arizona, and doubtless northwestern Sonora.

**Ondatra zibethicus pallidus** (Mearns) *


**Ondatra zibethicus ripensis** (V. Bailey) †*


**Ondatra zibethicus cinnamominus** (Hollister) †*


Ondatra zibethicus rivalicus (Bangs) *


Type Locality.—Burbridge, Plaquemines Parish, La. Range.—Coast region of Louisiana, north to northern Calcasieu, Pointe Coupee, and Tangipahoa Parishes; and in Alabama coast region west of Mobile Bay (A. H. Howell, North Amer. Fauna No. 45, p. 57, Oct. 28, 1921); and in Texas west at least to 2 miles southwest of Pasadena, Harris County (Davis and Lowery, Journ. Mamm., vol. 21, No. 2, p. 213, May 16, 1940).

Family Muridae

Subfamily Murinae

Genus RATTUS *50* G. Fischer


Rattus norvegicus *51* (Berkenhout) * ("Norway" rat)


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1778. *Mus decumanus* Pallas, Novae species quadrupedum e glirum ordine, . . . , p. 91.


**Type Locality.**—England. **Range.**—Introduced and widely established throughout North America.

*Rattus rattus rattus* (Linnaeus) * (black rat)


*Rattus rattus alexandrinus* (É. Geoffroy-Saint-Hilaire) * (gray-bellied rat)


**Type Locality.**—Alexandria, Egypt. **Range.**—Introduced and widely established in the southern United States, and thence southward. Primarily a house rat.

Berkenhout, who lived in London and therefore must have known the rodent at first hand, naturally thought, after reading Klein's account of “*Glis norvagius* [sic], Mures ex Norvegia” (Quadrupedum Dispositio brevisque Historia Naturalis, 1751, p 56), that the British and Irish brown rat came to England and Ireland from Norway. Bechstein, 20 years later (Gemeinützige Naturgeschichte Deutschlands nach allen drey Reichen, vol. 1, p. 436, 1789), supposed that the animal arrived in Europe on ships engaged in the East Indian trade. According to Brants (Het Geslecht der Muizen door Linnaeus opgesteld. . . . , pp. 112–113, 1827), who wrote about 40 years after Bechstein, this rat was unknown in western Europe before the year 1750, at about which date it arrived from Persia and southeastern Asia “in ongemeene schoolen.”

Rattus rattus frugivorus (Rafinesque) *  (white-bellied rat)


Type Locality.—Sicily. Range.—Introduced and widely distributed in the southern United States and thence southward; has a natural tendency to nest in trees.

Genus MUS 56 Linnaeus

1758. Mus Linnaeus, Systema naturae, ed. 10, vol. 1, p. 59. (Type, Mus musculus Linnaeus (by tautonomy).)

Mus musculus brevirostris Waterhouse *


Type Locality.—Maldonado, Uruguay. Range.—Introduced into South and Central America, and the southern part of the United States where its range passes into and overlaps that of domesticus (Schwarz and Schwarz, op. cit., p. 65).

Mus musculus domesticus Rutty *


Type Locality.—Dublin, Ireland. Range.—Introduced into North America, from Alaska to the northern part of the Central States of the United States (Schwarz and Schwarz, loc. cit.).

Superfamily DIPODOIDEA

Family ZAPODIDAE

Subfamily ZAPODINAE (jumping mice)

Genus ZAPUS


*Zapus hudsonius hudsonius* (Zimmermann) *


*Zapus hudsonius ladass* Bangs*


Type Locality.—Rigolet, Hamilton Inlet, Labrador, Canada. Range.—Eastern Quebec along north shore of Gulf of St. Lawrence from Godbout eastward (Moisie Bay), Trout Lake, and other localities; and on Labrador coast from Black Bay near Strait of Belle Isle north to Hamilton Inlet, and probably found in suitable places in interior of northwest Ungava (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 169, Jan. 24, 1947).

*Zapus hudsonius ontarioensis* Anderson


Type Locality.—Pancake Bay (Batchawana Bay), southeast end of Lake Superior, Algoma District, about 40 miles northwest of Sault Ste. Marie, Ontario, Canada. Range.—All parts of eastern Ontario from Lake Erie and Lake Ontario north of Ottawa River; Gatineau and Labella Counties and probably parts of Pontiac and Papineau Counties, Quebec; north in Ontario at least to Nipissing District and west to eastern shores of Lake Superior (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 169, Jan. 24, 1947).

Zapus hudsonius canadensis (Davies) *


Zapus hudsonius acadicus (Dawson) *


Zapus hudsonius hardyi Batchelder *


Zapus hudsonius americanus (Barton) *


Zapus hudsonius brevipes Bole and Moulthrop


Type Locality.—Bettsville, Seneca County, Ohio. Range.— Northwestern Ohio, and probably most of Indiana; and Lower Peninsula of Michigan (Burt, Mammals of Michigan, p. 234, 1946).
Zapus hudsonius rafinesquei Bole and Moulthrop
Type Locality.—Cat Run, extreme southeastern Belmont County, Ohio. 
Range.—Hill country of southeastern Ohio, southwestern Indiana and presumably 
all the Ohio Valley as well; presumably also Illinois, Kentucky, western 
Tennessee, and possibly eastern Missouri (Calhoun, Journ. Tennessee Acad. Sci., 
vol. 6, Nos. 1–2, p. 222, January 1941).

Zapus hudsonius pallidus Cockrum and Baker*
Type Locality.—NW. 1/4 sec. 4, T. 12 S., R. 20 E., 51/2 miles north and 13/4 
miles east of Lawrence, Douglas County, Kan. Range.—That part of Great 
Plains comprising southern South Dakota, probably southwestern Iowa, Ne-
braska, Kansas, and northern Oklahoma; eastward to central Missouri.

Zapus hudsonius campestris Preble†*
1899. Zapus hudsonius campestris Preble, North Amer. Fauna No. 15, p. 20, 
Aug. 8, 1899.
Type Locality.—Bear Lodge Mountains, Crook County, Wyo. Range.— 
From southeastern Saskatchewan and southwestern Manitoba (Anderson, Nat. 
and southern Minnesota (Swanson, Minnesota Dept. Conserv. Techn. Bull. 2, 
p. 95, 1945), North Dakota (V. Bailey, North Amer. Fauna No. 49 (December 
1926), p. 117, Jan. 8, 1927), and eastern Montana to eastern Colorado (Warren, 
The mammals of Colorado, . . ., p. 240, 1942).

Zapus hudsonius tenellus Merriam†*
Apr. 26, 1897.
No. 9, p. 377, Nov. 5, 1934.
Type Locality.—Kamloops, British Columbia, Canada. Range.—Dry belt 
of southern interior British Columbia; recorded from Kamloops, Ducks (about 
25 miles east of Kamloops), Enderby, Kelly Lake, Lillooet, Nicola Lake, and 
Vanderhoof (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 169, Jan. 24, 
1947). Specimens from Ashcroft, Bowron Lake, Indianpoint Lake, and Cotton-
wood, British Columbia, provisionally referred to tenellus.

Zapus hudsonius alascensis Merriam†*
vol. 11, p. 223, July 15, 1897.
Type Locality.—Yakutat Bay, Alaska. Range.—Yakutat Bay, north to Yukon 
River; recorded also at Portage Cove, Revillagigedo Island, Alaska (Swarth, 
Zapus princeps princeps 65 J. A. Allen*


Zapus princeps minor Preble†*


Zapus princeps saltator J. A. Allen*


_Type Locality._—Telegraph Creek, Stikine River, British Columbia, Canada. _Range._—From Bella Coola Inlet region (Hagensborg; Stüie; west branch of Mosher Creek, 5,000 feet; Caribou Mountain, 4,700 feet; Mount Brilliant, 5,000 feet; Rainbow Mountains), north to mouth of Skeena River (Inverness), Telegraph Creek and Atlin, and east to Wistaria near Burns Lake, and McDonald Creek, Mile 114 North, on Alaska Highway north of Summit Pass, in northern British Columbia; the most northerly record being Rose River, at Mile 95 on Canol Road, southern Yukon, Canada (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 170, Jan. 24, 1947). Recorded also at Taku River, 10 miles south of Juneau, Alaska (Swarth, Univ. California Publ. Zool., vol. 7, No. 2, p. 135, Jan. 12, 1911).

Zapus princeps kootenayensis Anderson*


_Type Locality._—Near summit of Green Mountain, head of Murphy Creek, about 10 miles north of Rossland, West Kootenay District, British Columbia, Canada; lat. 49°13' N., long. 117°52' W. Altitude, about 6,000 feet. _Range._—Interior of southern British Columbia, from eastern summit of Cascade Mountains, Similkameen, Okanagan, Kettle, Columbia, Kootenay, and Moyie River Valleys as far east as Purcell Range of Selkirks in more humid parts of Transition and Canadian Zones; northeastern Washington (Dalquest, Univ. Kansas Publ. Mus. Nat. Hist., vol. 2, p. 373, Apr. 9, 1943); northern Idaho southward as far as Clearwater drainage, where it intergrades with _idahoensis_ (Davis, The Recent mammals of Idaho, p. 337, Apr. 5, 1939); and northwestern Montana.

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Zapus princeps idahoensis Davis*


Zapus princeps oregonus Preble†*


Zapus princeps alleni Elliot*


Type Locality.—Pyramid Peak, near Lake Tahoe, El Dorado County, Calif. Range.—Sierra Nevada, from Jordan Hot Springs and from Sherman Creek (in Sequoia National Park), Tulare County, north to Lassen Peak and Mount Shasta; thence west through Trinity and Salmon Mountains in Trinity and Siskiyou Counties; also on South Yolla Bolly Mountain, in Tehama County; vertical range, from 3,600 feet (near Fyffe, El Dorado County) up to 10,000 feet (head of Lyell Canyon, Tuolumne County); zonal range, Canadian to Hudsonian, locally into Transition (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 196, Sept. 26, 1933); and vicinity of Lake Tahoe, Nevada (Hall, op. cit., p. 579).

Zapus princeps major Preble†*


Type Locality.—Warner Mountains, Lake County, Oreg. Range.—Warner Mountains in eastern Modoc County, at least from Lassen Creek south to Eagle
Peak; vertical range, from 4,800 feet (Goose Lake Meadows near Davis Creek) to 8,700 feet (Warren Peak); zonal range, Canadian and Transition (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 196, Sept. 26, 1933); and northward to scattered desert ranges in eastern Oregon.

**Zapus princeps curtatus** Hall


*Type Locality.*—Head of Big Creek, Pine Forest Mountains, Humboldt County, Nev. Altitude, 8,000 feet. *Range.*—Pine Forest Mountains, northern Humboldt County.

**Zapus princeps palatinus** Hall


*Type Locality.*—Wisconsin Creek, Toyabe Mountains, Nye County, Nev. Altitude, 7,800 feet. *Range.*—Toyabe Mountains, central Nevada.

**Zapus princeps nevadensis** Preble†*


*Type Locality.*—Ruby Mountains, Elko County, Nev. *Range.*—Northeastern Nevada, from Roberts Mountains northward through Ruby Mountains to Jarbridge Mountains and west into Santa Rosa Mountains (Hall, Mammals of Nevada, p. 579, July 1, 1946); and south of Snake River in central Idaho.

**Zapus princeps cinereus** Hall


**Zapus princeps utahensis** Hall*


**Zapus trinotatus trinotatus** Rhoads*


*Type Locality.*—Lulu Island, mouth of Fraser River, British Columbia, Canada. *Range.*—Pacific coast region from southwestern British Columbia mostly at low

**Zapus trinotatus pacificus** Merriam†*  
*Type Locality.*—Prospect, Rogue River Valley, Jackson County, Oreg.  
*Range.*—Upper Rogue River Valley in southwestern Oregon.

**Zapus trinotatus montanus** Merriam†*  
*Type Locality.*—Crater Lake, Mount Mazama, Klamath County, Oreg.  
*Range.*—Canadian Zone of Cascade Mountain region of Oregon.

**Zapus trinotatus eureka** A. B. Howell*  
*Type Locality.*—T’air Oaks [6 miles southwest of], Humboldt County, Calif.  
*Range.*—Northern portion of humid coast belt; south at least from Arcata, Humboldt County, as far as Mendocino City, Mendocino County, Calif. (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 195, Sept. 26, 1933).

**Zapus orarius** Preble*  
*Type Locality.*—Point Reyes, Marin County, Calif.  

**Zapus luteus luteus** Miller†*  
*Type Locality.*—Espanola. Rio Arriba County, N. Mex.  
Zapus luteus australis V. Bailey†*


_Type Locality._—Socorro, Socorro County, N. Mex. _Range._—Known from type locality only.

_Genus_ NAPAEOZAPUS* Preble

1899. Napaeozapus Preble, North Amer. Fauna No. 15, p. 33, Aug. 8, 1899. (Type, Zapus insignis Miller.)

Napaeozapus insignis insignis (Miller)*


_Type Locality._—Restigouche River, New Brunswick, Canada. _Range._—Eastern Canada, mostly in Canadian Zone, from Nova Scotia (including Cape Breton Island), New Brunswick (Gloucester, Madawaska, and York Counties), and Quebec (except Gaspé Peninsula) south of St. Lawrence River (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 171, Jan. 24, 1947); south to northern West Virginia (Brooks, Rep. West Virginia State Board Agric. No. 20, p. 19, 1911) and Ohio (Bole and Moultrop, Sci. Publ. Cleveland Mus. Nat. Hist., vol. 5, No. 6, p. 173, Sept. 11, 1942).

Napaeozapus insignis gaspensis Anderson


_Type Locality._—Near Federal Zinc and Lead Mine, on upper waters of Berry Mountain Brook, a tributary of Grand Cascapedia River, Shickshock Mountains, about half way between Gulf of St. Lawrence and Baie de Chaleur, Gaspé County, Quebec, Canada. Altitude, about 1,500 feet. _Range._—Gaspé Peninsula, Quebec.

Napaeozapus insignis saguenayensis Anderson


_Type Locality._—Trout Lake, near Moisie Bay, north shore of Gulf of St. Lawrence, Saguenay County, Quebec, Canada. _Range._—North shore of Gulf of St. Lawrence from Godbout east to Strait of Belle Isle in Saguenay County, Quebec, and Labrador coast region north to Hamilton Inlet, Labrador (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 172, Jan. 24, 1947).

Napaeozapus insignis algonquinensis Prince


_Type Locality._—Smoke Lake, Algonquin Park, Ontario, Canada. _Range._—From southern limits of range of species in Ontario (north Peel County, north York County, and central Ontario County) north of Bigwood, Sudbury District, and Lake Nipissing, east at least as far as Lake Edward, Champlain County, Quebec.


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Napaeozapus insignis abietorum (Preble) *

Napaeozapus insignis frutectanus Jackson†*
_Type Locality._—Crescent Lake, Oneida County, Wis. _Range._—Upper Peninsula and northern part of Lower Peninsula of Michigan (Burt, Mammals of Michigan, p. 235, 1946); northern Wisconsin; northeastern Minnesota (Swanson, Minnesota Dept. Conserv. Techn. Bull. 2, p. 95, 1945); in Canada near southeast corner of Lake Superior (Pancake Bay, Batchawana Bay), one record from Rainy River in western Ontario (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 172, Jan. 24, 1947); and also in southeastern Manitoba near Caddy Lake in Whiteshell Forest Reserve and at Cedar Lake near Vivian (Soper, Journ. Mamm., vol. 27, No. 2, p. 149, May 14, 1946).

Napaeozapus insignis roanensis (Preble) †*

Suborder HYSTRICOMORPHA

Superfamily ERETHIZONTOIDEA

Family ERETHIZONTIDAE (American porcupines)

Subfamily ERETHIZONTINAE

Genus ERETHIZON" F. Cuvier

Erethizon dorsatum dorsatum (Linnaeus)


Erethizon dorsatum picinus Bangs *


Type Locality.—L’Anse au Loup, Strait of Belle Isle, Labrador, Canada. Range.—Common and generally distributed in Labrador and northeastern Quebec, from Gulf of St. Lawrence north to semi-barrens; west to Chimo but otherwise its western limits are unknown, though porcupines undoubtedly occur here and there over Ungava Peninsula south of northern limit of trees (Anderson and Rand, Canadian Journ. Res., Ottawa, vol. 21, sect. D. p. 300, Sept. 6, 1943).

Erethizon dorsatum myops Merriam† *


Type Locality.—Portage Bay, Alaska Peninsula, Alaska. Range.—Wooded parts of Alaska from Yukon River (Osgood, North Amer. Fauna No. 19, p. 38, Oct. 6, 1900) southward to base of Alaska Peninsula (Osgood, North Amer. Fauna No. 24, p. 33, Nov. 23, 1904) and eastward at least to Wrangell Island and Le Conte Bay, southeastern Alaska (Webster, Journ. Mamm., vol. 30, No. 1,
p. 81, Feb. 14, 1949); and through Yukon to northern Alberta, Canada; specimens from northern Alberta (Wood Buffalo National Park) and from southern Yukon (Pelly River, Canol Road, Mile 95; Lapie River, Mile 132; and Teslin Lake) appear to show intergradation with *dorsatum*, and presumably likewise do porcupines occurring in extreme northern British Columbia and southwestern Mackenzie District. Northwest Territories (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 173, Jan. 24, 1947). Recorded north to Chandler Lake and John River, Alaska (Rausch, Journ. Mamm., vol. 31, No. 4, p. 466, Nov. 21, 1950).

**Erethizon dorsatum nigrescens** J. A. Allen*


**Erethizon dorsatum bruneri** Swenk*


*Type Locality.*—Three miles east of Mitchell, Scotts Bluff County, Nebr. *Range.*—From southern Saskatchewan, Canada (Anderson, loc. cit.) southward to western Oklahoma (McMurry, Journ. Mamm., vol. 25, No. 4, p. 413, Dec. 12, 1944); west to Weld County, Colo. (Warren, The mammals of Colorado, . . . , p. 244, 1942).

**Erethizon dorsatum epixanthum** Brandt*


*Type Locality.*—California (see Hollister, Canadian Alpine Journ., Special Number, p. 27, Feb. 17, 1913). *Range.*—Mountains of northern part of California interiorly of humid coast belt from Sequoia National Park and Whitney Creek, 10,850 feet, in Tulare County northward along Sierra Nevada; reported

**Erethizon dorsatum couesi** Mearns†


Genus COENDOU* Lacépède

1799. Coendou Lacépède, Tableau des divisions, sous-divisions, ordres et genres des mammifères, p. 11 (published as supplement to Discours d'ouverture et de clôture du cours d'histoire naturelle . . . ).

(Type, Hystrix prehensilis Linnaeus.)

Coendou mexicanus mexicanus (Kerr)*


Coendou mexicanus laenatus Thomas*


Coendou mexicanus yucataniae Thomas


Type Locality.—Yucatán (probably near Izamal), México. Range.—Yucatán.

Coendou pallidus (Waterhouse)


Type Locality.—“Said to be . . . the West Indies.”

Coendou rothschildi Thomas*


RODENTIA: HYDROCHOERIDAE—HEPTAXODONTIDAE

Superfamily CAVIOIDEA

Family HYDROCHOERIDAE (capybaras)

Subfamily HYDROCHOERINAE

Genus HYDROCHOERUS *Brisson

1762. Hydrochoerus Brisson, Regnum animale . . ., ed. 2, p. 12. (Type Hydrochoerus Brisson = Sus hydrochoeris Linnaeus.)

1772. Hydrochaeris Brünnich, Zoologiae fundamenta . . ., p. 44. (Type, "Elvesvinet = Sus hydrochoeris Linnaeus."

Hydrochoerus isthmius Goldman†*


Type Locality.—Marraganti, near head of tidewater on Río Tuyra, Darién, eastern Panamá. Range.—Drainage of Río Tuyra, Darién, extreme eastern Panamá. Recorded also near Juan Mina, Río Chagres basin, Canal Zone (Trapido, Journ. Mamm., vol. 28, No. 4, p. 408, Dec. 1, 1947), and Pacific coastal swamps into which Río Tocumen, Río Cabuya and Río Cabra empty, about 15 miles east of city of Panamá (Trapido, Journ. Mamm., vol. 30, No. 1, p. 80, Feb. 14, 1949).

Family HEPTAXODONTIDAE

Subfamily HEPTAXODONTINAE

Genus HEPTAXODON Anthony


Heptaxodon bidens Anthony


Type Locality.—Utuado, Puerto Rico. Range.—Known from cave remains only.

Genus ELASMODONTOMYS Anthony


Elasmodontomys obliquus Anthony


Type Locality.—Utuado, Puerto Rico. Range.—Known from cave remains only.

Genus QUEMISIA Miller

1929. Quemisia Miller, Smithsonian Misc. Coll., vol. 81, No. 9, p. 22, Mar. 30, 1929. (Type, Quemisia gravis Miller.)
Quemisia gravis Miller†* (the “quemi” of Oviedo)


Type Locality.—Cave near Atalaye plantation, 4 miles east of St. Michel, Haiti. Range.—Known only from remains found in caves and Indian deposits; but probably not yet extinct at beginning of Spanish occupation (see Miller, Smithsonian Misc. Coll., vol. 82, No. 5, p. 13, December 1929).

Family Dasyproctidae

Subfamily Cuniculinæ (spotted cayes)

Genus Cuniculus ⁶⁰ Brisson


1763. Cuniculus Gronovius, Zoophylacium Gronovianum, . . . , fasc. 1, p. 4. (Type, not designated; included species are (14) = Mus aguti; (15) = Mus paca; and (16) = Mus porcellus.)

1799. Agouti Lacépède, Tableau des divisions, sous-divisions, ordres et genres des mammifères, p. 9 (published as supplement to Discours d’ouverture et clôture du cours d’histoire naturelle . . ..). (Type, Agouti paca = Mus paca Linnaeus.)

Cuniculus paca virgatus (Bangs) *


Cuniculus paca nelsoni (Goldman) †*


According to Opinion 20 of the International Commission on Zoological Nomenclature (Smithsonian Inst. Spec. Publ. 1938, pp. 48-50, July 1910), Gronow, 1763, is binary, though not consistently binomial. Subsequently, in Opinion 89 (Smithsonian Misc. Coll., vol. 73, No. 3, p. 27, Dec. 16, 1925) the Commission made a ruling which in effect rejected all names published as new in Gronow (Gronovius), but left “them as available as of the dates when they were later adopted by authors whose nomenclatorial practice is unquestioned by zoologists.”

Subfamily DASYPROCTINAE (agoutis)

Genus DASYPROCTA Illiger

1811. Dasyprocta Illiger, Prodromus systematis Mammalium et Avium . . . , p. 93. (Type, Mus aguti Linnaeus.)

Dasyprocta aguti (Linnaeus) *


Dasyprocta albida Gray*

Type Locality.—St. Vincent, Lesser Antilles. Range.—St. Vincent Island. Recorded also from Grenada (USNM 267382).

Dasyprocta antillensis Sclater*

Type Locality.—St. Lucia, Lesser Antilles. Range.—St. Lucia Island. Recorded also from Martinique (USNM 293781).

Dasyprocta noblei G. M. Allen*

Type Locality.—Goyave, Guadeloupe, Lesser Antilles. Range.—Guadeloupe Island. Recorded also from St. Kitts (USNM 38072), Dominica (USNM 38422), and Montserrat (USNM 114010).

Dasyprocta mexicana Saussure*

Type Locality.—“Hot zone of México”; probably in State of Veracruz.
Dasyprocta ruatanica Thomas

Type Locality.—Ruatan Island, Bay Islands, Honduras. Range.—Bay Islands.

Dasyprocta punctata punctata Gray*


Dasyprocta punctata chiapensis Goldman†*

Type Locality.—Huehuetán, Chiapas, México. Range.—Southern Chiapas, from sea level to at least 3,500 feet altitude, and probably adjacent parts of Guatemala.

Dasyprocta punctata yucatanica Goldman†*


Dasyprocta punctata richmondi Goldman†*


Dasyprocta punctata underwoodi Goldman†*

Dasyprocta punctata nuchalis Goldman

Dasyprocta punctata pallidiventris Bole
*Type Locality.*—Paracote (plantation headquarters of Boston-Panamá Cocomut Company), 11½ miles south of mouth of Angulo River, Mariato-Suay Lands, Veraguas, Panamá. *Range.*—Known from type locality only, and presumably confined to southern part of Azuero Peninsula.

Dasyprocta punctata isthmica Alston*  
*Type Locality.*—Colón, Canal Zone, Panamá. *Range.*—Recorded also from Gatún, Maxon Ranch (Río Trinidad), and Río Indio (near Gatún) in or near Canal Zone, and from slope of Volcán de Chiriquí and near Bóquete in Chiriquí, western Panamá (Goldman, Smithsonian Misc. Coll., vol. 69, No. 5, p. 126, Apr. 26, 1920).

Dasyprocta punctata dariensis Goldman†* 
*Type Locality.*—Near head of Río Limón, Mount Pirri, Darién, eastern Panamá. Altitude, 5,200 feet. *Range.*—From sea level to over 5,000 feet in Darién region, Panamá.

Dasyprocta punctata callida Bangs*
*Type Locality.*—Isla San Miguel, Archipiélago de las Perlas, Golfo de Panamá, Panamá. *Range.*—Isla San Miguel.

Dasyprocta punctata bellula R. Kellogg†* 
*Type Locality.*—Isla San José, Archipiélago de las Perlas, Golfo de Panamá, Panamá. *Range.*—Known from Isla San José only.

Dasyprocta coibae Thomas
Superfamily OCTODONTOIDEA  

Family CAPROMYIDAE  

Subfamily CAPROMYINAE  

Genus CAPROMYS ⁴¹ Desmarest (hutias)  

(Type, Capromys fournieri Desmarest = Isodon pilgrides Say.)  

Subgenus CAPROMYS Desmarest  

Capromys pilgrides pilgrides (Say) ⁴ ²  


Type Locality.—“South America or one of the West Indian islands.” (Cuba.)  

Capromys pilgrides relictus G. M. Allen  


Type Locality.—Casas Mountains, Nueva Gerona, Isle of Pines, Cuba.  
Range.—Isle of Pines.  

Subgenus MYSATELES ⁴² Lesson  

1842. Mysateles Lesson, Nouveau tableau du règne animal, . . . Mammifères, p. 124. (Type, Mysateles poeppingii Lesson = Capromys prehensilis Poeppig.)  

Capromys prehensilis prehensilis Poeppig*  


Type Locality.—Wooded parts of southern Cuba. Range.—Cuba, from west end eastward to Trinidad; recorded from Trinidad, Cardenas, Matanzas, Santa Cruz del Norte, Santiago de las Vegas, Cabañas, San Diego de los Baños, “Berge S. Cubas, Partido de las Piedras, Macuriges, Masmaries” (Mohr, op. cit., p. 56).

Capromys prehensilis pallidus Peters
Type Locality.—Cuba. Range.—Known from vicinity of Trinidad, Cuba.

Capromys prehensilis poeyi Guérin
Type Locality.—Cuba. Range.—Recorded at Trinidad, Cuba.

Capromys prehensilis gundlachi Chapman†*
Type Locality.—Nueva Gerona, Isle of Pines, Cuba. Range.—Isle of Pines.

Capromys melanurus melanurus Peters*
Type Locality.—Manzanillo, Oriente Province, southeastern Cuba. Range.—Southeastern Cuba, in forests of Sierra Maestra, especially in eastern part of Oriente Province; recorded at Manzanillo, Turquino, Yao Arriba, Holguin, San Luis, Cuabitas, Portillo and Los Negros (Mohr, op. cit., p. 60).

Capromys melanurus rufescens (Mohr)
Type Locality.—Manzanillo, Oriente Province, southeastern Cuba. Range.—Known from type locality only.

Capromys nana G. M. Allen*
Type Locality.—Sierra de Hato Nuevo, Matanzas Province, Cuba. Range.—Originally described from cave material; afterward found living (see G. M. Allen,

*Genus GEOCAPROMYS* Chapman


**Geocapromys brownii brownii** (Fischer)*


1851. *Capromys brachyurus* Gosse, A naturalist’s sojourn in Jamaica, p. 471. (Jamaica.)


*Type Locality.*—Jamaica. Range.—Jamaica.

**Geocapromys brownii thoracatus** (True)†*


*Type Locality.*—Little Swan Island, Gulf of Honduras. Range.—Known from Little Swan Island only.

**Geocapromys ingrahami ingrahami** (J. A. Allen)*


*Type Locality.*—East Plana Cay, Plana Keys, Bahama Islands. Range.—Known from Plana Keys only.

**Geocapromys ingrahami abaconis** Lawrence


**Type Locality.**—Imperial Lighthouse Caves, Hole in the Wall, Great Abaco Island, Bahama Islands. **Range.**—Known from cave remains on Great Abaco Island only.

**Geocapromys ingrahami irrectus** Lawrence


**Geocapromys columbianus** (Chapman) *


*Type Locality.*—Cave near Trinidad, Santa Clara Province, Cuba. **Range.**—Known from cave remains only. Recorded also at Daiquiri, Oriente Province, Cuba (Mohr, Mitt. Zool. Mus. Hamburg, vol. 48, p. 80, May 1939).

**Genus HEXOLOBODON** Miller


**Hexolobodon phenax** Miller† *


*Type Locality.*—Small cave near St. Michel, Haiti. **Range.**—Known from cave remains only.

**Subfamily PLAGIODONTINAE**

**Genus PLAGIODONTIA** *F. Cuvier*


**Plagiodontia aedium** F. Cuvier*


**Plagiodontia ipnaeum** Johnson† *


*Type Locality.*—Kitchen-midden deposit at a Ciguayan village site at Anadel, 2 kilometers east of Samaná, Samaná Province, Dominican Republic. *Range.*—Recorded from cave and kitchen-midden sites in Haiti and the Dominican Republic.

*Plagiodontia hylaeum* Miller†*


*Type Locality.*—Guarabo, 10 miles east of Jovero, Samaná Province, Dominican Republic. *Range.*—Recorded also at cave near Altamira, Puerto Plata Province, Dominican Republic; Sabana de la Mar, Samaná Province, Dominican Republic; and mountain near Jérémie, Haiti (Mohr, Mitt. Zool. Mus. Hamburg, vol. 48, p. 84, May 1939).

*Plagiodontia spelaeum* Miller†*


*Type Locality.*—Cave near Atalaye plantation, 4 miles east of St. Michel, Haiti. *Range.*—Known from cave remains only.

**Genus ISOLOBODON** M. J. A. Allen


*Isolobodon portoricensis* J. A. Allen*


*Type Locality.*—Cueva de la Ceiba, near Utuado, Puerto Rico. *Range.*—Known from remains found chiefly in Indian deposits; Puerto Rico, St. Thomas, St. Croix, and Dominican Republic (See Miller, Proc. U. S. Nat. Mus., vol. 54, p. 508, Oct. 15, 1918; Smithsonian Misc. Coll., vol. 82, No. 5, pp. 7–8, Dec. 11, 1929).

*Isolobodon levir* (Miller)†*


*Type Locality.*—Large cave near St. Michel, Haiti. *Range.*—Known from remains found in caves and Indian deposits only.

Genus *APHAETREUS* Miller


*Aphaetreus montanus* Miller†


_Type Locality._—Large cave near St. Michel, Haiti. _Range._—Known from cave remains only.

**Subfamily MYOCASTORINAE**

*Genus MYOCASTOR* Kerr


*Myocastor coypus bonariensis* (É. Geoffroy-Saint-Hilaire) *a*


**Family ECHIMYIDAE**

**Subfamily ECHIMYINAE**

*Genus HOPLOMYS* J. A. Allen


*Hoplomys gymnurus goethalsi* Goldman†


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Hoplomys gymnurus truei J. A. Allen


Genus PROECHIMYS* J. A. Allen

Proechimys semispinosus burrus Bangs*


Type Locality.—Isla San Miguel, Archipielago de las Perlas, Golfo de Panamá, Panamá. Range.—Known from Isla San Miguel only.

Proechimys semispinosus centralis (Thomas) *


Proechimys semispinosus goldmani Bole

Type Locality.—Altos Cacao, on ridge between Río Mariato and Río Negro, Mariato—Suay Lands, Veraguas, Panamá. Range.—Azúero Peninsula of Panamá, probably on both slopes of mountains, but known only from western (Veraguas) side.

Proechimys semispinosus ignotus R. Kellogg*


Type Locality.—Isla San José, Archipiélago de las Perlas, Golfo de Panamá, Panamá. Range.—Known from Isla San José only.

Proechimys semispinosus panamensis Thomas*


Proechimys semispinosus rubellus Hollister†*


Genus ECHIMYS 68 F. Cuvier


**Echimys armatus** (I. Geoffroy-Saint-Hilaire) *


**Genus DIPLOMYS** Thomas


**Diplomys labilis** (Bangs) * 


*Type Locality.*—Isla San Miguel, Archipiélago de las Perlas, Golfo de Panamá, Panamá. *Range.*—Known from Isla San Miguel only.

**Diplomys darlingi** (Goldman) †*


**Genus HETEROPSOMYS** Anthony


**Heteropsomys insul ans** Anthony *


vol. 29, p. 206, Sept. 22, 1916, the correct name for this genus is *Loncheres*; but the type of *Echimys* was not fixed on the species *spinosus* by subsequent selection as defined in Opinion 6 of the International Commission of Zoological Nomenclature, *Smithsonian Inst. Spec. Publ.* No. 1938, pp. 7–9, July 1910.
**Type Locality.**—Utuado, Puerto Rico.  **Range.**—Known from cave remains only.

*Genus HOMOPSOMYS* *Anthony*


*Homopsomys antillensis* Anthony


*Type Locality.**—Utuado, Puerto Rico.  **Range.**—Known from cave remains only.

*Genus BROTONYS* Miller


*Brotomys voratus* Miller† (the “mohuy” of Oviedo)


*Type Locality.**—San Pedro de Macoris, Dominican Republic.  **Range.**—Known only from remains found in caves, and in Indian and owl deposits, but probably not yet extinct at beginning of Spanish occupation and possibly now existing in interior of Dominican Republic (see Miller, Smithsonian Misc. Coll., vol. 82, No. 5, pp. 13-14, Dec. 11, 1927; and vol. 82, No. 15, pp. 1-2, 6-7, Dec. 24, 1930).

*Brotomys contractus* Miller†*


*Type Locality.**—Small cave near St. Michel, Haiti.  **Range.**—Known from cave remains only.

*Genus BOROMYS* Miller


*Boromys offella* Miller†*


*Type Locality.**—Maisi, Oriente, Cuba.  **Range.**—Known from remains found in caves and Indian deposits only.

*Boromys torrei* G. M. Allen*


*Type Locality.**—Cavern in Sierra de Hato Nuevo, Matanzas Province, Cuba.  **Range.**—Known from remains found in caves only.

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Order CETACEA  

Suborder ODONTOCETI (toothed whales)

Superfamily PHYSETEROIDEA

Family ZIPHIIDAE

Genus BERARDIUS Duvernoy
(Type, Berardius arnouxii Duvernoy).

Berardius bairdii Stejneger†* (Baird’s beaked whale)

Type Locality.—Stare Gavan, Bering Island, Commander Islands, Bering Sea. Range.—In eastern North Pacific recorded from St. Matthew Islands (Hanna, Journ. Mamm., vol. 1, No. 3, p. 120, June 19, 1920) and St. George Island, Pribilof Group, Bering Sea (Hanna, Journ. Mamm., vol. 4, No. 4, p. 209, Nov. 1, 1923, south to Centerville Beach, near Ferndale, Humboldt County (True, U. S. Nat. Mus. Bull. 73, p. 77, Sept. 28, 1910), and Santa Cruz and Monterey Bay, Calif. (Davidson, Journ. Mamm., vol. 10, No. 4, p. 357, Nov. 11, 1929).

Genus MESOPLODON Gervais
(Type, Delphinus sowerbiensis Blainville = Physeter bidens Sowerby.)

Mesoplodon bidens (Sowerby)


Mesoplodon densirostris (Blainville) *


*Mesoplodon europaeus* (Gervais)*


*Mesoplodon mirus* True† (True’s beaked whale)


*Mesoplodon bowdoini* Andrews*


*Mesoplodon stejnegeri* True† (Stejneger’s beaked whale)


*Type Locality.*—Bering Island, Commander Islands, Bering Sea. *Range.*—In eastern North Pacific recorded from Bering Sea south to beach at mouth of Waatch River, Clallam County, Wash. (Scheffer and Slipp, Amer. Midl. Nat.,
vol. 39, No. 2, p. 267, March 1948) and South Beach, Yaquina Bay, near Newport, Oreg. (True, loc. cit.).

**Genus ZIPHIUS G. Cuvier**


**Ziphius cavirostris** G. Cuvier* (Cuvier’s beaked whale)


**Genus HYPEROODON Lacépède**


**Hyperoodon ampullatus** (Forster)* (bottlenose)

1770. *Balaena ampullata* Forster in Kalm. Travels into North America; . . . , vol. 1, p. 18, footnote. (Based on “beaked whale” of Pennant, The British Zoology, pt. 3, p. 43 [=p. 59, pl. 5, fig. 1], 1766.)


Family Physeteridae (sperm whales)

Genus Physeter Linnaeus

1758. Physeter Linnaeus, Systema naturae, ed. 10, vol. 1, p. 76. (Type, Physeter catodon Linnaeus.)

Physeter catodon Linnaeus* (sperm whale)


Family Kogiidae (pigmy sperm whales)

Genus Kogia Gray

1846. Kogia Gray, in The zoology of the voyage of H.M.S. Erebus and Terror, . . . , vol. 1, pt. 3, p. 22. (Type, Physeter breviceps Blainville.)

Kogia breviceps (Blainville)* (pigmy sperm whale)


Superfamily DELPHINOIDEA

Family MONODONTIDAE

Subfamily DELPHINAPTERINAE

Genus DELPHINAPTERUS Lacépède

1804. Delphinapterus Lacépède, Histoire naturelle des cétacées, . . . , p. xli. (Type, Delphinapterus beluga Lacépède = Delphinus leucas Pallas.)

Delphinapterus leucas (Pallas)* (white whale)


Type Locality.—Mouth of Obi [Ob] River, northeastern Siberia, U. S. S. R.


Delphinapterus dorofeevi Barabash and Klumov*


Subfamily MONODONTINAE

Genus MONODON Linnaeus

1758. Monodon Linnaeus, Systema naturae, ed. 10, vol. 1, p. 75. (Type, Monodon monoceros Linnaeus.)

Monodon monoceros Linnaeus* (narwhal)


Type Locality.—Arctic seas. Range.—Arctic seas; north in summer on east coast of Greenland, west coast of Greenland, and eastern coast of Ellesmere Island to Smith Sound, Buchanan Bay (Bache Peninsula about lat. 79° N.), Kane Basin, and Kennedy Channel to lat. 81°35' N. in migration; south in Baffin Bay, Davis Strait, Hudson Strait, and Atlantic coast of Labrador; common in Lancaster Sound and Eclipse Sound (Bylot Island) during migrations; west in eastern Canadian Arctic to Prince Regent Sound (east side of Somerset Island) and Boothia Peninsula; rare in northern parts of Hudson Bay (Anderson, Nat. Mus. Canada Bull. 102, (1946) p. 87, Jan. 24, 1947). Recorded also from near Cape Halkett, Harrison Bay, at mouth of Colville River, lat. 71° N., long. 151° W., northern coast of Alaska (Huey, Journ. Mamm., vol. 33, No. 4, p. 496, Nov. 19, 1952).

Family DELPHINIDAE 72 (porpoises)

Subfamily DELPHININAE

Genus STENELLA Gray


1880. Prodelphinus Gervais, in van Beneden and Gervais, Ostéographie des cétacés vivants et fossiles, p. 604. (Type, Delphinus marginatus Duvernoy.)

Stenella attenuata (Gray)*

1846. Steno attenuatus Gray, in The zoology of the voyage of H.M.S. Erebus and Terror, . . . , vol. 1, pt. 3, p. 44.


Type Locality.—Unknown. Range.—In eastern North Pacific recorded at Honolulu, Hawaiian Islands (True, U. S. Comm. Fish and Fisheries Bull., 1903, pp. 41-45, 1903).

Stenella frontalis (G. Cuvier)*


1836. Delphinus fraenatus F. Cuvier, De l'histoire naturelle des cétacés, . . . , p. 155, pl. 10, fig. 1. (Thirty leagues south of Cape

Verde Islands, North Atlantic Ocean. Regarded as identical with *frontalis* by Fraser, Atlantide Report No. 1 (Scientific results of the Danish expedition to the coasts of tropical West Africa 1945–1946), p. 74, 1950.)


**Stenella graffmani** (Lönnberg) *


*Type Locality.*—Off the beach approximately 20 miles north of Acapulco, Guerrero, México. *Range.*—In eastern North Pacific recorded from type locality, Golfo de Panamá (USNM 261427), Islas Secas in Golfo de Chiriquí (USNM 259311), and near Gorgona Island off west coast of Colombia (USNM 258641).

**Stenella longirostris** (Gray) *


*Type Locality.*—Unknown (Not Cape of Good Hope as ordinarily cited). *Range.*—Recorded in eastern North Pacific between Panamá and Galapagos Islands (USNM 23302).

**Stenella microps** (Gray) *


*Type Locality.*—Unknown. *Range.*—In eastern North Pacific recorded from María Madre, Tres Marias Islands, off Nayarit, México (USNM 88976).

**Stenella plagiodon** (Cope) †*


_Type Locality._—Unknown. _Range._—In western North Atlantic recorded from off Cape Hatteras, N. C. (True, op. cit., p. 165), off Charleston, S. C. (USNM 253598), 50 miles off coast of Georgia (USNM 261364), Miami (USNM 357833) and Pensacola, Fla. (USNM 21915), channel in front of Port Aransas, Tex., in Gulf of Mexico (Gunter, Journ. Mamm., vol. 22, No. 4, p. 447, Nov. 13, 1941), and Golfo de San Blas, Panamá (USNM 254447).

**Stenella styx** (Gray) *

1846. Delphinus ephrosyne Gray, in Richardson and Gray, _The zoology of the voyage of H.M.S. Erebus and Terror, . . . ,_ vol. 1, pt. 3, p. 40, pl. 22. (Locality unknown.)


**Genus STENO Gray**

1846. Steno Gray, _in The zoology of the voyage of H.M.S. Erebus and Terror, . . . ,_ vol. 1, pt. 3, p. 43. (Type, Delphinus rostratus Desmarest.)

**Steno bredanensis** (Lesson) * (rough-toothed porpoise)

1828. Delphinus bredanensis Lesson, _Histoire naturelle générale et particulière des mammifères et des oiseaux découverts depuis 1783 jusqu'a nos jours, [Half-title:]_ Complément des œuvres de Buffon, . . . , Complément 2,
vol. 1, Cétacés, p. 206. (Listed as Delphinorhynchus bredanensis on page 440 of table méthodique.)


1846. Steno compressus Gray, in The zoology of the voyage of H.M.S. Erebus and Terror, . . . , vol. 1, pt. 3, p. 43, pl. 27. (South Sea, Antarctic expedition.)

Type Locality.—European Seas. Range.—In western North Atlantic recorded from Tampa, Fla., (USNM 49628), and in eastern North Pacific from Honolulu, Hawaii (Zool. Inst. Univ. Copenhagen), and from Stinson Beach, Marin County, Calif. (Orr, Wasmann Journ. Biol., vol. 9, No. 2, p. 147, 1951).

Genus DELPHINUS Linnaeus

1758. Delphinus Linnaeus, Systema naturae, ed. 10, vol. 1, p. 77. (Type, Delphinus delphis Linnaeus.)

Delphinus delphis Linnaeus* (dolphin)


Delphinus bairdii Dall*


Type Locality.—Cape [now Point] Arguello, Santa Barbara County, Calif. Range.—In eastern North Pacific recorded from Pacific Beach, Wash. (Scheffer and Slipp, Amer. Midl. Nat., vol. 29, No. 2, p. 269, March 1948), Carmel (USNM 20162) and San Diego, Calif. (USNM 49800), and Escondido Bay, Baja California (USNM 260235).

Genus TURSIOPS Gervais


Tursiops truncatus (Montague)* (bottlenose porpoise)


**Tursiops gillii** Dall†


**Tursiops nuuanu** Andrews*


*Type Locality.*—North Pacific Ocean, approximately lat. 12° N., long. 120° W. *Range.*—Recorded also from Santa Catalina Island, Gulf of California, and 50 miles south of Panamá (Mayer, Amer. Midl. Nat., vol. 43, No. 1, pp. 183–185, January 1950).

**Genus LISSODELPHIS** Gloger


**Lissodelphis borealis** (Peale)* (right-whale porpoise)


*Type Locality.*—North Pacific Ocean, lat. 46° 6' 50'' N., long. 134° 5' W., approximately 500 miles off mouth of Columbia River, Oreg. *Range.*—In eastern North Pacific from Bering Sea south to San Diego Bay, Calif. (Scammon, The marine mammals of the north-western coast of North America, . . ., p. 101, 1874). Recorded also from Copalis and Cohasset Beach, Wash. (Scheffer and
Genus LAGENORHYNCHUS Gray


Lagenorhynchus albirostris Gray* (white-beaked porpoise)


Lagenorhynchus acutus (Gray)* (white-sided porpoise)

1828. Delphinus (Grampus) acutus Gray, Spicilegia zoologica, . . . , pt. 1, p. 2.


Lagenorhynchus obliquidens Gill†*


Type Locality.—Pacific Ocean, near San Francisco, Calif. Range.—In eastern North Pacific from Valdez (Swan Point) and Montague Strait, Prince William Sound, Alaska, southward off coasts of Washington, Oregon, and California to Ballenas Bay, Baja California (Scheffer, Amer. Midl. Nat., vol. 44, No. 3, p. 750, November 1950).

Lagenorhynchus thicolea Gray


Type Locality.—Stated to be western coast of North America.
Genus GRAMPUS Gray


1860. *Orcinus* Fitzinger, Wissenschaftlich-populäre Naturgeschichte der Säugethiere, vol. 6, p. 204. (Type, *Delphinus orca* Linnaeus.)

*Grampus orca* (Linnaeus)* * (Atlantic killer whale)

1758. [*Delphinus*] *orca* Linnaeus, Systema naturae, ed. 10, vol. 1, p. 77.


*Type Locality.*—European Seas. *Range.*—In western North Atlantic recorded from coast of Greenland (Brown, Proc. Zool. Soc. London, 1868, pt. 3, p. 549, March 1869), Eclipse Sound north of Baffin Island, Davis Strait, and Baffin Bay (Freuchen, in Degerbøl and Freuchen, *in Orcinus* *gladiator* True, *Delphinus* *aurancticus* Wagler, 1830, and *Delphinus* *tayenus**Grampus* *rectipinna* (Cope)* * (Pacific killer whale)


1898. [*Orca*] *rectispina* Trouessart, Catalogus Mammalium . . ., fasc. 5, p. 1050. (Accidental renaming of *rectipinna*.)


Genus GRAMPIDELPHIS Iredale and Troughton
1873. Grayius Scott, Mammalia, Recent and extinct; ... p. 104. (New name for Grampus Gray, 1846, and later, and not of Gray, 1828. Preoccupied by Grayius Bonaparte 1856, Günther 1858, and Bate 1862.)

Grampedelphis griseus (G. Cuvier) * (grampus)

Type Locality.—Brest, France. Range.—In western North Atlantic recorded from Cape Cod, Mass., and Atlantic City, N. J. (True, U. S. Nat. Mus. Bull. 36, p. 183, Aug. 8, 1889); and in eastern North Pacific from Monterey, Calif.

Genus PSEUDORCA Reinhardt
1862. Pseudorca Reinhardt, Overs. Danske Vid. Selsk. Forh., 1862, p. 151. (Type, Phocaena crassidens Owen.)

Pseudorca crassidens (Owen) * (false killer whale)
1846. Phocaena crassidens Owen, A history of British fossil mammals and birds, p. 516.


Genus GLOBICEPHALA Lesson
1828. Globicephala Lesson, Histoire naturelle générale et particulière des mammifères et des oiseaux découverts depuis 1788 jusqu’a nos jours, [Half-title:] Complément des œuvres de Buffon, ... , Complément 2, vol. 1, Cétacés, Table méthodique, p. 441. (Type, Delphinus destructor Scoresby.)
Globicephala melaena (Traill) * (blackfish or pilot whale)


Globicephala macrorhynchus Gray*


Type Locality.—South Seas. Range.—In western North Atlantic from New Jersey south to Gulf of Mexico and West Indies (True, U. S. Nat. Mus. Bull. 36, p. 139, Aug. 9, 1889). Recorded also from Dam Neck Mills, Va., and Osprey
(True, 1839, p. 139), Pavilion Key (USNM 37264), Dry Tortugas, Beach Bush Key (USNM 257414), and Pensacola, Fla. (USNM 241182). Stranded pilot whales have been recorded near mouth of Bayou Lafourche, La. (Lowery, Occ. Pap. Mus. Zool. Louisiana State Univ. No. 13, p. 257, Nov. 22, 1943), and on coast of Texas as far west as Aransas Pass (Gunter, Journ. Mamm., vol. 27, No. 4, p. 377, Nov. 25, 1946).

**Globicephala scammonii** Cope†*


*Type Locality.*—Ten miles off Pacific coast of Baja California, México, in lat. 31° N. Range.—In eastern North Pacific recorded from Kanatak on western shore of Alaska Peninsula (Orr, Wasmann Journ. Biol., vol. 9, No. 2, p. 147, 1951), Hecate Strait, Queen Charlotte Islands (Osgood, North Amer. Fauna No. 21, p. 25, Sept. 26, 1901), near Santa Catalina Islands, Calif. (Nidevar, California Fish and Game, vol. 7, No. 1, p. 64, January 1921), Cape San Lucas, Baja California, and Gulf of California (Scammon, The marine mammals of the northwestern coast of North America, p. 87, 1874), and Gulf of Dulce on coast of Guatemala (Scammon, loc. cit.).

**Genus PHOCOENA** G. Cuvier


**Phocoena phocoena** (Linnaeus)* (harbor porpoise)


**Phocoena vomerina** Gill†*


Genus PHOCOENOIDES Andrews


Phocoenoides dalli (True)†* (Dall’s porpoise)


Suborder MYSTICETI (baleen whales)

Family ESCHRICHTIDAE

Genus ESCHRICHTIUS Gray


Eschrichtius glaucus (Cope) * (gray whale)


**Family BALAENOPTERIDAE**

**Subfamily BALAENOPTERINAE** (finback whales)

**Genus BALAENOPTERA** *Lacépède*


**Balaenoptera physalus** (Linnaeus) * (common finback whale)


* * * 

Balaenoptera borealis Lesson*  (Sei or Pollack whale)


_Type Locality._—Gromitz, Lübeck Bay, Schleswig-Holstein, Germany. 


**Balaenoptera acutorostrata** Lacépède*  (little piked or Minke whale)


**Genus SIBBALDUS** Gray


**Sibbaldus musculus** (Linneaeus)*  (blue or sulphur-bottom whale)


**Subfamily MEGAPTERINAE** (humpback whale)

**Genus MEGAPTERA** Gray


Megaptera novaeangliae (Borowski) * (humpback whale)


1789. [Balaena] nodosa Bonnetterre, Tableau encyclopédique et méthodique des trois régnes de la nature, Cétologie, p. 5. (Coast of New England.)


**Family BALAENIDAE**

**Genus EUBALAENA** Gray


Eubalaena glacialis (Borowski) * (right whale)


**Type Locality.**—North Cape, Norway. **Range.**—In western North Atlantic from Iceland (Saemundsson, Mammalia, in Zoology of Iceland, vol. 4, pt. 76,
p. 31, 1939) south to Gulf of St. Lawrence near Newfoundland and along coast of New England; probably wintered regularly as far south as coasts of South Carolina and Bermuda Islands (True, Smithsonian Contr. Knowl., vol. 33, pp. 244-268, Aug. 29, 1904).

**Eubalaena sieboldii** (Gray)


*Type Locality.*—Coast of Japan and northwest coast of North America.


**Genus Balaena** Linnaeus


**Balaena mysticetus** Linnaeus* (bowhead whale)


**Order CARNIVORA**

**Suborder FISSIPEDIA**

**Superfamily CANOIDEA**

**Family CANIDAE**

**Subfamily CANINAE**

**Genus CANIS** Linnaeus

Subgenus THOS **Oken (jackals and coyotes)


*Canis latrans latrans* Say*


*Type Locality.*—Engineer Cantonment, about 12 miles southeast of present town of Blair, Washington County, Nebr. (Not Council Bluffs, Pottawattamie County, Iowa.) *Range.*—Southeastern Alberta and southern Saskatchewan, Montana, Wyoming, and Colorado east of Rocky Mountains, and northeastern corner of New Mexico; extreme southwestern corner of Manitoba, North Dakota except northeastern quarter; South Dakota, Nebraska; Kansas, except southeastern quarter; northwestern Oklahoma, and northern Panhandle region of Texas (Jackson, in Young and Jackson, The clever coyote, p. 257, Nov. 29, 1951).

*Canis latrans frustror* Woodhouse†*


*Type Locality.*—Red Fork of Arkansas River (now Cimarron River), about 100 miles west of Fort Gibson, and probably near long. 97° W. near present town of Perkins, Payne County, Okla. *Range.*—Southeastern and extreme eastern Kansas; Oklahoma mostly east of long. 99° W.; Texas east of long. 99° W. north of lat. 30° N. and east of Nueces Bay, long. 97° W., south of lat. 30° N.;

*American forms revised by Jackson, in Young and Jackson, The clever coyote, pt. 2, pp. 229–341, Nov. 29, 1951.*
Missouri, south of Missouri River and west of long. 91° W.; extreme northwestern and western Arkansas (Jackson, loc. cit.).

**Canis latrans thamnos** Jackson†*


*Type Locality.*—Basswood Island, Apostle Islands, Ashland County, Wis.  
*Range.*—East-central Saskatchewan south of lat. 54° N., and north of lat. 51° N.; Manitoba except extreme southwestern corner; extreme eastern North Dakota, Minnesota, Iowa, northern Missouri (north of Missouri River); easterly through western Ontario, Michigan, Wisconsin, northern and central Illinois, northern Indiana, southern and eastern Ontario, to extreme southern Quebec (near Luskville, Eardley Township), Canada (Jackson, in Young and Jackson, The clever coyote, pp. 266–267, Nov. 29, 1951).

**Canis latrans incolatus** Hall*


*Type Locality.*—Isaac Lake, Bowron Lake region, British Columbia, Canada. Altitude, 3,000 feet.  
*Range.*—Northern Alaska from north of Arctic Circle (Kotzebue; Point Barrow) south to lat. 61° N. (Eagle River); Yukon, except extreme northern part; western Mackenzie (Mackenzie River region); northern and central British Columbia, south to lat. 51° N. on the west and lat. 52° N. in eastern British Columbia; northern and central Alberta, south to lat. 52° N. in western Alberta and to lat. 55° N. in eastern Alberta (Jackson, in Young and Jackson, The clever coyote, p. 263, Nov. 29, 1951).

**Canis latrans lestes** Merriam†*


*Type Locality.*—Toyabe Mountains, near Cloverdale, Nye County, Nev.  
*Range.*—Southern British Columbia south of about lat. 52° N., except coast region; southwestern Alberta; Washington and Oregon east of Cascade Mountains; Idaho, western Montana, western Wyoming; northern California north of about lat. 40° N., except coast region to about lat. 41° N.; eastern California in Sierra Nevada south to about lat. 36° N.; Nevada and Utah north of about lat. 37°30′ N., except in eastern Utah where it extends south to about lat. 38°30′ N.; mountainous regions of western Colorado, except extreme southwest corner south of lat. 38°30′ N. and west of about long. 107° W.; mountain region of northern New Mexico between long. 105° and 107° W., and north of about lat. 35°30′ N. (Jackson, in Young and Jackson, The clever coyote, pp. 279–280, Nov. 29, 1951).

**Canis latrans umpquensis** Jackson†*


*Type Locality.*—Five miles southeast of Drew, Douglas County, Oreg.  
*Range.*—West of Cascade Mountains in Oregon and Washington.
Canis latrans ochropus Eschscholtz*


Type Locality.—West-central California, most probably on Sacramento River not far south of Sacramento; specimens from Tracy, San Joaquin County, assumed to be typical. Range.—California west of high Sierra Nevada and south of about lat. 40° N. except in coast region where its range extends north to lat. 41° N.; south through central California to about lat. 34° N. and in western coast region nearly to lat. 33° N. (Jackson, in Young and Jackson, The clever coyote, p. 290, Nov. 29, 1951).

Canis latrans clepticus Elliot*


Type Locality.—Vallecitos, Sierra San Pedro Martir, Baja California, México. Altitude, 8,500 feet. Range.—Northern Baja California north of lat. 30° N. except northeastern part north of lat. 31°31' N. and east of long. 116° W.; southwestern California, mostly confined to San Diego County (Jackson, in Young and Jackson, The clever coyote, p. 293, Nov. 29, 1951).

Canis latrans peninsulae Merriam†*


Type Locality.—Santa Anita, near San José del Cabo, Cape San Lucas, Baja California, México. Range.—Peninsula of Baja California south of lat. 30° N. (Jackson, in Young and Jackson, The clever coyote, p. 296, Nov. 29, 1951).

Canis latrans mearnsi Merriam†*


Type Locality.—Quitobaquito, Pima County, Ariz. Range.—Extreme southwestern Colorado (San Juan County), Utah and Nevada south of about lat. 37° N.; southeastern California south of lat. 37° N., and mainly east of long. 113° W.; northeastern Baja California, Arizona, New Mexico west of Rio Grande; most of Sonora and Chihuahua (Jackson, in Young and Jackson, The clever coyote, p. 298, Nov. 29, 1951).
Canis latrans jamesi C. H. Townsend†*
Type Locality.—Tiburón Island, Gulf of California, Sonora, México. Range.—Restricted to Tiburón Island.

Canis latrans microdon Merriam†*
Type Locality.—Mier, on the Río Grande, Tamaulipas, México. Range.—Lower Rio Grande region, extreme northeastern Nuevo León, extreme northern Tamaulipas, and extreme southern Texas in southern parts of Cameron, Hidalgo, and Starr Counties; southern limits of range in Tamaulipas unknown (Jackson, in Young and Jackson, The clever coyote, p. 304, Nov. 29, 1951).

Canis latrans texensis V. Bailey†*
Type Locality.—Forty-five miles southwest of Corpus Christi, at Santa Gertrudis, Kleberg County, Tex. Range.—Texas west of Gulf of Mexico coast region at long. 97° W. (Nueces Bay) in the south, except extreme southern Texas in lower Rio Grande region, west of long. 99° W., in the north, and south of Panhandle region (about lat. 34° N.); New Mexico east of Rio Grande and south of about lat. 35°30’ N.; northern Coahuila; and extreme northwestern Tamaulipas (Jackson, in Young and Jackson, The clever coyote, p. 275, Nov. 29, 1951).

Canis latrans impavidus J. A. Allen*
Type Locality.—Río de las Bocas, northwest Durango, México. Altitude, 7,000 feet. Range.—Pacific coast drainage of western Mexico between about lat. 22° N. and 26° N.; extreme southern Sonora, extreme southwestern Chihuahua, western Durango, western Zacatecas, and Sinaloa (Jackson, in Young and Jackson, The clever coyote, p. 306, Nov. 29, 1951).

Canis latrans cagottis (Hamilton-Smith) *

**Type Locality.**—Río Frio, west slope of Mount Iztaccíhuatl, Valley of México, between city of México and Puebla, México. **Range.**—Represented by specimens from States of México, Oaxaca, San Luis Potosí, Puebla, and Vera-cruz, México; range may possibly extend into southern Nuevo León and southern Tamaulipas (Jackson, *in* Young and Jackson, The clever coyote, p. 307, Nov. 29, 1951).

*Canis latrans vigilis* Merriam†*


**Type Locality.**—Manzanillo, Colima, México. **Range.**—Pacific coast, slope, and drainage of western México between lat. 16° and 22° N. (Jackson, *in* Young and Jackson, The clever coyote, p. 310, Nov. 29, 1951).

*Canis latrans goldmani* Merriam†*


**Type Locality.**—San Vicente, Chiapas, México, near Guatemala border. **Range.**—Known only from type locality, but may presumably be the coyote of western Guatemala (Jackson, *in* Young and Jackson, The clever coyote, p. 311, Nov. 29, 1951).

*Canis latrans hondurensis* Goldman†*


**Type Locality.**—Cerro Guínote, northeast of Archaga, on the Talanga road north of Tegucigalpa, Francisco Morazán, Honduras. **Range.**—Known only from region of type locality in southwest-central Honduras (Jackson, *loc* cit.).

*Canis latrans dickeyi* Nelson


**Type Locality.**—Near Cerro Mogote, lat. 13°30' N., 2 miles west of Río Goascorán, District of La Unión, El Salvador. **Range.**—Known by specimens only from type locality; assumed to be the subspecies known to occur in parts of Costa Rica and other parts of El Salvador, and possibly western Nicaragua (Jackson, *in* Young and Jackson, The clever coyote, p. 312, Nov. 29, 1951).

*Subgenus* CANIS 76 Linnaeus (dogs and wolves proper)

*Canis lupus tundrarum* Miller†*


*Type Locality.*—Point Barrow, Alaska. *Range.*—Tundra region of Alaska from Bering Sea and along coast of Arctic Ocean in northern Alaska and Arctic part of Yukon and Mackenzie District, Northwest Territories, Canada, west of Mackenzie River delta (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 57, Jan. 24, 1947); south to Noatak River Valley. Intergrading on south with *pambasileus* and on east along Arctic coast with *mackenzii*.

**Canis lupus pambasileus** Elliot


*Type Locality.*—Susitna River, region of Mount McKinley, Alaska. *Range.*—Interior and most of western and southwestern Alaska, including Seward Peninsula, Yukon, Kuskokwim and Susitna River Valleys, and Mount McKinley region; ranging east into central Yukon.

**Canis lupus alces** Goldman†


*Type Locality.*—Kachemak Bay, Kenai Peninsula, Alaska. *Range.*—Known only from type locality near southern end of Kenai Peninsula.

**Canis lupus mackenzii** Anderson


*Type Locality.*—Imnaruit, west of Kater Point, Bathurst Inlet, District of Mackenzie, Northwest Territories, Canada, lat. 67° 44’ 20” N., long. 109° 04’ 03” W. *Range.*—Arctic coast and tundra region of Mackenzie District from Mackenzie delta east to southern Victoria Island and Queen Maud Sea, south to northern and eastern sides of Great Bear Lake, upper Coppermine and upper Back Rivers, intergrading with *occidentalis* in southern parts of its range and presumably with *hudsonicus* to the eastward.

**Canis lupus bernardi** Anderson


*Type Locality.*—Cape Kellett, southwestern part of Banks Island, District of Franklin, Northwest Territories, Canada; lat. about 72° N., long. 125° W. *Range.*—Known only from Banks Island, but probably occurs also on northwestern Victoria Island.
Canis lupus manningi Anderson

_Type Locality._—Hantzsch River, east side of Foxe Basin, west coast of Baffin Island, District of Franklin, Northwest Territories, Canada, lat. about 67° N., long. 24° W. _Range._—All parts of Baffin Island from Hudson Strait to Pond Inlet; probably also on Bylot Island.

Canis lupus arctos Pocock*

_Type Locality._—Melville Island, Northwest Territories, Canada.

_Range._—Melville Island, Sverdrup Islands, and Ellesmere Island, and probably some neighboring islands.

Canis lupus orion Pocock

_Type Locality._—Cape York, Baffin Bay, northwest Greenland. _Range._—Northern Greenland, Arctic America; limits of range unknown.

Canis lupus labradorius Goldman†*

_Type Locality._— Vicinity of Fort Chimo (now Chimo), Quebec, Canada. _Range._—Northern Quebec and Labrador.

Canis lupus beothucus G. M. Allen and Barbour*

_Type Locality._—Newfoundland. _Range._—Confined to Newfoundland; now probably extinct.

Canis lupus hudsonicus Goldman†*

_Type Locality._—Head of Schultz Lake, District of Keewatin, Northwest Territories, Canada. _Range._—Northern Keewatin District, including northwestern coast of Hudson Bay (Cape Fullerton), west to northeastern Mackenzie District (Back River, 20 miles below Lake Beechey) and region east of Great Slave Lake.

Canis lupus occidentalis Richardson*


Type Locality.—Simpson, near mouth of Liard River, Mackenzie District, Northwest Territories, Canada. Range.—From northern Alberta along eastern side of Rocky Mountain ranges in Mackenzie Valley to Arctic Circle or beyond, intergrading with mackenzii north of Great Bear Lake, with hudsonicus east of Great Slave Lake, with knightii in northeastern Alberta, with columbianus in northwestern Alberta, and perhaps with pambasileus in Liard Valley (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 56, Jan. 24, 1947).

Canis lupus griseoalbus Baird

1823. Canis Lupus-Griseus Sabine, in Franklin, Narrative of a journey to the shores of the Polar Sea, in 1819-22, p. 655 (Appendix), plate opposite p. 312.


Type Locality.—Cumberland House, Saskatchewan, about 35 miles northwest of The Pas, Manitoba, and about 15 miles west of the present Manitoba-Saskatchewan interprovincial boundary, lat. 54° N., long. 101°40' W. Range.—Forested regions of northern Manitoba and Saskatchewan; south formerly to edge of prairie region about Carlton, Saskatchewan; east into central and southeastern Manitoba (casually at Riding Mountain National Park), and presumably west into northeastern Alberta, intergrading with occidentalis in that region, and with hudsonicus along northern boundary of Manitoba; presumably intergrading with nubilus in central Saskatchewan in former times.

Canis lupus columbianus Goldman*  


Type Locality.—Wistaria, north side of Ootsa Lake, Coast district, British Columbia, Canada. Range.—Greater part of British Columbia, west of Rocky Mountains and in Stikine Mountains, passing into fuscus near southwestern coast and into ligoni along coast bordering Alexander Archipelago of southwestern Alaska.

Canis lupus ligoni Goldman†*


Type Locality.—Head of Duncan Canal, Kupreanof Islands, Alexander Archipelago, Alaska. Range.—Alexander Archipelago and adjacent mainland of southeastern Alaska; northward along coast of Yakutat Bay.
Canis lupus lycaon Schreber*
1775. *Canis lycaon* Schreber, Die Säugthiere . . . , Theil 2, Heft 13, pl. 89.
1843. *Canis lupus canadensis* Blainville, Ostéographie ou description icono-
graphique . . . , Paris, Atlas, vol. 2, fasc. 13 (Carnassiers, Genre Canis),
p. 45, pl. 7 (Canada).
4, 1912.
18, No. 2, p. 230, May 12, 1937.
11, 1937; Goldman, *in* Young and Goldman, *The wolves of North America,*
p. 437, May 29, 1944.
1940. *Canis tundrarum ungavensis* Comeau, Ann. l’Acfas, Montreal, vol. 6,
p. 121 (35 miles north of village of Godbout, on north coast, Quebec).
*Type Locality.*— Vicinity of Quebec, Quebec, Canada (Goldman, Journ.
western and northern Ontario, eastern Minnesota, Michigan, Ohio, Northeastern
and Middle Atlantic States; southern limit of range indefinitely determined, but
believed to have extended to Florida. Still present in southern Quebec, Ontario,
and parts of northern Minnesota, Wisconsin, and northern Michigan.

Canis lupus nubilus Say*
1823. *Canis nubilus* Say, *in* Long, Account of an expedition from Pittsburgh
to the Rocky Mountains, . . . , vol. 1, p. 169.
1829. *Canis lupus var. nubilus* Richardson, Fauna Boreali-Americana; . . . ,
p. 69.
29), p. 610, Nov. 29, 1834. (Part.)
Sept. 12, 1935.—Goldman, *in* Young and Goldman, *The wolves of North
America,* p. 441, May 29, 1944.
*Type Locality.*—Engineer Cantonment, near present town of Blair, Washing-
ton County, Nebr. *Range.*—Formerly Great Plains region from southern Al-
berta and Saskatchewan, and probably southwestern Manitoba, south to north-
eastern New Mexico and southern Oklahoma, and from near eastern base of Rocky
Mountains east to western Minnesota, western Iowa, and Missouri; now probably
extinct.

Canis lupus irremotus Goldman†*
1937. *Canis lupus irremotus* Goldman, Journ. Mamm., vol. 18, No. 1, p. 41,
Feb. 11, 1937.
*Type Locality.*—Red Lodge, Carbon County, Mont. *Range.*—Formerly
northern Rocky Mountain region and high adjoining plains, from southern
Alberta (Calgary and Lethbridge), south through Idaho and western Wyoming,
est to Black Hills (Belle Fourche) of South Dakota.

Canis lupus crassodon Hall*
No. 12, p. 420, Nov. 8, 1932.

*Type Locality.*—Tahsis Canal, Nootka Sound, Vancouver Island, British Columbia, Canada. *Range.*—Vancouver Island.

*Canis lupus fuscus* Richardson* 

1839. *Canis lupus var. fusca* Richardson, in Beechey, The zoology of Captain Beechey's voyage in His Majesty's ship *Blossom* . . . , p. 5. 


*Type Locality.*—Banks of the Columbia River, below The Dalles, in Oregon or Washington. *Range.*—Formerly forested region from Cascade Range in Oregon and Washington west in places to Pacific coast; south to undetermined limits along Sierra Nevada in northeastern California, and probably northwestern Nevada, north on mainland coast of southwestern British Columbia at least as far as Kimsquit at head of Dean Channel; on east intergradation with *columbianus* and *irremotus* can safely be assumed. Probably still extant in some of wilder sections near coast of southwestern British Columbia and Siskiyou Mountains of southern Oregon.

*Canis lupus youngi* Goldman†* 


*Type Locality.*—Hart's Draw, north slope of Blue Mountains, 20 miles northwest of Monticello, San Juan County, Utah. *Range.*—Formerly numerous in Rocky Mountain region from northern Utah and southern Wyoming south through Utah and western Colorado to northern Arizona and northern New Mexico; west irregularly to central Nevada (Gold Creek, Elko County) and sporadically at least to southeastern California (Providence Mountains). Now extremely rare and restricted to rugged territory bordering upper Colorado River in southeastern Utah and southwestern Colorado.

*Canis lupus mogollonensis* Goldman†* 


*Type Locality.*—S. A. Creek, 10 miles northwest of Luna, Catron County, N. Mex. *Range.*—Formerly Mogollon Plateau region, extending nearly across central Arizona, and east through Mogollon Mountains of central western New Mexico; now rare if not extinct.

*Canis lupus monstrabilis* Goldman†* 


*Type Locality.*—Ten miles south of Rankin, Upton County, Tex. *Range.*—Formerly southern and most of western Texas (apparently replaced by *baileyi* in extreme western part), southeastern New Mexico and south into northeastern México (Matamoros); now probably extinct.
Canis lumis baileyi Nelson and Goldman†*

Type Locality.—Colonia García (about 60 miles southwest of Casas Grandes), Chihuahua, México. Altitude, 6,700 feet. Range.—Sierra Madre and adjoining tableland region of western México, formerly extending north to southeastern Arizona (Fort Bowie), southwestern New México (Hatch), and western Texas (Fort Davis), south to Valley of México; still living in northern part of Sierra Madre; exact southern and eastern limits undetermined.

Canis niger niger Bartram*
1791. Lupus niger Bartram, Travels . . ., p. 199.

Type Locality.—Alachua Savanna (now Payne’s Prairie), Alachua County, Fla. Range.—Formerly Florida, Georgia, and Alabama; limits of range undetermined, but probably included South Carolina; believed to be now extinct.

Canis niger gregoryi Goldman†*

Type Locality.—Mack’s Bayou, 3 miles east of Tensas River, 13 miles southwest of Tallulah, Madison Parish, La. Range.—Formerly Mississippi River Valley, north at least to Warsaw, Ill., and Wabash, northern Indiana; probably western Kentucky and western Tennessee; west throughout Ozark Mountain region in southern Missouri and Arkansas (except northwestern part) to southeastern Oklahoma, and from lowlands of Louisiana west to eastern Texas; east to southeastern Mississippi. Intergradation with rufus on west and with niger on east is evident. (Specimens from Reeds Spring, 5 miles north of Gainesville, and 3 miles north of Thomasville, all localities in southern Missouri, allocated to rufus by Hall and Kelson, Univ. Kansas Publ. Mus. Nat. Hist. Hist., vol. 5, No. 25, p. 340, Dec. 5, 1952.)

Canis rufus Audubon and Bachman*
Type Locality.—Name restricted by Goldman (loc. cit.) to the subspecies that occurs 15 miles west of Austin, Travis County, Tcx. Range.—Formerly northwestern Arkansas, eastern Oklahoma except Ozark Mountains in southeastern corner, and south through central Texas to Gulf coast near Aransas Bay; west to Pecos River Valley. Now believed to be restricted to parts of central and southern Texas, intergrading with gregoryi in eastern part of the State.

Genus ALOPEX Kaup (arctic foxes)

1820. Alopex Kaup. Skizzierte Entwickelungs-Geschichte und Naturliches System der Europäischen Thierwelt, pt. 1, p. 35. (Type, Canis lagopus Linnaeus.)

Alopex lagopus groenlandicus (Bechstein) *


Type Locality.—Greenland. Range.—Greenland and parts of Ellesmere Island, Northwest Territories, Canada.

Alopex lagopus innuitus (Merriam) †+


Type Locality.—Karogar River, Point Barrow, Alaska. Range.—Arctic coast and tundra region from western and northern Alaska, northern Yukon, and Mackenzie and Keewatin Districts of Northwest Territories to west side of Hudson Bay and Baffin Island; northern parts of Alberta, Saskatchewan, and Manitoba, and that part of northwestern Ontario bordering on Hudson Bay; found on most islands of Canadian Arctic and ranges far out on sea ice in winter (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 51, Jan. 24, 1947).

Alopex lagopus ungava (Merriam) †*


Type Locality.—Fort Chimo, south of Ungava Bay, Quebec, Canada. Range.—Ordinarily restricted to treeless parts of Labrador and northern Ungava Peninsula, but some winters appears in considerable numbers as far south as north shore of Gulf of St. Lawrence (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 51, Jan. 24, 1947).
Alopex hallensis (Merriam) †*


Alopex pribilofensis (Merriam) †*


*Genus VULPES* *Oken* (foxes)

1816. Vulpes Oken, Okens Lehrbuch der Naturgeschichte, pt. 3 (Zoologie), sect. 2, p. 1033. (Type, Canis vulpes Linnæus.)

1821. Vulpes Bowdich, An analysis of the natural classifications of Mammalia, p. 40. (Type, Canis vulpes Linnæus.)

*fulva*—group ‡ (red foxes)

Vulpes fulva fulva (Desmarest) *

1820. Canis fulvus Desmarest, Mammalogie, ..., pt. 1, p. 203, 1820 [in Encyclopédie methodique ...].


Vulpes fulva rubricosa Bangs *


**Vulpes fulva deletrix** Bangs*


*Type Locality.*—Bay St. George, Newfoundland. *Range.*—Restricted to Island of Newfoundland.

**Vulpes fulva bangsi** Merriam*


**Vulpes fulva regalis** Merriam†*


**Vulpes fulva alascensis** Merriam†*


Type Locality.—Andrcafski, about 70 miles above delta of the Yukon River, Alaska. Range.—Through most of northern and central Alaska, northern and central parts of Yukon, and Mackenzie District of Northwest Territories as far south as Great Slave Lake and east to Coronation Gulf and Bathurst Inlet (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 48, Jan. 24, 1947).

Vulpes fulva harrimani Merriami†*
Type Locality.—Kodiak Island, Alaska. Range.—Kodiak Island.

Vulpes fulva kenaiensis Merriami†*
Type Locality.—Kenai Peninsula, Alaska. Range.—Kenai Peninsula; limits of range unknown.

Vulpes fulva abietorum Merriami†*
1911. ? Vulpes] argenteus sitkaensis Brass, Aus dem Reiche der Pelze, p. 443, April 1911. (“West coast, especially the Aleutian Islands.” The name appears to be based on Sitka trade skins of the “so-called Sitka fox or Kodiak fox.”)

Vulpes fulva macroura Baird†*
Type Locality.—Wasatch Mountains bordering Great Salt Lake, Utah. Range.—From eastern Oregon (Blue Mountains and Steens Mountains) and mountainous parts of Idaho (absent from Snake River Plains and unknown from mountains to south and west) to Black Hills of South Dakota, and south in Rocky Mountains to northern New Mexico.
Vulpes fulva cascadensis Merriam†*


*Type Locality.*—Trout Lake, south base of Mount Adams, Cascade Mountains, Skamania County, Wash. *Range.*—Cascade Range from southern British Columbia south through Washington into Oregon.

Vulpes fulva necator Merriam†*


*Type Locality.*—Whitney Meadow, near Mount Whitney, High Sierra, Tulare County, Calif. Altitude, 9,500 feet. *Range.*—Chiefly high Sierra Nevada above 7,000 foot level; occurs, probably continuously or very nearly so, north from vicinity of Monache Meadows, Tulare County, to Sierra County; also on two mountain masses of which Lassen Peak and Mount Shasta are highest points (Grinnell, Dixon, and Linsdale, The fur-bearing mammals of California, vol. 2, p. 331, Aug. 10, 1937).

*velox*—group (kit foxes)

Vulpes macrotis macrotis Merriam†*


Vulpes macrotis arsipus Elliot*


*Type Locality.*—Daggett, Mohave Desert, San Bernardino County, Calif. *Range.*—The Colorado and Mohave Deserts, west to Palm Springs, Riverside County, and Victorville, San Bernardino County, and north at least to vicinity of Oasis, Mono County, in California; southern Nevada; Arizona; and northwestern Sonora.
Vulpes macrotis mutica Merriam†*


*Type Locality.*—Tracy, San Joaquin County, Calif. *Range.*—Dry plains of San Joaquin Valley of south and central California; on east side of Valley as far as vicinity of La Grange, Stanislaus County; formerly occurred on west side of Valley as far as Tracy, San Joaquin County; southernmost station of occurrence, Rose Station, Kern County (Grinnell, Dixon, and Linsdale, *The fur-bearing mammals of California*, vol. 2, p. 403, Aug. 10, 1937).

Vulpes macrotis tenuirostris Nelson and Goldman†*


*Type Locality.*—Trinidad Valley, northwest base of Sierra San Pedro Martir, Baja California, Mexico. Altitude, 2,600 feet. *Range.*—Known only from open desert in Trinidad Valley on the Pacific slope in mountains of northern Baja California.

Vulpes macrotis devia Nelson and Goldman†*


*Type Locality.*—Llano de Yrais, opposite Magdalena Island, Baja California, México.

Vulpes macrotis neomexicana Merriam†*


Vulpes macrotis nevadensis Goldman†*


Vulpes macrotis zinseri Benson

Type Locality.—San Antonio de Jaral, southeastern Coahuila, México.

Range.—Known only from type locality, but probably ranging in desert plains of Coahuila and San Luis Potosí, México.

**Vulpes velox velox** (Say)*


**Vulpes velox hebes** Merriam†*


*Type Locality.*—Calgary, Alberta, Canada. *Range.*—From southeastern British Columbia, southern Alberta, and southwestern Saskatchewan south to prairies of North Dakota and Wyoming.

**Genus UROCYON** *Baird* (gray foxes)


**Urocyon cinereoargenteus cinereoargenteus** (Schreber) *

1775. *Canis cinereo argenteus* Schreber, Die Säugethiere . . . , Thiel 2, Heft 13, pl. 92.


**Urocyon cinereoargenteus floridanus** Rhoads*


*Type Locality.*—Tarpon Springs, Pinellas County, Fla. *Range.*—Florida north to southern Georgia, west to Louisiana (Lowery, Occ. Pap. Mus. Zool.,

† Subspecies arranged by V. Bailey, *Nature Mag.*, vol. 34, No. 9, pp. 493, 528, November 1941.

Urocyon cinereoargenteus borealis Merriam†*


Urocyon cinereoargenteus ocythous Bangs*


Urocyon cinereoargenteus scotti Mearns*


*Type Locality.*—Pinal County, Ariz. *Range.*—Northeastern Baja California (Colorado Desert district); Colorado and Mohave Deserts north to White Mountains in Mono County and west to eastern slopes of San Jacinto and Santa Rosa Mountains in Riverside County, Calif. (Grinnell, Dixon, and Linsdale, loc. cit.); southern half of Nevada (Hall, Mammals of Nevada, p. 239, July 1, 1946),

**Urocyon cinereoargenteus townsendi** Merriam†*


*Type Locality.*—Baird, Shasta County, Calif. *Range.*—From Columbia River south through interior valleys of western Oregon; and foothills and lower mountains in northern two-thirds of California west of Sierran divides from interior of Humboldt County east to vicinity of Mount Shasta and south through humid coast belt and foothills on either side of Great Valley to southern Monterey and Mariposa Counties (Grinnell, Dixon, and Linsdale, The fur-bearing mammals of California, vol. 2, p. 430, Aug. 10, 1937).

**Urocyon cinereoargenteus californicus** Mearns†*


*Type Locality.*—Tahquitz Valley, San Jacinto Mountains, Riverside County, Calif. *Altitude,* 8,000 feet. *Range.*—Baja California (south at least to Vizcaíno Desert district); and southern California west of desert divides northward near coast at least to Ventura County, and in foothills of southern Sierra Nevada to Tulare County (Grinnell, Dixon, and Linsdale, The fur-bearing mammals of California, vol. 2, p. 432, Aug. 10, 1937).

**Urocyon cinereoargenteus peninsularis** Huey*


*Type Locality.*—San Ignacio, lat. 27° 24' N., long. 112° 59' W., Cape Region, Baja California, México. *Range.*—Southern half of Peninsulara of Baja California.

**Urocyon cinereoargenteus madrensis** Burt and Hooper


*Type Locality.*—Carimechi, Río Mayo, Chihuahua, México. *Range.*—Known only from type locality, but probably ranges over most of southern Chihuahua, southeastern Sonora, and northern Durango and Sinaloa in Durangan biotic province.
Urocyon cinereoargenteus colimensis Goldman†*  
_Type Locality._—Three miles west of Colima, Colima, México. Altitude, 1,700 feet. _Range._—Western México, mainly in and along Sierra Madre and more elevated parts of plateau region, from northern Sinaloa south to near Isthmus of Tehuantepec. Vertical range from sea level along Pacific coast to at least 8,500 feet on mountains bordering Valley of México.

Urocyon cinereoargenteus orinomus Goldman†*  
_Type Locality._—Orizaba, Veracruz, México. Altitude, 4,000 feet. _Range._—Eastern México, from southern San Luis Potosí south to central Oaxaca. Vertical range from 2,000 feet at Jalpan, Querétaro, to 10,000 feet on Cerro San Felipe, Oaxaca; zonal range, mainly Humid Tropical.

Urocyon cinereoargenteus fraterculus Elliot*  

Urocyon cinereoargenteus guatemalae Miller†*  
_Type Locality._—Nentón, Huehuetenango, Guatemala. Altitude, 3,000 feet.

Urocyon cinereoargenteus costaricensis Goodwin  
_Type Locality._—Sabanilla de Pirris, a town on the Pacific coast range near Río Grande de Pirris, Province of San José, Costa Rica. Altitude, about 500 feet. _Range._—Costa Rica.
CARNIVORA: CANIDAE

Urocyon cinereoargenteus furvus G. M. Allen and Barbour

Type Locality.—Three miles west of Balboa, Canal Zone, Panamá.

Urocyon littoralis littoralis (Baird)†*

Type Locality.—San Miguel Island, Santa Barbara Islands, Calif. Range.—San Miguel Island.

Urocyon littoralis santarosae Grinnell and Linsdale

Type Locality.—Santa Rosa Island, Santa Barbara Islands, Calif. Range.—Santa Rosa Island.

Urocyon littoralis santacruzae Merriam†*

Type Locality.—Santa Cruz Island, Santa Barbara Islands, Calif. Range.—Santa Cruz Island.

Urocyon littoralis dickeyi Grinnell and Linsdale

Type Locality.—San Nicolas Island, Santa Barbara Islands, Calif. Range.—San Nicolas Island.

Urocyon littoralis clementae Merriam†*

Type Locality.—San Clemente Island, Santa Barbara Islands, Ventura County, Calif. Range.—San Clemente Island.

Urocyon littoralis catalinae Merriam†*

Type Locality.—Santa Catalina Island, Santa Barbara Islands, Calif. Range.—Santa Catalina Island.
Subfamily SIMOCYONINAE

Genus ICTICYON* Lund


*Icticyon panamensis* Goldman†*


*Type Locality.*—Head of Río Limón, Mount Pirri, Darién, eastern Panamá. Altitude, 5,000 feet.

Family Ursidae (bears)

Genus EUARCTOS* Gray (black bears)


*Euarctos americanus americanus* Pallas*


1913. *Ursus arctos schwenki* Shoemaker†, Stories of great Pennsylvania hunters, p. 25. (Union County, Pa. Some trimmings from the skin on which this name was based are in the U. S. National Museum.)


*Type Locality.*—Eastern North America. *Range.*—Wooded districts of North America from Nova Scotia and Labrador west of the foothills of the Rocky Mountains and southern part of Northwest Territories south to Georgia, northern Alabama, Arkansas, and eastern Kansas.

*Euarctos americanus floridanus* (Merriam) ‡*


*Type Locality.*—Key Biscayne, Dade County, Fla. *Range.*—Florida west to swamps of southern Alabama (A. H. Howell, North Amer. Fauna No. 45, p. 29, Oct. 28, 1921), and north to southern Georgia.

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Euarchos americanus luteolus (Griffith)*
1821. Ursus luteolus Griffith, Class Quadrinemembria, order Carnivora, general and particular description of carnivorous animals, . . ., p. 236.
Type Locality.—Louisiana. Range.—Louisiana (see Lowery, Proc. Louisiana Acad. Sci., vol. 3, No. 1, p. 18, March 1936) and probably southeastern Texas.

Euarchos americanus perniger (J. A. Allen)*

Euarchos americanus pugnax (Swarth)
Type Locality.—Rocky Bay, now Bobs Bay, Dall Island, Alaska.

Euarchos americanus emmonsii (Dall)* (glacier bear)

Euarchos americanus randi R. M. Anderson*
Type Locality.—Sheldon Mountain, Canol Road, Mile 222, Yukon Territory, Canada; lat. about 62° 30' N., long. 131° W. Altitude, about 4,000 feet. Range.—Central and southern Yukon from western slope of Mackenzie Moun-

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tains, north and west to Klondike region, Hootalinqua River, Nisutlin River, and Teslin Lake; southwest into British Columbia to head of Teslin Lake and Snowden Mountains southwest of Teslin Lake; probably occurs also in parts of southwestern Mackenzie district in Northwest Territories (Anderson, 1947, p. 38).

**Euarctos americanus kermodei** (Hornaday)


**Euarctos americanus vancouveri** (Hall) *


_Type Locality._—King Solomon’s Basin, Vancouver Island, British Columbia, Canada. _Range._—Restricted to Vancouver Island.

**Euarctos americanus cinnamomum** (Audubon and Bachman) *


**Euarctos americanus altifrontalis** (Elliot) *


**Type Locality.**—Lake Crescent, Olympic Mountains, Clallam County, Wash.


**Euartctos americanus californiensis** (J. Miller) *


**Type Locality.**—Name originally applied to the “large black bear” of California and Washington (restricted to Sierra Nevada in California by Grinnell, loc. cit.).

**Range.**—Sierra Nevada north from Tehachapi Mountains, Kern County, to Siskiyou County, Calif., and vicinity of Lake Tahoe in Nevada (see Grinnell, Dixon, and Linsdale, The fur-bearing Mammals of California, vol. 1, p. 95, Aug. 10, 1937).

**Euartctos americanus amblyceps** (Baird) †


**Type Locality.**—Old copper mines near present town of Santa Rita, Grant County, N. Mex. (see V. Bailey, North Amer. Fauna No. 53 (1931) p. 357, Mar. 1, 1932).


**Euartctos americanus machetes** (Elliot) *


**Type Locality.**—Casas Grandes, Sierra Madre, Chihuahua, México.

**Euartctos americanus eremicus** (Merriam) †


**Type Locality.**—Sierra Guadalupe, Coahuila, México.

**Euartctos hunteri** R. M. Anderson *

Type Locality.—Near mouth of Prairie Creek, South Nahanni River, Mackenzie District, Northwest Territories, Canada; lat. about 61°30' N., long. about 124°30' W. Range.—Western part of Mackenzie District, probably the prevailing form of black bear from Liard River northward to near limit of trees north of Arctic Circle; westward into central and southern Yukon at least to Teslin Lake; Canal Road (Mile 139, Pelly River near junction with Ross River; Nisutlin River, 24 miles from Johnson Crossing); mountains back of Teslin Lake; probably also parts of extreme northern British Columbia north of Liard River and south of Teslin Lake (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 38, Jan. 24, 1947).

Euartos carlottae (Osgood)†*


Type Locality.—Massett, Graham Island, Queen Charlotte Islands, British Columbia, Canada. Range.—Restricted to Queen Charlotte Islands.

Genus URSUS* Linnaeus

1758. Ursus Linnaeus, Systema naturae, ed. 10, vol. 1, p. 47. (Type, Ursus arctos Linnaeus.)


1918. Vetularctos Merriam, North Amer. Fauna No. 41, p. 131, Feb. 9, 1918. (Type, Vetularctos inopinatus Merriam.)

horribilis—group

Ursus horribilis horribilis Ord*


Ursus horribilis bairdi Merriam†*


Type Locality.—Blue River, Summit County, Colo. Range.—Southern Rocky Mountain region from San Juan Mountains, southwestern Colorado, northward through Wyoming to Montana, and perhaps to southeastern British Columbia. Probably a mountain animal, while its neighbor horribilis was a plains species.

* Revised by Merriam, North. Amer. Fauna No. 41, Feb. 9, 1918.
**Ursus horribilis dusorgus** Merriam†*


*Type Locality.*—Head of Jackpine River, near Mount Bess, close to British Columbia boundary, Alberta, Canada. *Range.*—Rocky Mountain region of western Alberta and eastern British Columbia (Anderson, loc. cit.).

**Ursus horribilis imperator** Merriam†*


**Ursus chelidonias** Merriam†*


*Type Locality.*—Head of Jervis Inlet, British Columbia, Canada. *Range.*—Unknown.

**Ursus atnarko** Merriam†*


*Type Locality.*—Lonesome Lake, Atnarko River, one of the upper forks of the Bella Coola, British Columbia, Canada. *Range.*—Mountains inland from Bella Coola area.

**Ursus kwakiutl** Merriam†*


*Type Locality.*—Jervis Inlet, coast of southern British Columbia, Canada. *Range.*—Coast region of British Columbia from southwestern corner (Burrard Inlet, Howe Sound, Jervis Inlet) northwesterly to or beyond the lower Bella Coola.

**Ursus nortoni** Merriam†*


**Ursus warburtoni** Merriam†*


*Type Locality.*—Atnarko River, British Columbia, Canada. *Range.*—Coast region (but perhaps not the immediate coast strip) of southeastern Alaska and adjacent parts of British Columbia from Chilkat River southeasterly to Atnarko
River, one of the upper forks of Bella Coola (skulls of adult males examined from Atnarko River, Stikine River, Iskut River near junction with Stikine, and Chilkat River Valley).

**Ursus neglectus** Merriam†


_Type Locality._—Near Hawk Inlet, Admiralty Island, southeastern Alaska.

**Ursus californicus** Merriam†


_Type Locality._—Monterey, Monterey County, Calif. *Range._—Humid coast region of California from San Francisco Bay south about to San Luis Obispo (apparently passing into _tularensis_ in the dryer interior).

**Ursus tularensis** Merriam†


_Type Locality._—Fort Tejon, Cañada de las Uvas, Tehacapi Mountains, Kern County, Calif. *Range._—Dry chaparral hills of interior Coast Ranges between San Joaquin Valley and Los Angeles Plain, comprising Tehacapi, Tejon, Sierra Madre, and San Gabriel Ranges, and probably San Bernardino Mountains also, and ranging northward an unknown distance, doubtless covering San Rafael and Gabilan Ranges, and southern part of Diablo Range; limits unknown.

**Ursus colusus** Merriam†


_Type Locality._—Sacramento River, probably between Colusa and Sacramento, Calif. *Range._—Sacramento (and perhaps also San Joaquin) Valley and adjacent foothills; westerly in hot inner coast mountains to Dobbins Creek canyon on boundary between southeastern Humboldt and southwestern Trinity Counties.

_planiceps_—group

**Ursus nelsoni** Merriam†


_Type Locality._—Colonía García, Chihuahua, México. *Range._—Southwestern New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 361, Mar. 1, 1932) and Sierra Madre of México from northwestern Chihuahua and northeastern Sonora south to southern Durango.
Ursus texensis texensis Merriam†

*Type Locality.*—Davis Mountains, Jeff Davis County, Tex.  

Ursus texensis navaho Merriam†

*Type Locality.*—Navajo country near Fort Defiance, Apache County, Ariz. (Mollhausen); type probably killed in 1856 in Chuska Mountains, on boundary between northeastern Arizona and northwestern New Mexico.  
*Range.*—Probably restricted to isolated Chuska Mountains (including so-called Lukachukai and Tunitcha elevations, and perhaps also neighboring Carrizo Mountains on the north). Recorded from Navajo Mountain, near Chromo, Archuleta County, Colo. (Warren, The mammals of Colorado, . . . , p. 38, 1942).

Ursus planiceps Merriam†

*Type Locality.*—Colorado, exact locality unknown, but probably in the foothills or on the western edge of the plains.  

Ursus macrodon Merriam†

*Type Locality.*—Twin Lakes, Lake County, Colo.  

Ursus mirus Merriam†

*Type Locality.*—Slough Creek, Yellowstone National Park, Wyo.  
*Range.*—From lower levels of Yellowstone National Park down Snake River Valley over southern Idaho to lava bed region of southeastern Oregon (V. Bailey, North Amer. Fauna No. 55, p. 329, Aug. 29, 1936).

Ursus eltonclarki Merriam†

*Type Locality.*—Freshwater Bay, Chichagof Island, Alaska.  
*Range.*—The Sitka Islands, Baranof and Chichagof.
Ursus tahltsanicus Merriam†*
_Type Locality._—Klappan Creek (third south fork of Stikine River), British Columbia, Canada. _Range._—Middle and upper Stikine-Skeena region, limits uncertain.

Ursus insularis Merriam†*
_Type Locality._—Admiralty Island, southeastern Alaska.

Ursus orgilos Merriam†*
_Type Locality._—Bartlett Bay, east side of Glacier Bay, southeastern Alaska.

Ursus orgiloides Merriam†*
_Type Locality._—Italio River, Alaska. _Range._—Coast strip southeast of Yakutat Bay. Specimens have been received from near Yakutat village and from Ankow and Anklin Rivers and mouths of Alsek and Italio Rivers.

Ursus pallasi Merriam†*
_Type Locality._—Donjek River, southwestern Yukon, Canada. _Range._—Central and eastern Yukon, from Donjek River and upper Alsek River (Champagne Landing), east to McConnell River, Ross River (Canol Road, Mile 132, Lapie River, a little below junction of Ross and Pelly Rivers, Ross Mountains), and southern part of Mackenzie Mountains (Ida Lake, Yukon, altitude about 4,000 feet, about 60 miles west of Glacier Lake, Northwest Territories), and north to Richardson Mountains (about 25 miles southwest of Aklavik), Mackenzie District (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 42, Jan. 24, 1947).

Ursus canadensis canadensis Merriam†*
Carnivora: Ursidae

Columbia from Mount Robson (Moose Pass and Sheep Creek) to Kootenay Lake, and Rocky Mountains of western Alberta in Jasper National Park and Banff National Park (Panther River); limits of range not known (Anderson, loc. cit.).

Ursus canadensis rungiusi Merriam†*


Type Locality.—Rocky Mountains on headwaters of Athabaska River, Alberta, Canada. Range.—Southwestern Alberta (Waterton Lakes National Park) and Kootenay Pass (Alberta–British Columbia boundary); limits of range in British Columbia not known (Anderson, loc. cit.; see also Hall, Univ. California Publ. Zool., vol. 40, No. 9, p. 366, Nov. 5, 1934).

Ursus canadensis sagittalis Merriam†*


Type Locality.—Champagne Landing, southwestern Yukon, Canada. Range.—Apparently known from type locality only.

Ursus macfarlani Merriam†*


Type Locality.—On Anderson River, 50 miles below Fort Anderson, Mackenzie District, Northwest Territories, Canada. Range.—Arctic coastal region of Mackenzie District from Coronation Gulf (Kogaryuak and Rae Rivers), to Dolphin and Union Strait (Stapylton Bay), Franklin Bay, Anderson River, and eastern parts of Mackenzie River delta (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 41, Jan. 24, 1947).

arizonae–group

Ursus arizonae Merriam†*


Ursus idahoensis Merriam†*


Ursus pulchellus pulchellus Merriam†*

_Type Località._—Ross River, Yukon, Canada. _Range._—Central and southern Yukon, from Donjek River and upper Alsek River (Champagne Landing) east to McConnell River, Ross River (Canol Road, Mile 132, Lapie River, a little below junction of Ross and Pelly Rivers), and Ross Mountains (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 42, Jan. 24, 1947).

Ursus pulchellus ereunetes Merriam†*

_Type Località._—Beaverfoot Range, Kootenay District, British Columbia, Canada. _Range._—Apparently known from type località only.

Ursus oribasus Merriam†*

_Type Località._—Upper Liard River, Yukon, Canada, near British Columbia boundary. _Range._—Apparently known from type località only.

Ursus chelan Merriam†*

_Type Località._—T. 30 N., R. 16 E., Willamette meridian, Wenatchee National Forest, east slope of Cascade Mountains, northern Chelan County, Wash. _Range._—Cascade and Cassiar Mountains from northern Washington to upper Stikine River and Dease Lake, British Columbia.

Ursus shoshone Merriam†*

_Type Località._—Estes Park, Larimer County, Colo. _Range._—Mountains of Colorado and Wyoming.

Ursus kennerleyi Merriam†*

_Type Località._—Mountains near Los Nogales, Sonora, México. _Range._—Nothing is known of the range of _kennerleyi_ except that the type specimen came from mountains near Nogales, Sonora.

Ursus utahensis Merriam†*

_Type Località._—North fork of Salina Creek, about 10 miles southeast of Mayfield, Sanpete County, Utah. _Range._—Southern Wasatch and Pine Valley Mountains; limits unknown.

Ursus perturbans Merriam†*

1918. Ursus perturbans Merriam, North Amer. Fauna No. 41, p. 64, Feb. 9, 1918.

Ursus rogersi rogersi Merriam†*  
Type Locality.—High up on Greybull River, Absaroka Mountains, Yellowstone National Park, Wyo.

Ursus rogersi bisonophagus Merriam†*  
Type Locality.—Bear Lodge, Sundance National Forest, Black Hills, Crook County, Wyo.  Range.—Black Hills of South Dakota and adjacent northeast corner of Wyoming.

Ursus pervagor Merriam†*  
Type Locality.—Pemberton [now Lillooet] Lake on edge of humid coast strip, British Columbia, Canada.  Range.—Interior of southwestern British Columbia; known only from Lillooet Lake and Bridge River.

Ursus caurinus Merriam†*  
Type Locality.—Berners Bay, east side of Lynn Canal, southeastern Alaska.  Range.—Coast of mainland of southeastern Alaska from Chilkat River Valley and Lynn Canal south an unknown distance.

Ursus eulophus Merriam†*  
Type Locality.—Admiralty Island, Alaska.  Range.—Admiralty Island.

Ursus klamathensis Merriam†*  
Type Locality.—Beswick, near mouth of Shovel Creek, Klamath River, Siskiyou County, Calif.  Range.—Siskiyou Mountains of northern California and southern Oregon, ranging north in recent times to Fort Klamath region and Rogue River Valley; in early days to lower Willamette Valley (presumably same species); south in Sierra Nevada an unknown distance.  (Skull from lower McCloud River referred to this species.)

Ursus mendocinensis Merriam†*  
Type Locality.—Long Valley [north of Sherwood], Mendocino County, Calif.  Range.—Unknown; probably northwest coast belt of California.
Ursus magister Merriam†*


_Type Locality._—Los Biacitos, head of San Onofre Canyon, Santa Ana Mountains, San Diego County, Calif. _Range._—Santa Ana or Trabuco Mountains, Cuyamaca and Santa Rosa Mountains, and probably San Jacinto Mountains. Believed to be extinct.

_hylodromus_—group

Ursus hylodromus Elliot*  


_Type Locality._—Alberta, Canada. _Range._—Rocky Mountain region of western Alberta and eastern British Columbia, including Selkirk Range.

Ursus kluane kluane Merriam†*  


_Type Locality._—McConnell River, Yukon, Canada. _Range._—Southwest corner of Yukon Territory east of St. Elias Range, extending northwesterly in Alaska to Mount McKinley region (head of Toklat River), easterly in Yukon Territory to McConnell River (north-northeast of Teslin Lake) and probably south into northwest corner of British Columbia.

Ursus kluane impiger Merriam†*  


Ursus pellyensis Merriam†*  

1918. Ursus pellyensis Merriam, North Amer. Fauna No. 41, p. 82, Feb. 9, 1918.


Ursus andersoni Merriam  


_Type Locality._—East branch of Dease River, near Great Bear Lake, Mackenzie District, Northwest Territories, Canada. _Range._—Not known to occur immediately on Arctic coast, but ranges on Barren Grounds along northern edge of Hudsonian Zone from Eskimo Lakes east and southeast to east end of Great Bear Lake (Dease River), Aylmer Lake, and probably from upper waters of Back,

**horriaeus**—group

**Ursus apache** Merriam†*


*Type Locality.*—Whorton Creek, on south slope of White Mountains, a few miles west of Blue, Greenlee County, Ariz. *Range.*—From White Mountains, Ariz., to Sangre de Cristo in northern New Mexico (see V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 366, Mar. 1, 1932).

**Ursus horriaeus** Baird†*


**Ursus henshawi** Merriam†*


*Type Locality.*—Southern Sierra Nevada, near Havilah, Kern County, Calif. *Range.*—Lower slopes of southern part of Sierra Nevada; limits unknown.

**stikeenensis**—group

**Ursus stikeenensis** Merriam†*


**Ursus crassodon** Merriam†*


*Type Locality.*—Klappan Creek (third south fork, Stikine River), British Columbia, Canada. *Range.*—Omineca district near headwaters of Skeena River, head of Teslin Lake, and Tatlatui River in northern British Columbia; Glenlyon Mountains, Quiet Lake at head of Big Salmon River, White River, and Wolf

**Ursus crassus Merriam†**


**Ursus mirabilis Merriam†**

*Type Locality.*—Admiralty Island, Alaska.

**Ursus absarokus Merriam†**

*Type Locality.*—Head of Little Bighorn River, northern part of Bighorn Mountains, Carbon County, Mont. *Range.*—Laramie and Bighorn Mountains, eastern Wyoming, Black Hills region, South Dakota, and northward along Little Missouri to Missouri and Yellowstone Rivers.

**Ursus alascensis Merriam†**


**Ursus toklat Merriam†**

*Type Locality.*—Head of Toklat River, north base of Alaska Range, near Mount McKinley, Alaska. *Range.*—So far as known, restricted to Alaska Range.

**Ursus latifrons Merriam†**

Ursus richardsoni Swainson*


*Type Locality.*—Near first cascade, about 8 miles from mouth of Hood River, Arctic Sound, on west side of Bathurst Inlet, southeast of Coronation Gulf, Mackenzie District, Northwest Territories, Canada. *Range.*—Along Arctic coast from Kent Peninsula on coast and islands of Bathurst Inlet (Baillie's Cove at south end of Arctic sound, a few miles from type locality); south side of Coronation Gulf (Kogaryuk River, Coppermine River); Dolphin and Union Strait (Bernard Harbour, Wise Point); Franklin Bay (Langton Bay), lower Anderson River, and west to Tuktuyaktok on northeast side of Mackenzie delta (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 45, Jan. 24, 1947).

*Ursus internationalis internationalis* Merriam*


*Ursus internationalis russelli* Merriam


*Type Locality.*—West branch of Mackenzie River delta (Aklavik Branch), south of northern limit of spruce, a little below Black Mountain, Richardson Mountains, Mackenzie District, Northwest Territories, Canada. *Range.*—Outer part of Mackenzie delta region as far east as Richards Island and west side of delta in foothills of Richardson Mountains (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 46, Jan. 24, 1947).

*Ursus phaeonyx* Merriam†*


*Type Locality.*—Glacier Mountain, Tanana Mountains, Alaska (about 2 miles below source of Comet Creek, near Fortymile Creek, between Yukon and Tanana Rivers). *Range.*—Tanana Mountains between Tanana and Yukon Rivers.

*Ursus washake* Merriam†*

Type Locality.—North fork of Shoshone River, Absaroka Mountains, between Bighorn Basin and Yellowstone National Park, Wyo.

kidderi—group

Ursus kidderi kidderi Merriam†*

Type Locality.—Chinitna Bay, Cook Inlet, Alaska. Range.—Entire length of Alaska Peninsula.

Ursus kidderi tundrensis Merriam†*

Type Locality.—Shaktolik River, Norton Sound, Alaska. Range.—Tundra region of northwestern Alaska from Shaktolik River on Norton Sound, southerly across lower Yukon, Kuskokwim, and Nushagak Rivers to Bristol Bay and north side of base of Alaska Peninsula.

Ursus eximius Merriam†*

Type Locality.—Head of Knik Arm, Cook Inlet, Alaska.

innuitus—group

Ursus innuitus Merriam†*

Type Locality.—Golofnin Bay, south side of Seward Peninsula, western Alaska. Range.—Coastal region of Norton Sound, Alaska, from Unalaklik northward and westward; limits unknown.

Ursus cressonus Merriam†*

Type Locality.—Lakina River, south slope of Wrangell Range, Alaska. Range.—Chitina River Valley and adjacent slopes of Skolai and Wrangell Mountains, westerly doubtless through Chugach Mountains to west side of Cook Inlet; occurs as far south as Iliamna region; east to southwestern Yukon (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 46, Jan. 24, 1947).

Ursus holzworthi Merriam†*

Type Locality.—East slope of Talkeetna Mountains, near headwaters of Oshetna or Black River, Alaska. Range.—Known only from the type locality, nearly due north of Matanuska region and about 50 miles north-northeast of Chickaloon.

Ursus alexandrae Merriam*  
Type Locality.—Kasilof Lake, Kenai Peninsula, Alaska. Range.—Kenai Peninsula.

townsendi—group

**Ursus townsendi** Merriam†*


*Type Locality.*—Mainland of southeastern Alaska, probably between Cross Sound and Alsek River delta, but exact locality uncertain.

dalli—group

**Ursus dalli** Merriam†*


*Type Locality.*—Yakutat Bay (northwest side), Alaska. Range.—Malaspina Glacier and region northwest of Yakutat Bay.

**Ursus hoots** Merriam†*


*Type Locality.*—Clearwater Creek, a north branch of the Stikine River, British Columbia, Canada. Range.—Apparently known only from Stikine River and its northern branches.

**Ursus sitkensis** Merriam†*


*Type Locality.*—Near Sitka, Alaska. Range.—Sitka Islands (Baranof and Chicago), Alaska.

**Ursus shirasi** Merriam†*


*Type Locality.*—Pybus Bay, Admiralty Island, southeastern Alaska. Range.—Restricted to Admiralty Island.

**Ursus nuchek** Merriam†*


*Type Locality.*—Head of Nuchek Bay, Hinchinbrook Island, Prince William Sound, Alaska. Range.—Prince William Sound easterly to Mount St. Elias; limits unknown.

**Ursus gyas** Merriam†*


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*Type Locality.*—Pavlov Bay, Alaska Peninsula, Alaska. *Range.*—Entire length of Alaska Peninsula from Cook Inlet to Isanotski Strait and adjacent Unimak Island.

**Ursus middendorffi** Merriam†*  
*Type Locality.*—Kodiak Island, Alaska. *Range.*—Kodiak and adjacent islands, Afognak and Shuyak; not known from mainland.

**Ursus arctos beringianus** Middendorff*  

**Ursus kenaiensis** Merriam†*  
*Type Locality.*—Cape Elizabeth, extreme west end of Kenai Peninsula, Alaska. *Range.*—Kenai Peninsula.

**Ursus sheldoni** Merriam†*  
*Type Locality.*—Montague Island, Prince William Sound, Alaska.

**Ursus inopinatus** (Merriam)†*  
*Type Locality.*—Rendezvous Lake (about lat. 69° N., long. 126° W., near northern limit of trees between middle parts of Anderson River and Horton River), northeast of old Fort Anderson, Mackenzie District, Northwest Territories, Canada. *Range.*—Southern edge of Barren Grounds from Anderson River
CARNIVORA: URSIDAE


*Thalarctos maritimus* (Phipps) *

1774. *Ursus maritimus* Phipps, A voyage toward the North Pole . . . , p. 185.


Type Locality.—Spitzbergen. Range.—From Greenland, Ellesmere Island, Devon Island, Baffin Island, and other islands of eastern Canadian Arctic Archipelago, as far west as Victoria Strait; south to Hudson Bay and James Bay at least to Twin Islands (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 47, Jan. 24, 1947).

*Thalarctos maritimus ungavensis* (Knottnerus-Meyer) *


Type Locality.—Near Killinek, Ungava Bay, Canada.

*Thalarctos maritimus groenlandicus* (Birula) *


Type Locality.—Western Greenland.

*Thalarctos eogroenlandicus* (Knottnerus-Meyer) *


Type Locality.—Pack ice off coast of eastern Greenland.

*Thalarctos labradorensis* (Knottnerus-Meyer) *


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Bassariscus astutus astutus (Lichtenstein) *
1887. Bassariscus Coues, Science, vol. 9, p. 516, May 27, 1887. (Type, Bassariscus astutus Lichtenstein.)

Bassariscus astutus bolei Goldman 

Bassariscus astutus consitus Nelson and Goldman*  

Bassariscus astutus flavus Rhoads*  


*Bassariscus astutus arizonensis* Goldman†*


*Bassariscus astutus yumanensis* Huey


*Type Locality.*—Tinajas Altas, Gila Mountains, Yuma County, Ariz.

*Bassariscus astutus nevadensis* Miller†*


*Bassariscus astutus willetti* Stager


*Type Locality.*—Riverside Mountains, extreme northeastern corner of Riverside County, Calif. *Range.*—Known from type locality and southward to, and including, Palo Verde Mountains, Imperial County, Calif.

*Bassariscus astutus raptor* (Baird) †*


*Type Locality.*—The type specimen was caught in the city of Washington, D. C., where it had escaped from captivity. Glen Ellen, Sonoma County, Calif., designated “by restriction” as the type locality (Hall, Univ. California Publ. Zool., vol. 30, No. 3, p. 44, Sept. 8, 1926). *Range.*—Southwestern Oregon and Cali-

**Bassariscus astutus octavus** Hall


_Type Locality._—San Luis River, near Escondido, San Diego County, Calif. Altitude, 1,700 feet. _Range._—Pacific slope of northwestern Baja California and southern California, from Jacumba, near Mexican border, northwest at least to Matilija, Ventura County; vertical range, 750 to 5,000 feet (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 100, Sept. 26, 1933).

**Bassariscus astutus palmarius** Nelson and Goldman†*


_Type Locality._—Comondú, Baja California, México.

**Bassariscus astutus saxicola** Merriam†*


_Type Locality._—Espíritu Santo Island, Gulf of California, Baja California, México.

**Bassariscus astutus insulicola** Nelson and Goldman†*


_Type Locality._—San José Island, Gulf of California, Baja California, México.

**Genus JENTINKIA** Trouessart

1886. _Wagneria_ Jentink, Notes Leyden Mus., vol. 8, p. 129. (Type, _Bassaris sumichrasti_ Saussure. Not of Robineau-Desvoidy 1830, or of Alenitzin 1873.)


**Jentinkia sumichrasti sumichrasti** (Saussure) *


**Jentinkia sumichrasti campechensis** Nelson and Goldman†**


*Type Locality.*—Apaazote, near Yohaltún, central Campeche, México. *Range.*—Tropical lowland forests of Yucatán Peninsula, probably ranging into northern Guatemala and British Honduras.

**Jentinkia sumichrasti variabilis** (Peters)


**Jentinkia sumichrasti notinus** (Thomas) *


*Genus PROCYON* Storr (raccoons)

1780. *Procyon* Storr, Prodromus methodi Mammalium . . ., p. 37. (Type, *Ursus lotor* Linnaeus.)

*Subgenus EUPROCYON* Gray (crab-eating raccoons)


**Procyon cancrivorus panamensis** (Goldman) †**


Subgenus PROCYON Storr

Procyon lotor lotor (Linnaeus) *


Procyon lotor maritimus Dozier†*


Type Locality.—Blackwater National Wildlife Refuge, Dorchester County, Md. Range.—Marsh areas on Delmarva Peninsula in Delaware, Maryland, and Virginia.

Procyon lotor solutus Nelson and Goldman†*


Type Locality.—Hilton Head Island, Beaufort County, S. C., Range.—Coast region and islands of South Carolina (Goldman, North Amer. Fauna No. 60, p. 41, Nov. 7, 1950).

Procyon lotor litoreus Nelson and Goldman†*


Type Locality.—Saint Simon Island, Glynn County, Ga. Range.—Coastal strip and islands of Georgia (Goldman, North Amer. Fauna No. 60, p. 40, Nov. 7, 1950).

Procyon lotor elucus Bangs*


Type Locality.—Oak Lodge, East Peninsula opposite Micco, Brevard County, Fla. Range.—Peninsular Florida, except southwestern part inhabited by marinus, north to extreme southern Georgia; grading into varius in northwest Florida (Goldman, North Amer. Fauna No. 60, p. 42, Nov. 7, 1950).

Procyon lotor marinus Nelson†*

CARNIVORA: PROCYONIDAE

Type Locality.—Near Chokoloskee, Collier County, Fla. Range.—Keys of Ten Thousand Islands Group, and adjoining mainland of southwestern Florida from Cape Sable north through Everglades to Lake Okeechobee (Goldman, North Amer. Fauna No. 60, p. 44, Nov. 7, 1950).

Procyon lotor inesperatus Nelson†*


Type Locality.—Upper Matecumbe Key, Monroe County, Fla. Range.—Key Largo Group, embracing fringing keys along southeast coast of Florida, from Virginia Key south to Lower Matecumbe Key (Goldman, North Amer. Fauna No. 60, p. 46, Nov. 7, 1950).

Procyon lotor auspicatus Nelson†*


Type Locality.—Marathon, Key Vaca, Monroe County, Fla. Range.—Key Vaca and doubtless closely adjoining keys of Key Vaca group, a central section of main chain off southern coast of Florida (Goldman, North Amer. Fauna No. 60, p. 47, Nov. 7, 1950).

Procyon lotor incautus Nelson†*


Type Locality.—Torch Key, Big Pine Key Group, Monroe County, Fla. Range.—Big Pine Key Group, near southwestern end of chain of Florida Keys (Goldman, North Amer. Fauna No. 60, p. 48, Nov. 7, 1950).

Procyon lotor varius Nelson and Goldman†*


Type Locality.—Castleberry, Conecuh County, Ala. Range.—Extreme southwestern Kentucky, Tennessee, Mississippi, northern Louisiana, Alabama, northwestern Florida, and western Georgia (Goldman, North Amer. Fauna No. 60, p. 38, Nov. 7, 1950).

Procyon lotor hirtus Nelson and Goldman†*


Type Locality.—Elk River, Sherburne County, Minn. Range.—Upper Missisippi and Missouri drainage areas from eastern slopes of Rocky Mountains east to Lake Michigan, and from southern Manitoba and probably southwestern Ontario, southeastern Alberta and southern Saskatchewan (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 35, Jan. 24, 1947) south to southern Oklahoma and Arkansas (Goldman, North Amer. Fauna No. 60, p. 37, Nov. 7, 1950).

 Procyon lotor megalodus Lowery*


Type Locality.—Marsh Island, Iberia Parish, La. Range.—Coast region of southern Louisiana from St. Bernard Parish west to Cameron Parish.
Procyon lotor fuscipes Mearns†*
_Type Locality._—Las Moras Creek, Fort Clark, Kinney County, Tex. Altitude, 1,011 feet. _Range._—Texas, except extreme northern and western parts, southern Arkansas, Louisiana, except delta region of Mississippi, and south into northeastern México, including Coahuila and Nuevo León, to southern Tamaulipas, México (Goldman, North Amer. Fauna No. 60, p. 50, Nov. 7, 1950).

Procyon lotor mexicanus Baird†*
_Type Locality._—Espia, northwestern Chihuahua, México. _Range._—New Mexico, except northeastern and northwestern parts, southeastern Arizona, western Texas, and south through Chihuahua, eastern Sonora, Sinaloa, and Durango to northern Nayarit, México (Goldman, North Amer. Fauna No. 60, p. 52, Nov. 7, 1950).

Procyon lotor hernandezii Wagler*

Procyon lotor shufeldti Nelson and Goldman†*
_Type Locality._—La Tuxpeña, Champotón, southeastern Campeche, México. _Range._—From the Isthmus of Tehuantepec east through Chiapas, Tabasco, Campeche, Yucatán, Quintano Roo, British Honduras, and Guatemala to western Honduras; limits of range unknown (Goldman, North Amer. Fauna No. 60, p. 66, Nov. 7, 1950).

Procyon lotor dickeyi Nelson and Goldman
_Type Locality._—Barra de Santiago, Ahuachapán, southwestern El Salvador. _Range._—Coast region of southwestern El Salvador and probably of southeastern Guatemala; limits of range unknown (Goldman, North Amer. Fauna No. 60, p. 67, Nov. 7, 1950).

Procyon lotor crassidens Hollister†*

**Procyon lotor pumilus** Miller†*


Type Locality.—Ancón, Canal Zone, Panamá. Range.—Panamá and Canal Zone from Porto Bello west to Boquerón, Chiriquí; limits of range unknown (Goldman, North Amer. Fauna No. 60, p. 70, Nov. 7, 1950).

**Procyon lotor grinnelli** Nelson and Goldman†*


Type Locality.—La Paz, Baja California, México. Range.—Southern Baja California from the Cape region north at least to San Ignacio (Goldman, North Amer. Fauna No. 60, p. 62, Nov. 7, 1950).

**Procyon lotor pallidus** Merriam†*


Type Locality.—New River [about 6 miles west of Imperial], Colorado Desert, Imperial County Calif. Range.—Colorado and Gila River Valleys and adjoining territory from the delta north to southeastern Nevada (Hall, Mammals of Nevada, p. 179, July 1, 1946) and northeastern Utah, and east to western Colorado and northwestern New Mexico (Goldman, North Amer. Fauna No. 60, p. 54, Nov. 7, 1950).

**Procyon lotor psora** Gray*  


Type Locality.—Sacramento, Sacramento County, Calif. Range.—California, except extreme northwest coastal strip, the northeastern corner and southeastern desert region, ranging south through northwestern Baja California to San Quintín (Goldman, North Amer. Fauna No. 60, p. 56, Nov. 7, 1950); extreme west-central
Nevada on east slope of Sierra Nevada (Hall, Mammals of Nevada, p. 178, July 1, 1946).

**Procyon lotor pacificus** Merriam†*
1911. ?*Procyon proteus* Brass, Aus dem Reiche der Pelze, p. 564, April 1911. (West coast from Puget Sound to the Cascade Mountains. Not of J. A. Allen, 1904.)

*Type Locality.*—Lake Keechelus, Kittitas County, Wash. Altitude, 3,000 feet.


**Procyon lotor excelsus** Nelson and Goldman†*

*Type Locality.*—Owyhee River [near mouth of North Fork], Malheur County, southeastern Oregon, 10 miles west of Fairyland, Owyhee County, Idaho.


**Procyon lotor vancouverensis** Nelson and Goldman†*

*Type Locality.*—Quatsino Sound, Vancouver Island, British Columbia, Canada.

*Range.*—Known only from Vancouver Island.

**Procyon lotor castaneus** de Beaux

*Type Locality.*—México.

**Procyon lotor flavidus** de Beaux

*Type Locality.*—“Southern United States?”

**Procyon lotor rufescens** de Beaux

*Type Locality.*—Unknown.
Procyon insularis insularis Merriam†*
_Type Locality._—Maria Madre Island, Tres Marias Islands, off west coast of Nayarit, México. _Range._—Known only from María Madre Island.

Procyon insularis vicinus Nelson and Goldman†*
_Type Locality._—Maria Magdalena, Tres Marias Islands, off west coast of Nayarit, México. _Range._—Known only from Maria Magdalena Island.

Procyon maynardi Bangs*
_Type Locality._—New Providence Island, Bahamas. _Range._—Known only from New Providence Island.

Procyon pygmaeus Merriam†*
_Type Locality._—Cozumel Island, Quintana Roo, México. _Range._—Known only from Cozumel Island.

Procyon minor Miller†*
_Type Locality._—Pointe-à-Pitre, Guadeloupe, Lesser Antilles, West Indies. _Range._—Known only from Guadeloupe Island.

Procyon gloveralleni Nelson and Goldman
_Type Locality._—Barbados, Lesser Antilles, West Indies. _Range._—Known only from the Island of Barbados.

Genus NASUA* Storr (coatis)
1780. Nasua Storr, Prodromus Methodi Mammalium . . . , p. 35, Tab. A. (Type, _Viveira nasua_ Linnaeus.)

Nasua narica narica (Linnaeus)*
1766. [_Viveera_] narica Linnaeus, Systema naturae, ed. 12, vol. 1, p. 64.
1860. Nasua solitaria var. mexicana Weinland, Zool. Garten, vol. 1, p. 191. (Near hacienda El Mirador, 20 leagues from Vera Cruz, México; altitude, about 4,000 feet.)


Nasua narica tamaulipensis Goldman†


Type Locality.—Cerro de la Silla, near Monterrey, Nuevo León, México. Altitude, 2,600 feet. Range.—Warmer, low mountain slopes and other forested parts of Coahuila, Nuevo León, and Tamaulipas, México; rarely along the Río Grande Valley from Brownsville west to near Big Bend above the mouth of Pecos River in Texas.

Nasua narica pallida J. A. Allen*


Nasua narica molaris Merriam†


Nasua narica isthmica Goldman†


Type Locality.—Santa Efigenia, about 8 miles northwest of Tapanatepec, southeastern Oaxaca, México. Altitude, 1,200 feet. Range.—Southern Oaxaca and southeastward along the Pacific coast to El Salvador.

Nasua narica yucatanica J. A. Allen*


Type Locality.—Chichén-Itzá, Yucatán, México. Range.—Low, flat Peninsula of Yucatán, comprising the States of Yucatán, Campeche, the Territory of

**Nasua narica richmondi** Goldman†*


_Type Locality._—Escondido River, 50 miles above Bluefields, Zelaya, Nicaragua.


**Nasua narica bullata** J. A. Allen*


_Type Locality._—Pozo Azul, San José, Costa Rica. _Range._—Costa Rica.

**Nasua narica panamensis** J. A. Allen*


**Nasua nelsoni** Merriam†*


_Type Locality._—Cozumel Island, Quintana Roo, México.

*Genus Potos* **É. Geoffroy-Saint-Hilaire and G. Cuvier** (kinkajous)


**Potos flavus aztecs** Thomas*


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*†* Regarded by Pocock (Proc. Zool. Soc. London, 1921, pt. 2, p. 421, July 8, 1921) as the type of a special subfamily, the *Potosinae.*
Potos flavus guerrerensis Goldman†*

Type of Locality.—Ometepec, Guerrero, México.

Potos flavus dugesii Villa

Type Locality.—Southeast of La Esperanza coffee plantation, 45 kilometers northeast of Huixtla, Chiapas, México. Altitude, 760 meters. Range.—Sierra Madre del Sur, Chiapas.

Potos flavus campechensis Nelson and Goldman†*


Potos flavus arborensis Goodwin†*


Potos flavus chiquiensis J. A. Allen*


Potos flavus isthmicus Goldman†*

Type Locality.—Near head of Río Limón, Mount Pirri, Darién, eastern Panamá. Altitude, 5,200 feet. Range.—Mountains of eastern Panamá (see Goldman, Smithsonian Misc. Coll., vol. 69, No. 5, p. 158, Apr. 26, 1920).

Genus BASSARICYON** J. A. Allen

Bassaricyon gabbii gabbii J. A. Allen†


_Type Locality._—Talamanca, Limón, Costa Rica. _Range._—Eastern Costa Rica; limits of range unknown. Recorded also in western Panamá and in the Canal Zone at Corozal and near Gatun (Goldman, Smithsonian Misc. Coll., vol. 69, No. 5, p. 156, Apr. 26, 1920).

Bassaricyon gabbii richardsoni J. A. Allen


_Type Locality._—Río Grande, Atlantic slope, Nicaragua. Altitude, below 1,000 feet. _Range._—Nicaragua and adjacent parts of Costa Rica.

Bassaricyon gabbii orinomus Goldman†


_Type Locality._—Cana (Santa Cruz de Cana), upper Río Tuyra, Darién, eastern Panamá. Altitude, 1,800 feet. _Range._—Mountains of eastern Panamá.

Bassaricyon lasius Harris


_Type Locality._—Estrella de Cartago, near the source of the Río Estrella, 6 or 8 miles south of Cartago, Cartago, Costa Rica. Altitude, about 4,500 feet.

Bassaricyon pauli Enders


_Type Locality._—Cerro Pando, between Río Chiriquí Viejo and Río Colorado (about 10 miles from El Volcán), Chiriquí, Panamá. Altitude, 4,800 feet.

_Family Mustelidae_  

Subfamily Mustelinae

_Genus Martes_ Pinel (martens)


_Subgenus Martes_ Pinel (martens)

_Martes americana americana_ (Turton) *


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*Martes americana brunalis* (Bangs) *


*Martes americana abieticola* (Preble) †*


*Martes americana abietinoides* Gray* *


*Type Locality.*—“Edge of the humid western slope of the Rocky Mountains, somewhere between Kicking Horse Pass and the Columbia River” (Rhoads, loc. cit.). *Range.*—Humid parts of mountains in southern British Columbia, particularly the Selkirk and Gold Ranges; east in Rocky Mountains to Banff and Jasper National Parks; northern limits of range unknown (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 58, Jan. 24, 1947).

*Martes americana actuosa* (Osgood) †*


*Martes americana kenaiensis* (Elliot) *


*Type Locality.*—Kenai Peninsula, Alaska.

*Martes atrata* (Bangs) *


*Type Locality.*—Bay St. George, Newfoundland. *Range.*—Restricted to Newfoundland.

*Martes caurina caurina* (Merriam) †*


*Martes caurina nesophila* (Osgood) †*


*Type Locality.*—Masset, Graham Island, Queen Charlotte Islands, British Columbia, Canada.

*Martes caurina vancouverensis* Grinnell and Dixon *


Martes caurina origenes (Rhoads)†*


Martes caurina humboldtensis Grinnell and Dixon*†


_Type Local._—Ridge about 5 miles northeast of Cuddeback [Carlotta], Humboldt County, Calif. _Range._—Narrow northwest humid coast strip, chiefly within limits of redwoods, from Oregon line in Del Norte County south, at least formerly, as far as old Fort Ross, Sonoma County, Calif.; vertical range, from sea level up to about 3,000 feet (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 100, Sept. 26, 1933).

Martes caurina sierrae Grinnell and Storer*


_Type Local._—Head of Lyell canyon, Yosemite National Park, Tuolumne County, Calif. Altitude, 9,800 feet. _Range._—Sierra Nevada above 6,000-foot level from Jordan Hot Springs, Tulare County, north to Mount Shasta, Siskiyou County; thence west and northwest through Trinity, Scott, and Salmon Mountains, in Trinity and Siskiyou Counties, Calif. (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 100, Sept. 26, 1933); and Sierra Nevada in Nevada in vicinity of Lake Tahoe (Hall, Mammals of Nevada, p. 183, July 1, 1946).

*Subgenus PEKANIA Gray (fishers)*

(Type Mustela pennanti Erxleben.)

Martes pennanti pennanti (Erxleben) *


_Type Local._—Eastern Canada (=Province of Quebec). _Range._—Heavily wooded districts of Canada, west to Rocky Mountains; formerly south in Allegheny Mountains to North Carolina and in Rocky Mountains to Yellowstone Park; north in Quebec to about latitude of James Bay; from Manitoba westward it is considered to intergrade with columbiana through northern Saskatchewan and northern Alberta, and north to Great Slave Lake, Northwest Territories (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 59, Jan. 24, 1947).
Martes pennanti columbiana Goldman*  
Type Locality.—Stuart Lake, near headwaters of Fraser River, British Columbia, Canada. Range.—Rocky Mountain region and central and northern British Columbia (Fort Nelson), north to extreme southern parts of Yukon; south, formerly at least, to central Idaho (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 60, Jan. 24, 1947).

Martes pennanti pacifica (Rhoads) *  

Genus MUSTELA  

Subgenus MUSTELA Linnaeus

Mustela erminea arctica (Merriam) †*  
Type Locality.—Point Barrow, Alaska. Range.—Arctic regions of Alaska and western Canada from Pacific Ocean to Smith Sound; from northern limit of land south approximately to a line from Skagway through Fort Goodhope, north shore of Great Bear Lake, south shore of Clinton Golden Lake, north shore of Baker Lake, west end of Wagner Bay to south end of Committee Bay (Hall, Univ. Kansas Publ. Mus. Nat. Hist., vol. 4, p. 97, Dec. 27, 1951).

Mustela erminea polaris (Barrett-Hamilton)
Type Locality.—Gap Valley, 7 1/4 miles northeast of Cape Brevoort, lat. 82° N., long. 59°20' W., northwestern Greenland. Range.—North coast of Greenland and east coast as far south as Turner Sound (between lat. 69° and 70° N.) (Hall, Univ. Kansas Publ. Mus. Nat. Hist., vol. 4, p. 103, Dec. 27, 1951).

Mustela erminea sempiei Sutton and Hamilton*

Mustela erminea kadiacensis (Merriam) †
Type Locality.—Kodiak Island, Alaska. Range.—Kodiak Island.

Mustela erminea richardsonii Bonaparte*
Type Locality.—Fort Franklin, Great Bear Lake, Mackenzie District, Canada. Range.—Hudsonian timber belt from southern Yukon, central Mackenzie, Great Bear and Great Slave Lakes, east to Hudson Bay at about lat. 60° N., coasts of Hudson and James Bays, Ungava and Labrador coast, east to Newfoundland, Nova Scotia, and New Brunswick, south to central Quebec, central Ontario, cen-

**Mustela erminea cicognanii** Bonaparte*


**Mustela erminea bangsi** Hall*


*Type Locality.*—Elk River, Sherburne County, Minn. *Range.*—Southern Manitoba, northeastern North Dakota, the whole of Minnesota, Wisconsin and Michigan, and northern Iowa.

**Mustela erminea invicta** Hall*


**Mustela erminea alascensis** (Merriam) †*


**Mustela erminea salva** Hall*

Type Locality.—Mole Harbor, Admiralty Island, Alaska. Range.—Admiralty Island.

Type Locality.—Saook Bay, Baranof Island, Alaska. Range.—Chichagof and Baranof Islands.

Type Locality.—Kasaan Bay, Prince of Wales Island, Alaska. Range.—Prince of Wales, Dall, and Long Islands, Alaska.

Type Locality.—Santa Cruz, Suemez Island, Alaska. Range.—Known from type locality only.

Type Locality.—Massett, Graham Island, Queen Charlotte Islands, British Columbia, Canada. Range.—Queen Charlotte Islands.

Type Locality.—French Creek, Vancouver Island, British Columbia, Canada. Range.—Vancouver Island.

Type Locality.—Huntingdon, British Columbia. Range.—On mainland in immediate vicinity of coast from probably opposite Texada Island, British Columbia, south to Lake Whatcom, Wash., and east to Mount Baker Range on international boundary.

Type Locality.—Near head of Soleduck River, Olympic Mountains, Clallam County, Wash. Altitude, 4,500 feet. Range.—Olympic Peninsula, Wash., south to Olympia.
Mustela erminea streatori (Merriam)†*

*Type Locality.—Mount Vernon, Skagit Valley, Skagit County, Wash. Range.—Western Washington along eastern side of Puget Sound, western Oregon from Cascades to coast, and northwestern California south in humid coastal district nearly to Golden Gate.

Mustela erminea gulosa Hall†*

*Type Locality.—Trout Lake, Klickitat County, Wash. Range.—Cascades from northeastern King County south to Mount Adams.

Mustela erminea muricus (Bangs) *

*Type Locality.—Echo, El Dorado County, Calif. Altitude, 7,500 feet. Range.—Near 5,300 feet (Denver) to 11,000 feet (Santa Fe Baldy); typically Boreal but taken in Upper Sonoran Zone in winter at Denver; from central and southwestern Montana, southern Idaho, and Blue Mountains of southeastern Washington southward east of Cascade Divide through Salmon River Mountains and Sierra Nevada at least into Fresno County, Calif., in Great Basin to central Nevada, in Rocky Mountains into northern New Mexico; eastward to Black Hills (Hall, Univ. Kansas Publ. Mus. Nat. Hist., vol. 4, p. 162, Dec. 27, 1951).

Mustela rixosa rixosa (Bangs) *

Mustela rixosa allegheniensis (Rhoads) *


Mustela rixosa eskimo (Stone) *


Mustela rixosa campestris Jackson†*


Mustela frenata frenata Lichtenstein*


*Type Locality.*—Valley of México, near city of México, México. *Range.*—Sea level (Brownsville, Tex.) to 7,600 feet (Talpan, México); from southern Texas as far south as city of México; zonal range, Lower Sonoran to at least Transition (Hall, Univ. Kansas Publ. Mus. Nat. Hist., vol. 4, p. 341, Dec. 27, 1951).

Mustela frenata leucoparia (Merriam) †*


**Mustela frenata perotae** Hall†*


**Type Locality.**—Cofre de Perote at elevation of 12,500 feet, Veracruz, México. **Range.**—From 7,500 (?) feet (Perote) to 13,500 feet (Popocatepetl); Upper Sonoran, Transition, and Boreal Zones of mountains along Puebla–México boundary, eastward to western central Veracruz and south into Oaxaca (Hall, Univ. Kansas Publ. Mus. Nat. Hist., vol. 4, p. 351, Dec. 27, 1951).

**Mustela frenata macrophonius** (Elliot) *


**Mustela frenata goldmani** (Merriam) †*


**Type Locality.**—Pinabete, Chiapas, México. Altitude, about 8,200 feet. **Range.**—From 2,500 feet (El Ciprés, Guatemala) to 9,500 feet (near Tecpan, Guatemala); Upper Tropical Zone of mountains and western coasts of southern México, Guatemala and El Salvador (Hall, Univ. Kansas Publ. Mus. Nat. Hist., vol. 4, p. 355, Dec. 27, 1951).

**Mustela frenata tropicalis** (Merriam) †*


**Type Locality.**—Jico, Veracruz, México. Altitude, 6,000 feet. **Range.**—Up to 5,000 feet (as now known) in Tropical Zone of Veracruz (Hall, Univ. Kansas Publ. Mus. Nat. Hist., vol. 4, p. 363, Dec. 27, 1951).

**Mustela frenata perda** (Merriam) †*


**Type Locality.**—Teapa, Tabasco, México. **Range.**—From 50 feet (Chichén-Itzá) to 4,000 feet (San Vicente) in Lower Tropical Zone south from southern Veracruz through southern México into Guatemala (Hall, Univ. Kansas Publ. Mus. Nat. Hist., vol. 4, p. 367, Dec. 27, 1951).
Mustela frenata nicaraguae J. A. Allen

Mustela frenata costaricensis Goldman†*
_Type Locality._—San José, San José, Costa Rica. _Range._—Costa Rica.

Mustela frenata panamensis Hall†*
_Type Locality._—Rio Indio near Gatún, Canal Zone, Panamá. _Range._—Sea level to 5,800 feet (Bóquete), Panamá. Zonal range, Upper and Lower Tropical.

Mustela frenata texensis Hall
_Type Locality._—Kerr County, Tex. _Range._—Lower and possibly Upper Sonoran Zones of central Texas.

Mustela frenata neomexicana (Barber and Cockerell)*

Mustela frenata arizonensis (Mearns)*
_Type Locality._—San Francisco Forest, Yavapai County, Ariz. _Range._—Transition to Hudsonian Zones of Arizona, and extreme western New Mexico, along Colorado River and south of Little Colorado, from San Francisco Mountain region along Mogollon Plateau to extreme western New Mexico.
Mustela frenata inyoensis Hall*


*Type Locality.—* Carl Walter’s Ranch, 2 miles north of Independence, Inyo County, Calif. *Range.—* From 3,700 feet (Lone Pine) to at least 4,000 feet (Alvord) in Lower Sonoran Zone on floor of Owens Valley, Inyo County, Calif.

Mustela frenata pulchra Hall*


Mustela frenata latirostra Hall*


*Type Locality.—* San Diego, San Diego County, Calif. *Range.—* Sea level to 8,000 feet (Tahquitz Valley, San Jacinto Mountains) in Sonoran and Transition Zones of coast, and in mountains, west of Mojave and Imperial Deserts of southern California, from Point Conception and Cuyama Valley southward to Mexican boundary.

Mustela frenata nigriauris Hall*


*Type Locality.—* Two and one-half miles east of Santa Cruz, Santa Cruz County, Calif. *Range.—* Sea level to more than 4,000 feet; Sonoran and Transition Zones of Coast Range and coast of California from San Francisco Bay south to Point Conception, Santa Barbara County, Calif. (Hall, Univ. Kansas Publ. Mus. Nat. Hist., vol. 4, p. 320, Dec. 27, 1951).

Mustela frenata xanthogenys Gray*


Mustela frenata munda (Bangs) *


Type Locality.—Point Reyes, Marin County, Calif. Range.—Sea level to at least 6,000 feet (South Yolla Bolly Mountain, Trinity County); Upper Sonoran and Transition Zones of the coast and Coast Range of northwestern California from Golden Gate northward into southern Humboldt and Trinity Counties.

**Mustela frenata oregonensis** (Merriam)†*


Type Locality.—Grants Pass, Rogue River Valley, Josephine County, Oreg. Range.—Transition and Canadian Zones along coast of northern California and southern Oregon from Humboldt County, Calif., north through Curry County, Oreg., thence inland, west of Cascades, north to Columbia River.

**Mustela frenata saturata** (Merriam)†*


Type Locality.—Siskiyou, Jackson County, Oreg. Altitude, 4,000 feet. Range.—Transition and Boreal Zones of Siskiyou and Trinity Mountains in southern Oregon and northwestern California.

**Mustela frenata altifrontalis** Hall*


**Mustela frenata washingtoni** (Merriam)†*


Type Locality.—Trout Lake, south base of Mount Adams, Skamania County, Wash. Range.—From near 2,000 feet at Trout Lake up to highest parts of Cascade Range from Mount Jefferson, Oreg., north to Mount Rainier, Wash. Zonal range, Upper Sonoran to Arctic-Alpine.

**Mustela frenata effera** Hall*


Type Locality.—Ironside, 4,000 feet, Malheur County, Oreg. Range.—Upper Sonoran to Arctic–Alpine Zones of northern two-thirds of Oregon east of Cascades and southeastern Washington, south of Snake River.

**Mustela frenata nevadensis** Hall*


Mustela frenata oribasus (Bangs)*


Type Locality.—Source of Kettle River [the summit between middle fork of Kettle River and Cherry Creek at Pinnacles], British Columbia, Canada. Altitude, 7,500 feet. Range.—Canadian and Hudsonian Zones from near lat. 56° N. in Rocky Mountains of British Columbia and Alberta and Ootsa Lake along Fraser and Chilcotin Rivers south to Alta Lake, in Caribou and Monashee Mountains, probably in Selkirks and Rockies, and through Rocky Mountains of Montana into extreme northern Wyoming (Hall, Univ. Kansas Publ. Mus. Nat. Hist., vol. 4, p. 270, Dec. 27, 1951).

Mustela frenata longicauda Bonaparte*


Mustela frenata alleni (Merriam)†*


**Mustela frenata spadix** (Bangs) *


*Type Locality.*—Fort Snelling, Hennepin County, Minn. *Range.*—Upper Austral and Transition Zones of Minnesota, northern and western Iowa, southeastern North Dakota, eastern part of South Dakota, and northeastern Nebraska.

**Mustela frenata noveboracensis** (Emmons) *


*Type Locality.*—Williamstown, Berkshire County, Mass. *Range.*—Sea level to highest parts of mountains of eastern United States; Canadian Zone of Ontario and Quebec southward through eastern United States in Canadian, Transition, and Upper Austral Zones to and including upper edge of Lower Austral Zone in Carolinas and northern parts of Georgia, Alabama and Mississippi; westward from Atlantic coast to St. Croix and Mississippi Rivers.

**Mustela frenata occisor** (Bangs) *


**Mustela frenata primulina** Jackson†*


*Type Locality.*—Five miles northeast of Avilla, Jasper County, Mo. *Range.*—Upper and Lower Austral Zones west of Mississippi River in Missouri and Arkansas, eastern and southern Iowa, eastern half of Kansas and Oklahoma, northern Louisiana, and northeastern Texas; southern and southwestern limits of range undetermined (Hall, Univ. Kansas Publ. Mus. Nat. Hist., vol. 4, p. 233, Dec. 27, 1951).
CARNIVORA: MUSTELIDAE

Mustela frenata arthuri Hall*


Mustela frenata olivacea A. H. Howell†*

Type Locality.—Autaugaville, Autauga County, Ala. Range.—Lower and Upper Austral Zones in eastern Mississippi, Alabama, Georgia, South Carolina, and northern Florida.

Subgenus LUTREOLA Wagner (minks)

Mustela vison vison Schreber*
1777. Mustela vison Schreber, Die Säugthiere . . . , Theil 3, Heft 25, pl. 127b.
1911. Lutreola vison borealis Brass, Aus dem Reiche der Pelze, p. 504, April 1911. (Northeastern North America.)

Type Locality.—Eastern Canada (= Province of Quebec). Range.—Eastern Canada, west to eastern and southern Ontario; south in interior to Catskill Mountains, N. Y., and to northern Pennsylvania. Not found on the coast south of New Brunswick.

Mustela vison lowii R. M. Anderson

Type Locality.—Mistassini Post, Mistassini Lake, Mistassini District, Quebec, Canada, about 215 miles east of Rupert House, James Bay, Quebec, Canada. Range.—Northern Labrador and northern Quebec in wooded districts from Chimo near southern end of Ungava Bay south to Lake Mistassini and Lake Waswanipi southeast of James Bay.

Mustela vison mink Peale and Palisot de Beauvois*


Type Locality.—Maryland. Range.—Eastern United States, from coast of New England south to North Carolina, and, in the interior, to central Georgia and Alabama; westward through southern Pennsylvania and Ohio to Missouri and northeastern Texas.

Mustela vison lutensis (Bangs) *


Type Locality.—Salt marsh off Matanzas Inlet, St. Johns County, Fla. Range.—Coast of southeastern United States from South Carolina to Florida.

Mustela vison evergladensis Hamilton


Type Locality.—Tamiami Trail (U. S. Route 41), 5 miles southeast of Royal Palm Hammock, Collier County, Fla. Range.—Unknown, but presumably cypress and mangrove swamps of Florida Everglades and Ten Thousand Islands.

Mustela vison vulgivaga (Bangs) *


Type Locality.—Burbridge, Plaquemines Parish, La. Range.—Coast of Louisiana and Mississippi. North in Mississippi River bottoms to northern Louisiana.

Mustela vison letifera Hollister†*


Type Locality.—Elk River, Sherburne County, Minn. Range.—From northern Wisconsin and northern South Dakota south to northern Illinois, northern Missouri, and southern Kansas.

Mustela vison lacustris (Preble) †*


Type Locality.—Echiamamish River (near Painted Stone portage), Manitoba, Canada. Range.—Interior of Canada from western shores of Hudson Bay northwest through wooded parts of Keewatin and Mackenzie Districts to Great Slave Lake, and southward through Alberta (Wood Buffalo Park), probably northeastern corner of British Columbia, Saskatchewan, and Manitoba to southern North Dakota (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 67, Jan. 24, 1947).

**Mustela vison energumenos** (Bangs) *


Type Locality.—Sumas, British Columbia, Canada. Range.—Western North America, from southern Yukon and northern British Columbia south to Columbia River, northeastern Nevada, Utah (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 6, p. 419, Aug. 10, 1952), and in Rocky Mountains to New Mexico.

**Mustela vison aestuarina** Grinnell*


Type Locality.—Grizzly Island, Solano County, Calif. Range.—Oregon; western Nevada, in lakes and along streams flowing eastward from the Sierra Nevada, from Truckee River south to Walker River (Hall, Mammals of Nevada, p. 194, July 1, 1946); streams and marshes of northern half of California, south along coast nearly to north side of San Francisco Bay, southward throughout marshes adjacent to mouths of Sacramento and San Joaquin Rivers through San Joaquin Valley to neighborhood of Mendota, Fresno County, and south along Sierra Nevada, on west side to Tulare County and on east side, in Owens Valley, Inyo County, to near Big Pine (Grinnell, Dixon, and Linsdale, The fur-bearing mammals of California, vol. 1, p. 240, Aug. 10, 1937).

**Mustela vison nesolestes** (Heller) *


Type Locality.—Windfall Harbor, Admiralty Island, Alaska. Range.—Alexander Archipelago, Alaska.

**Mustela vison evagor** Hall*


Type Locality.—Little Qualicum River, 8 or 9 miles west of Parksville, Vancouver Island, British Columbia, Canada. Range.—Vancouver Island.

**Mustela vison melanpeplus** (Elliot) *

*Type Locality.*—Kenai Peninsula, Alaska.  
*Range.*—Kenai Peninsula and Cook Inlet region, Alaska.

*Mustela vison ingens* (Osgood) †*  
*Type Locality.*—Fort Yukon, Alaska.  
*Range.*—Northern, western, and central Alaska; northern Yukon and northwestern Mackenzie; south to Alaska Peninsula and to Fort Good Hope, Mackenzie; east to Anderson River.

*Mustela macrodon* (Prentiss) †*  
*Type Locality.*—Shell heaps at Brooklin, Hancock County, Maine.  
*Range.*—At present known from skeletal remains only; according to Hardy (Forest and Stream, vol. 61, p. 125, Aug. 15, 1903) the animal became extinct about 1860.

*Subgenus PUTORIUS*  
†*G. Cuvier  

*Mustela nigripes* (Audubon and Bachman) ‡* (black-footed ferret)  
*Range.*—Great Plains, from western North Dakota and northern Montana, north to southeastern Alberta and southwestern Saskatchewan, south to Texas, and thence westward through New Mexico to country north of Williams, Ariz., to southern rim of Grand Canyon, which to date appears to be its most westerly known habitat. Vertical range in Rocky Mountains up to 10,500 feet (Young, Amer. Forests, vol. 46, No. 1, p. 18, January 1940). Recorded also eastward to Norman, Cleveland County, Okla. (Arvey and Glass, Journ. Mamm., vol. 31, No. 4, p. 460, Nov. 21, 1950).

*Subfamily TAYRINAE*  
*Genus TAYRA*  
†*Oken  

†*Revised by Merriam, North Amer. Fauna No. 11, pp. 7-9, June 30, 1896.  


*Tayra barbara* biologiae (Thomas) *


*Type Locality.*—Calóvéora [=Calóvéora], Veraguas, Panamá. *Range.*—Panamá and Costa Rica.

*Tayra barbara* inserta J. A. Allen *


*Tayra barbara* senex (Thomas) *


*Subfamily GRISONINAE*

*Genus GRISON* **Oken**

1816. *Grison* Oken, Okens Lehrbuch der Naturgeschichte, pt. 3 (Zoologie), sect. 2, p. 1000. (Type, *Viverra vittata* Schreber.)


Grison canaster (Nelson)†*

Subfamily GULONINAE (wolverines)

Genus GULO Pallas

1780. Gulo Pallas, . . . Spicilegia zoologica, . . . , fasc. 14, p. 25. (Type, Gulo sibiricus Pallas=Ursus gulo Linnaeus.)

Gulo luscus luscus (Linnaeus) *

Type Locality.—Hudson Bay. Range.—From shores of Arctic Ocean, stragglng north to northern Baffin Island, Ellesmere Island, and Melville Island, east to Labrador coast, and west to Alaska; south formerly to extreme northeastern United States, Michigan, Wisconsin, Minnesota, and North Dakota, and southward in the Rocky Mountains into Colorado.

Gulo luscus luteus Elliot*

Type Locality.—Crater Meadows [= Groundhog Meadows], Whitney Creek [= Golden Trout Creek], 27 miles south of Mount Whitney, Tulare County, Calif. Altitude, 8,700 feet. Range.—From southern (Piute Mountains, Kern

**Gulo luscus vancouverensis** Goldman†*


*Type Locality.*—Great Central Lake, Vancouver Island, British Columbia, Canada. *Range.*—Restricted to Vancouver Island.

**Gulo hylaeus** Elliot*


*Type Locality.*—Susitna River, region of Mount McKinley, Alaska.

**Gulo katschemakensis** Matschie*


*Type Locality.*—Katschemak Bay, Kenai Peninsula, Alaska.

**Subfamily taxidiinae** (American badgers)

**Genus TAXIDEA** Waterhouse


**Taxidea taxus taxus** (Schreber) *


*Type Locality.*—Labrador and Hudson Bay (probably southwest of Hudson Bay). *Range.*—Southwestern Ontario (Rainey River District) and Great Plains region of Manitoba, Saskatchewan, and Alberta, to foothills of Rocky mountains; south to northern Indiana, northern Illinois, Michigan, Wisconsin, and Minnesota; and into southern British Columbia.

**Taxidea taxus jacksoni** Schantz†*


*Type Locality.*—Four miles east of Milton, Rock County, Wis. *Range.*—Southern Wisconsin and southern Minnesota; limits of range undetermined.

**Taxidea taxus iowae** Schantz†*


Type Locality.—Near Clarion, Wright County, Iowa. Range.—Known from Iowa only.

**Taxidea taxus dacotensis** Schantz†*


*Type Locality.*—Folsom, Custer County, S. Dak. Range.—Badlands region of western South Dakota.

**Taxidea taxus montana** Schantz†*


*Type Locality.*—Thirty five miles south of Dillon, Beaverhead County, Mont. Range.—Montana, excepting an extreme western portion; Wyoming, excepting an extreme western portion; Colorado, excepting a southwestern portion; eastern Utah, west to approximately long. 100°25' W.

**Taxidea taxus merriami** Schantz†*


*Type Locality.*—Banner, Trego County, Kan. Range.—Kansas, approximately between long. 97° and 101° W., except for a dip south to Hill City (22 miles east), Graham County.

**Taxidea taxus kansensis** Schantz*


*Type Locality.*—Four miles southeast of McLouth, Leavenworth County, Kan. Range.—Eastern Kansas, east of long. 97° W.

**Taxidea taxus berlandieri** Baird†*


**Taxidea taxus littoralis** Schantz†*


*Type Locality.*—Corpus Christi, Nueces County, Tex. Range.—Coastal area of Texas from Corpus Christi southward along Gulf coast and inland to Coahuila, México.
Taxidea taxus apache Schantz†*
Type Locality.—San Pedro River, Arizona and Sonora, Mexico—United States boundary. Range.—Grassy plains region of southeastern Arizona and northeastern Sonora, near Mexican boundary, 25 miles south into Sonora and 65 miles north to Willcox, Ariz.

Taxidea taxus sonoriensis Goldman†*

Taxidea taxus hallorani Schantz†*
Type Locality.—Castle Dome Mountains, Kofa Game Range, Yuma County, Ariz. Range.—Southern gray desert soils from southeastern Nevada, lat. 36°30' N.; southward into southeastern California, long. 114°45' to 115°30' W., and lat. 34°50' to 35°20' N.; in Arizona west of long. 111° W., excepting Beaver Creek and Santa Catalina Mountains, and south of lat. 35°40' N.; extreme northeastern Baja California and northwestern Sonora.

Taxidea taxus halli Schantz†*
Type Locality.—White Sage Flat, between Desert Range and Sheep Range, Desert Game Range, Clark County, Nev. Range.—The Desert Game Range, an area covering 2,022,000 acres in southern Nevada, and that part of southern Nevada and southeastern California north of range of hallorani, at lat. 36°45' N., and west to Death Valley and Panamint Mountains, Calif.

Taxidea taxus neglecta Mearns†*
Type Locality.—Fort Crook, Shasta County, Calif. Range.—From Baja California, and California west and north of Mohave and Colorado Deserts north to eastern Oregon.

Taxidea taxus infusca Thomas*
Type Locality.—Santa Anita, Baja California, México. Range.—Peninsula of Baja California. Northward extent of range on Peninsula not determined.

Subfamily MEPHITINAE (skunks)

Genus SPILOGALE* Gray


Spilogale ambarvalis Bangs*


Type Locality.—Oak Lodge, East Peninsula, opposite Micco, Brevard County, Fla. Range.—Eastern portion of Florida Peninsula, from New Smyrna south into Dade County.

Spilogale putorius (Linnaeus) *


1890. Spilogale ringens Merriam†, North Amer. Fauna No. 4, p. 9, Oct. 8, 1890. (Greensboro, Hale County, Ala.)

Type Locality.—South Carolina. Range.—Mississippi, Alabama, western Georgia, western South Carolina, and northward along Alleghenies to northern Virginia; western limits of range unknown.

Spilogale interrupta (Rafinesque) *


1890. Spilogale interrupta Merriam, North Amer. Fauna No. 4, p. 8, Oct. 8, 1890.


Spilogale indianola Merriam†*

1890. Spilogale indianola Merriam, North Amer. Fauna No. 4, p. 10, Oct. 8, 1890.

Type Locality.—Indianola, Matagorda Bay, Matagorda County, Tex. Range.—Coast region of Texas and Louisiana; south to Victoria, Tamaulipas.

Spilogale gracilis gracilis Merriam†*


1890. Spilogale leucoparia Merriam†, North Amer. Fauna No. 4, p. 11, Oct. 8, 1890. (Mason, Mason County, Tex. Regarded as identical with gracilis


**Spilogale gracilis saxatilis** Merriam†*

1890. Spilogale saxatilis Merriam, North Amer. Fauna No. 4, p. 13, Oct. 8, 1890.


**Spilogale gracilis tenuis** A. H. Howell†*


_Type Locality._—Arkins, Larimer County, Colo. _Range._—Eastern slopes of Rocky Mountains in Colorado and northern New Mexico; limits of range unknown.
Spilogale gracilis latifrons Merriam†*


_Type Locality._—Roseburg, Douglas County, Oreg. _Range._—Extreme northwestern corner of California, including Humboldt County (at least from Van Duzen River Valley northward), Del Norte County, and western Siskiyou County; coast region of Oregon; western Washington from western edge of Cascades westward (Dalquest, loc. cit.) and north in southwestern British Columbia to Howe Sound and near summit of Coast Mountains at Alta Lake, 70 miles north of Vancouver (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 72, Jan. 24, 1947).

Spilogale gracilis phenax Merriam†*


_Type Locality._—Nicasio, Marin County, Calif. _Range._—Most of California west of Sierran divide, north from Santa Barbara and Kern Counties to southern Humboldt, Trinity, and Siskiyou Counties.

Spilogale gracilis microrhina Hall


_Type Locality._—Julian, San Diego County, Calif. _Range._—Extreme southwestern California; west from edges of Mohave and Colorado Deserts to seacoast and northwest as far as Ventura County; intergradation from *microrhina* to *phenax* takes place up coastal region from Los Angeles County to San Luis Obispo County; vertical range from near sea level up at least to 4,500 feet (Grinnell, loc. cit.). Recorded also from San Bernardino Peak, La Puerta, and Dulzura in southern California (Hall and Kelson, Univ. Kansas Publ. Mus. Nat. Hist., vol. 5, No. 25, p. 335, Dec. 5, 1952).

Spilogale gracilis amphialus Dickey*


*Type Locality.*—Santa Rosa Island, Santa Barbara Islands, Calif.  *Range.*—Santa Rosa and Santa Cruz Islands, Santa Barbara County.

### Spilogale gracilis martirensis Elliot*


*Type Locality.*—Vallecitos, Sierra San Pedro Mártir, Baja California, México.  *Range.*—Baja California, from Sierra San Pedro Mártir, south to Mulejé (Mulege; A. H. Howell, North Amer. Fauna No. 26, p. 31, Nov. 24, 1906).

### Spilogale gracilis microdon A. H. Howell†*


*Type Locality.*—Comondú, Baja California, México.  *Range.*—Known from type locality only.

### Spilogale gracilis lucasana Merriam†*


*Type Locality.*—Cape San Lucas, Baja California, México.  *Range.*—Cape region of Baja California.

### Spilogale angustifrons angustifrons A. H. Howell†*


### Spilogale angustifrons tropicalis A. H. Howell†*


*Type Locality.*—San Mateo del Mar, Oaxaca, México.  *Range.*—Coast region of southern Oaxaca.

### Spilogale angustifrons elata A. H. Howell†*


*Type Locality.*—San Bartolomé, Chiapas, México.  *Range.*—Highlands of Chiapas, México; Guatemala (recorded from Duenas by Hall, Ann. Mag. Nat. Hist., ser. 11, vol. 1, No. 5, p. 513, May 1938); Honduras, Nicaragua, and north-

**Spilogale angustifrons yucatanensis** Burt


*Type Locality.*—Chichén-Itzá, Yucatán, México. *Range.*—Yucatán Peninsula, México.

**Spilogale angustifrons celeris** Hall


*Type Locality.*—San Isidro, Alajuela, Costa Rica.

**Spilogale pygmaea** Thomas*


*Type Locality.*—Rosario, Sinaloa, México. *Range.*—Known only from type locality.

**Spilogale pygmaea australis** Hall†*


*Type Locality.*—Acapulco, Guerrero, México. *Range.*—Known from type locality only.

**Genus Mephitis*** É. Geoffroy-Saint-Hilaire and G. Cuvier


**Subgenus Mephitis** É. Geoffroy-Saint-Hilaire and G. Cuvier

**Mephitis mephitis mephitis** (Schreber)*

1776. *Viverra mephitis* Schreber, Die Säugethiere . . . , Theil 3, Heft 17, pl. 121.


*Type Locality.*—Eastern Canada (= Province of Quebec). *Range.*—Eastern Canada—Nova Scotia, New Brunswick, Quebec, and northern Ontario; ranging north to James Bay and found occasionally on north shore of Gulf of St. Lawrence, west at least to Oxford House in central Manitoba (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 72, Jan. 24, 1947).

**Mephitis mephitis hudsonica** Richardson*


1911. *Mephitis minnesotae* Brass, Aus dem Reiche der Pelze, p. 532, April 1911. (Forested region of Minnesota.)


*Mephitis mephitis nigra* (Peale and Palisot de Beauvois) *


1911. *Mephitis dentata* Brass, Aus dem Reiche der Pelze, p. 533, April 1911. (From the Alleghenies to Connecticut.)


*Type Locality.*—Maryland. *Range.*—New England, and Middle Atlantic States; north to southern Ontario at least as far as Toronto region; southern Quebec along northern boundaries of New York, Vermont, New Hampshire, and Maine; probably also western New Brunswick; south to northern Virginia, and west of Allegheny Mountains from Lower Peninsula of Michigan and southern Illinois to central Alabama and Mississippi (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 73, Jan. 24, 1947).

*Mephitis mephitis elongata* Bangs *


*Type Locality.*—Micco, Brevard County, Fla. *Range.*—Florida (from vicinity of Lake Worth) to North Carolina; westward through Georgia, southern half of Alabama to Mississippi River on coast.

*Mephitis mephitis avia* Bangs *


Type Locality.—San Jose, Mason County, Ill. Range.—Prairie region of Illinois, western Indiana, eastern Iowa, northern Missouri, northeastern Kansas; boundaries of range imperfectly known.

**Mephitis mephitis mesomelas** Lichtenstein*

1832. *Mephitis mesomelas* Lichtenstein, Darstellung neuer oder wenig bekannter Säugethiere, . . . , pl. 45, fig. 2.


*Type Locality.*—Louisiana. Range.—West side of Mississippi Valley from southern Louisiana to Missouri and extreme southeastern Kansas (Hibbard, Trans. Kansas Acad. Sci., vol. 47, p. 69, September 1944); westward along coast of Texas to Matagorda Island; and up Red River Valley as far at least as Wichita Falls.

**Mephitis mephitis varians** Gray*


*Type Locality.*—Texas. Range.—Southern and western Texas, eastern two-thirds of New Mexico, and adjacent parts of Mexico north into Oklahoma, Colorado, Kansas, and Nebraska.

**Mephitis mephitis estor** Merriam†


*Type Locality.*—San Francisco Mountain [Little Spring at north base], Coconino County, Ariz. Altitude, 8,200 feet. Range.—Western third of New Mexico across Arizona to northeastern Baja California and southeastern California (Colorado River Valley); northward to southeastern Nevada (Hall, Mammals of Nevada, p. 213, July 1, 1946); southern and eastern Utah (Durrant, Univ. Kansas Publ. Mus. Nat. Hist., vol. 6, p. 431, Aug. 10, 1952); and southward in Sonora, and in Sierra Madre to southern Chihuahua; limits of range unknown.

**Mephitis mephitis major** (A. H. Howell) ††


Type Locality.—Fort Klamath, Klamath County, Oreg. Range.—Southeastern Washington, south of Snake River and east of Columbia River (Dalquest, Univ. Kansas Publ. Mus. Nat. Hist., vol. 2, p. 218, Apr. 9, 1943), eastern Oregon and northeastern California (east of Sierran Divide, Modoc County to Lake Tahoe and Owens Valley), eastward to southeastern Idaho and Wasatch Mountains in Utah; and southward to Colorado River.

Mephitis mephitis holzneri Mearns*  

Type Locality.—San Isidro Ranch, within 2 miles of United States boundary and 19 miles east from Pacific seacoast, Baja California, México. Range.—Southern California, chiefly west of deserts, from about latitude of Monterey, east to southern Sierra Nevada in Kern River Basin, and western edges of Mohave and Colorado Deserts, south in Coast Range and along coast to mouth of Santo Domingo River, Baja California.

Mephitis mephitis occidentalis Baird†*  
1901. Chincha platyrhina A. H. Howell,† North Amer. Fauna No. 20, p. 39, Aug. 31, 1901. (South fork of Kern River, 3 miles above Onyx, Kern County, Calif.)  

Type Locality.—Petaluma, Sonoma County, Calif. Range.—From Willamette Valley, Oreg., south through northwestern and western California to about latitude of Monterey Bay and east to Sierran divide.

Mephitis mephitis notata (A. H. Howell) †*  

Type Locality.—Trout Lake, Skamania County, Wash. Range.—Columbia River Valley of southern Cascades from Wind River east to Snake River, and Yakima Valley area (Dalquest, Univ. Kansas Publ. Mus. Nat. Hist., vol. 2, p. 219, Apr. 9, 1943) in southern Washington; and northern Oregon, east of Cascades.

Mephitis mephitis spissigrada Bangs*  


*Subgenus LEUCOMITRA* ¹ A. H. Howell


*Mephitis macroura macroura* Lichtenstein*


*Mephitis macroura eximius* Hall and Dalquest


**Type Locality.**—Fifteen kilometers west of Piedras Negras, Veracruz, México. Altitude, 300 feet. **Range.**— Vicinity of type locality on arid coastal plain of lowlands of central Veracruz, México.

*Mephitis macroura milleri* Mearns†*


*Mephitis macroura vittata* Lichtenstein*


*Type Locality.*—San Mateo del Mar, Oaxaca, México. *Range.*—Known only from type locality; probably ranges over coast region of Oaxaca and Chiapas.

**Genus CONEPATUS Gray**


**Subgenus ORYCTOGALE Merriam**


*Conepatus leuconotus leuconotus* (Lichtenstein) *


*Type Locality.*—Río Alvarado, Veracruz, México. *Range.*—Uncertain, possibly southern Tamaulipas south through Veracruz and eastern Hidalgo (Metlatoyuca) to about lat. 19° N.

*Conepatus leuconotus texensis* Merriam† *


*Conepatus mesoleucus mesoleucus* (Lichtenstein) *

1832. *Mephitis mesoleuca* Lichtenstein, Darstellung neuer oder wenig bekannter Saugethiere, . . ., pl. 44, fig. 2.


*Type Locality.*—Near Chico, Hidalgo, México. *Range.*—Hidalgo (El Chico), Puebla (Río Otlati, 15 kilometers northwest of San Martín; Davis, Journ. Mamm., vol. 25, No. 4, p. 382, Dec. 12, 1944), México (Salazar), and Michoacán (Pátzcuaro) southward through Guerrero (Acapulco and Ometepec) and Oaxaca to Isthmus of Tehuantepec (Huilotepac and Santo Domingo).

*Conepatus mesoleucus filipensis* Merriam† *


Type Locality.—Cerro San Felipe, Oaxaca, México. Altitude, 10,000 feet. 

Range.—Forests of pine and oak on summit of Cerro San Felipe from altitude of 9,000 to 10,500 feet.

*Conepatus mesoleucus nicaraguae* J. A. Allen†


*Conepatus mesoleucus nelsoni* Goldman†


Type Locality.—Armería (near Manzanillo), Colima, México. Altitude, 200 feet. Range.—Region of type locality and probably adjacent parts of western México. Zonal range, Arid Tropical.

*Conepatus mesoleucus pediculus* Merriam†


Type Locality.—Sierra Guadalupe, Coahuila, México. Range.—Recorded also at San Juan, Nuevo León (Koestner, Great Basin Naturalist, vol. 2, No. 1, p. 10, Feb. 20, 1941).

*Conepatus mesoleucus sonoriensis* Merriam†


Type Locality.—Camoa, Río Mayo, Sonora, México. Range.—Northwestern México from Valparaíso Mountains in southwestern Zacatecas, northwesterly through Sinaloa (Santa Cruz de Alaya) into southern Sonora (Camo).

*Conepatus mesoleucus mearnsi* Merriam†


Type Locality.—Mason, Mason County, Tex. Range.—Tableland of México and adjacent southern part of United States, from Jalisco (Ameca, Guadalajara and Zapotlán) and southwestern San Luis Potosí (mountains near Jesús María) northward to central Texas (Llano, Mason, and San Angelo) and through Valleys of Pecos and Río Grande to Jicarillo Mountains, Socorro County, and head of Mimbres River in New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 337, Mar. 1, 1932). Recorded also in Liberty, Hardin, and Jasper Counties in Big Thicket region of southeastern Texas (Taylor and Davis, Texas Game, Fish, and Oyster Comm. Bull. 27, p. 29, August 1947).
Conepatus mesoleucus venaticus Goldman†*


Type Locality.—Casper Ranch, Blue River, 12 miles south of Blue, Greenlee County, Ariz. Altitude, 5,000 feet. Range.—From Camp Verde, Tucson, and Nogales in southeastern Arizona eastward to Animas Valley and Dry Creek near Gila River in southwestern New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 338, Mar. 1, 1932); south to northern Sonora (Aguazarca) and northern Chihuahua (Colonia García), México. Zonal range, mainly Upper and Lower Sonoran.

Conepatus mesoleucus figginsi F. W. Miller*


Type Locality.—Furnace Canyon, western Baca County, Colo. Range.—Warm Sonoran Zone valleys of Baca and Las Animas Counties, Colo.; limits of range unknown.

Conepatus mesoleucus fremonti F. W. Miller


Type Locality.—Garden Park, near Canyon City, Fremont County, Colo. Range.—Warm Sonoran Zone valleys tributary to the Arkansas River in Fremont and El Paso Counties, Colo.

Conepatus mesoleucus telmalestes V. Bailey†*


Type Locality.—Big Thicket, 7 miles northeast of Sour Lake, Hardin County, Tex. Range.—Big Thicket region of Hardin and Liberty Counties, southeastern Texas.

Subgenus MARPUTIUS Gray


Conepatus semistriatus conepatl (Gmelin) *


Type Locality.—"Nova Hispania" [=México]; restricted to Motzorongo, Veracruz, México (Hershkovitz, loc. cit.). Range.—Tropical east coast of southern Veracruz and Tabasco and possibly Campeche, México.

Conepatus semistriatus yucatanicus Goldman†*

Type Locality.—La Vega, on mainland coast opposite Isla Cancun, northeastern Quintana Roo, Mexico. Range.—Yucatán, Quintana Roo, and Guatemala; limits of range undetermined.

Conepatus semistriatus trichurus Thomas


Subfamily Lutrinae (otters)

Genus Lutra* Brisson
1762. Lutra Brisson, Regnum animale . . . , ed. 2, p. 201. (Type, Lutra Brisson=Mustela lutra Linnaeus.)
1772. Lutra Brünnicch Zoologiae Fundamenta . . . , p. 42. (Type, "Odderen"=Mustela lutra Linnaeus.)

Lutra canadensis canadensis (Schreber)*
1776. Mustela lutra canadensis, Schreber, Die Säugthiere . . . , Theil 3, Heft 18, pl. 126b.
1823. Lutra canadensis Sabine, in Franklin, Narrative of a journey to the shores of the Polar Sea in . . . 1819-22, p. 653.
1863. Lutra destructor Barnston†, Canadian Nat. Geol., vol. 8, No. 2, p. 152, April 1863. (Michipicoten Island, Lake Superior, Ontario, Canada.)


CARNIVORA: MUSTELIDAE

Lutra canadensis degener Bangs
Type Locality.—Bay St. George, Newfoundland. Range.—Known from Newfoundland only.

Lutra canadensis chimo Anderson
Type Locality.—Chimo, Ungava District, Quebec, about 30 miles south of tip of Ungava Bay, Quebec, Canada. Range.—Northern Labrador and northern Quebec in wooded districts from Chimo, Ungava Bay south to Hamilton River and Lake Mistassini southeast of James Bay; on Labrador coast as far north as Okkak, and on east side of Hudson Bay as far north as Little Whale River (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 70, Jan. 24, 1947).

Lutra canadensis preblei Goldman†*
Type Locality.—Near McTavish Bay, Great Bear Lake (on canoe route from Lake Hardisty), Mackenzie District, Northwest Territories, Canada. Range.—Mackenzie River Basin and east to Hudson Bay; south to Alberta, Saskatchewan, and western Manitoba.

Lutra canadensis yukonensis Goldman†*
Type Locality.—Unalakleet, Norton Sound, Alaska. Range.—Bering Sea coast, Alaska Peninsula, Kuskokwim and Yukon River drainage, east to central Yukon, Canada.

Lutra canadensis extera Goldman†*
Type Locality.—Nagai Island, Shumagin Islands, Alaska. Range.—Known from Nagai Island only.

Lutra canadensis kodiacensis Goldman†*
Type Locality.—Uyak Bay, Kodiak Island, Alaska. Range.—Kodiak and Afognak Islands, Alaska.

Lutra canadensis optiva Goldman†*
Type Locality.—Zaikof Bay, Montague Island, Alaska. Range.—Montague and Hinchenbrook Islands and adjacent Kenai Peninsula.
Lutra canadensis pericyzomae Elliot


Type Locality.—Gawi, west coast of Moresby Island, Queen Charlotte Islands, British Columbia, Canada. Range.—Known from Queen Charlotte Islands only.

Lutra canadensis evexa Goldman†


Type Locality.—Stuart Lake, near headwaters of Fraser River, British Columbia, Canada. Range.—Western slope of Rocky Mountains in central British Columbia.

Lutra canadensis vancouverensis Goldman†


Type Locality.—Quatsino, northwestern Vancouver Island, British Columbia, Canada. Range.—Vancouver Island, British Columbia; and San Juan Islands of northern Puget Sound and adjacent marine waters (Dalquest, loc. cit.).

Lutra canadensis pacifica Rhoads*


Lutra canadensis brevipilosus Grinnell*


Type Locality.—Grizzly Island, Suisun Bay, Solano County, Calif. Range.—Streams and marshes in the Great Valley of California north from Tulare County, and near coast north from San Francisco Bay into Oregon (Grinnell, Dixon, and Linsdale, The fur-bearing mammals of California, vol. 1, p. 274, Aug. 10, 1937); and western Nevada in lakes and streams flowing eastward from Sierra Nevada (Hall, Mammals of Nevada, p. 198, July 1, 1946).

Lutra canadensis nexa Goldman†


Type Locality.—Near Deeth, Humboldt River, Elko County, Nev. Range.—Humboldt and upper Snake River Basins in southeastern Oregon, southern Idaho, and northeastern Nevada (Hall, Mammals of Nevada, p. 196, July 1, 1946), and

**Lutra canadensis sonora** Rhoads


*Type Locality.*—Montezuma Well, Beaver Creek, Yavapai County, Ariz. *Range.*—From Colorado River in California to southwestern New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 323, Mar. 1, 1932); north along Colorado River and perhaps originally along Virgin River into southeastern Nevada (Hall, Mammals of Nevada, p. 199, July 1, 1946).

**Lutra canadensis interior** Swenk*


**Lutra canadensis texensis** Goldman†*


*Type Locality.*—Twenty miles west of Angleton, Brazoria County, Tex. *Range.*—Lower Mississippi River Valley in Louisiana and doubtless Mississippi, and west in Gulf coast region at least to Bay City, Tex.

**Lutra canadensis vaga** Bangs*


*Type Locality.*—Micco, Brevard County, Fla. *Range.*—Florida and southern Georgia.

**Lutra canadensis lataxina** F. Cuvier*


Lutra mira Goldman†*
_Type Locality._—Kasaan Bay, Prince of Wales Island, Alaska. _Range._—Alexander Archipelago and probably adjacent mainland, southeastern Alaska.

Lutra annectens annectens Major*
_Type Locality._—Río de Tepic, Nayarit, México. _Range._—Nayarit south at least to Isthmus of Tehuantepec (Santa Efginia), Oaxaca, México.

Lutra annectens latidens J. A. Allen*

Lutra annectens mesopotes (Cabrera)
_Type Locality._—Costa Rica. _Range._—Limits of range unknown.

Lutra annectens repanda Goldman†*

Subfamily ENHYDRINAE (sea-otters)
Genus ENHYDRA* Fleming

Enhydra lutris lutris (Linnaeus) *
Type Locality.—Kamchatka. Range.—Kamchatka to western Aleutian Islands, Alaska.

Enhydra lutris nereis (Merriam) †*
Type Locality.—San Miguel Island, Santa Barbara Islands, Calif. Range.—Ocean around islands and along coasts of Washington, Oregon (V. Bailey, North Amer. Fauna No. 56 (June), p. 303, Aug. 29, 1936), California (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 104, Sept. 26, 1933), and Baja California at least as far south as Sebastián Vizcaino Bay (Scammon, The marine mammals of the northwestern coast of North America, p. 169, 1874).

Superfamily FELOIDEA

Family VIVERRIDAE

Subfamily HERPESTINAE (mongooses)

Genus HERPESTES Illiger
1811. Herpestes Illiger, Prodromus systematis Mammalium et Avium . . . , p. 135. (Type, Viverra ichneumon Linnaeus. For use of this name in place of Mungos E. Geoffroy-Saint-Hilaire and G. Cuvier see J. A. Allen, Journ. Mamm., vol. 1, No. 1, pp. 27–30, Nov. 28, 1918.)

Herpestes auropunctatus auropunctatus (Hodgson) *

*Type Locality.*—Nepal. Introduced and widely established in the West Indies.

**Family Felidae** (cats)

**Genus FELIS** *Linnaeus*


*Pardus*—group 5 (jaguars)

**Felis onca centralis** Mearns†*


*Type Locality.*—Talamanca, Limón, Costa Rica (probably near Sipurio, in the valley of Río Sixaola). *Range.*—Central America north to El Salvador and along Pacific coast probably to near Isthmus of Tehuantepec; south to Guaduas, Cundinamarca, Colombia.

**Felis onca goldmani** Mearns†*


**Felis onca hernandesii** (Gray) *


_TypeLocality._—Mazatlán, Sinaloa, México. _Range._—Western México from Sinaloa south to Isthmus of Tehuantepec.

**Felis onca verae crucis** Nelson and Goldman†*


_TypeLocality._—San Andrés Tuxtla, Veracruz, México. _Range._—Gulf slope of eastern and southeastern México from coast region of Tabasco north through Veracruz and Tamaulipas to central Texas.

**Felis onca arizonensis** Goldman†*


_TypeLocality._—Near Cibecue, Navajo County, Ariz. _Range._—Mountainous parts of eastern Arizona north to the Grand Canyon, southern half of western New Mexico, and northeastern Sonora, México.

*pardalis*_—group ⁶ (ocelots)

**Felis pardalis pardalis** Linnaeus*


1911. *? Felis bufhoni* Brass, Aus dem Reiche der Pelze, p. 412, April 1911. (México.)


Felis pardalis meanesi J. A. Allen†*
Type Locality.—Talamanca, Limón, Costa Rica. Range.—Panamá, Costa Rica, and Nicaragua.

Felis pardalis nelsoni Goldman†*
Type Locality.—Manzanillo, Colima, México. Altitude, 50 feet. Range.—Pacific coastal lowlands and western slope of mountains of interior from southern Oaxaca (Puerto Angel) north to southern Sinaloa (Escuinapa).

Felis pardalis sonoriensis Goldman†*
Type Locality.—Camao, Río Mayo, Sonora, México. Altitude, 800 feet. Range.—Warmer western slopes of Sierra Madre from southern Sonora, and probably northern Sinaloa, north to southeastern Arizona; formerly as far north as Fort Verde, Ariz.; absent in arid plains region of western Sonora.

Felis pardalis albescens Pucheran*
1911. Felis ludoviciana Brass, Aus dem Reiche der Pelze, p. 411, April 1911. (Alternative for limitis.)


*Felis wiedii pirrensis* Goldman†


*Type Locality.*—Cana (Santa Cruz de Cana), upper Río Tuyra, Darién, eastern Panamá. Altitude, 2,000 feet. *Range.*—Eastern Panamá, and south perhaps to Ecuador and Perú.

*Felis wiedii nicaragucae* (J. A. Allen) *


*Felis wiedii salvinia* (Pocock)


*Felis wiedii yucatanica* Nelson and Goldman†


**Felis wiedii oaxacensis** Nelson and Goldman†*  

**Felis wiedii glauca** Thomas*  
*Type Locality.*—Beltran, Jalisco, México. *Range.*—Western México, from Jalisco north to southern Sinaloa; limits of range unknown.

**Felis wiedii cooperi** Goldman†*  
*Type Locality.*—Eagle Pass, Maverick County, Tex. *Range.*—Known only from type locality, but probably has an extended range in northeastern México.

**Felis pardinoides oncilla** Thomas  
*Type Locality.*—Volcán de Irazú, Cartago, Costa Rica. *Range.*—Known from Costa Rica only.

*The genus *Oncilla* of J. A. Allen.
Felis concolor concolor—group ⑨ (pumas)

Felis concolor concolor couguar Kerr


Type Locality.—Pennsylvania. Range.—Formerly eastern United States as far north as Maine and to southern Ontario and Quebec.

Felis concolor missoulensis Goldman


Type Locality.—Sleeman Creek, about 10 miles southwest of Missoula, Missoula County, Mont. Range.—Northern Rocky Mountain region from Yellowstone National Park, Wyo., north to Jasper Park, Alberta, northern Cassiar (Big Muddy River), and Peace River district, British Columbia; east to southwestern Saskatchewan and northwestern North Dakota; west to Wallowa Mountains, northeastern Oregon.

Felis concolor hippolestes Merriam


Type Locality.—Wind River Mountains, near head of Big Wind River, Fremont County, Wyo. Range.—Rocky Mountain region from Wyoming, except northwestern part, south through southeastern Idaho, northeastern Utah, and Colorado to northern New Mexico. Formerly east in prairie states to undetermined limits.

Felis concolor oregonensis Rafinesque


Type Locality.—Ohanapecosh River, Mount Rainier National Park, Pierce County, Wash. Range.—Cascade Mountain region from mainland of southwestern British Columbia south through Washington and Oregon, except upper part of Rogue River Valley, to near California boundary, intergrading on east with *missoulensis*, on west in Washington with *olympus*, and on south with *californica*.

Felis concolor vancouverensis Nelson and Goldman†*


*Type Locality.*—Campbell Lake, Vancouver Island, British Columbia. *Range.*—Known from Vancouver Island only.

Felis concolor olympus Merriam†*


*Type Locality.*—Lake Cushman, Olympic Mountains, Mason County, Wash. *Range.*—Olympic Peninsula region of western Washington, intergrading to the east with *oregonensis*.

Felis concolor californica May*


*Type Locality.*—Kern County, Calif. Probably the Kern River basin in the Sierra Nevada. *Range.*—California, except desert region in southeastern part, north to closely adjoining portions of Oregon, except coast region, and south to include Sierra Juárez and Sierra San Pedro Mártil region of northwestern Baja California; altitudinal range from sea level to near timber line on high mountains.

Felis concolor kaibabensis Nelson and Goldman†*


Felis concolor browni Merriam†*


*Type Locality.*—Lower Colorado River, 12 miles south of Yuma, Yuma County, Ariz. *Range.*—Desert plains and low mountains of Colorado River Valley in southwestern Arizona, southeastern California, northeastern Baja California, and northwestern Sonora. Zonal range, mainly Lower Sonoran.

Felis concolor improcera Phillips


**Type Locality.**—Calmalli, Baja California, México. **Range.**—Vizcaíno Desert region and south to mountains of Cape region, Baja California.

### Felis concolor azteca Merriam†


**Type Locality.**—Bruni Ranch, near Bruni, southeastern Webb County, Tex. **Range.**—Texas and northeastern México, intergrading on west with *azteca* and on east with *coryi*.

### Felis concolor coryi Bangs*


**Type Locality.**—Wilderness back of Sebastian, Brevard County, Fla. **Range.**—Isolated parts of southern Florida and perhaps of northeastern Louisiana; formerly doubtless from eastern Texas or western Louisiana and lower Mississippi River valley east through Southeastern States in general, intergrading on the north with *couguar*, and to the west and northwest with *stanleyana* and *hippopolestes*.

### Felis concolor mayensis Nelson and Goldman†

Felis concolor costaricensis Merriam


_Type Locality._—Boquete, Chiriquí, Panamá. _Range._—Tropical forested region (mainly rain forest) from eastern Panamá west to Costa Rica and probably to Nicaragua; limits of range unknown.

*yagouaroundi—group\(^{10}\)

Felis yagouaroundi panamensis J. A. Allen


_Type Locality._—Boquerón, Chiriquí, Panamá. _Range._—Panamá and Costa Rica.

Felis yagouaroundi fossata Mearns


_Type Locality._—Mérida, Yucatán, México. _Range._—Peninsula of Yucatán, México, south to La Paz and Tegucigalpa Provinces, Honduras.

Felis yagouaroundi tolteca Thomas


Felis yagouaroundi cacomitli Berlandier


\(^{10}\) The genus _Herpailurus_ of J. A. Allen.


**Type Locality.**—Matamoros, Tamaulipas, México. **Range.**—Extreme southern Texas south to at least to Tampico, Tamaulipas, México.

**Genus LYNX Kerr (lynxes)**


canadensis—group (Canada lynxes)

**LYNX canadensis canadensis** Kerr*


**LYNX canadensis mollipilosus** Stone*

Bull. 102 (1946), p. 75, Jan. 24, 1947, as identical with *Lynx canadensis canadensis*.

*Type Locality.*—Wainwright Inlet, Alaska.

**Lynx canadensis subsolanus** Bangs*


*Type Locality.*—Codroy, Newfoundland. *Range.*—Apparently restricted to island of Newfoundland.

**Lynx rufus rufus** (Schreber)*

1777. *Felis rufa* Schreber, Die Säugthiere . . . , Theil 3, Heft 95, pl. 109b.

(For use of the name *rufus* Schreber 1777 in place of *ruffus* Güldenstaedt 1776 (not a scientific name) see J. A. Allen, Journ. Mamm., vol. 1, No. 2, p. 91, Mar. 2, 1920.)


**Lynx rufus gigas** Bangs*


*Type Locality.*—Fifteen miles back of Bear River, Nova Scotia, Canada. *Range.*—From Nova Scotia and New Brunswick westward through southern Quebec to southeastern Ontario.

**Lynx rufus superiorensis** Peterson and Downing*


*Type Locality.*—McIntyre Township, near Port Arthur, Ontario, Canada. *Range.*—In Ontario north and east at least to Kenogami River and from south-

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western Algoma and western Manitoulin Island Districts westward to southeastern Manitoba; Upper Peninsula of Michigan westward across Wisconsin and Minnesota; western and southern limits as yet unknown.

**Lynx rufus floridanus Rafinesque**


1911. *Lynx floridanus* Gifford, Florida Rev., vol. 6, No. 6, p. 461, December 1911. (Shore of Biscayne Bay, 6 miles south of Miami, Dade County, Fla.)


**Lynx rufus uinta** Merriam†


*Type Locality.—Bridger Pass, Carbon County, Wyo. Range.—From southern Alberta, Glacier National Park in Montana (V. Bailey, The mammals, in Wild animals of Glacier National Park, U. S. Nat. Park Service, p. 82, 1918), and western North Dakota along Missouri River and in Badlands (V. Bailey, North Amer. Fauna No. 49 (December 1926), p. 148, Jan. 8, 1927), south in Rocky Mountains to higher mountains of northern New Mexico and along Manzano and Sacramento chain of ranges between Pecos and Rio Grande Valleys to south-central New Mexico (V. Bailey, 1932, loc. cit.).

**Lynx rufus pallescens** Merriam†


*Type Locality.—South side of Mount Adams, near Trout Lake, Skamania County, Wash. Range.—From southern British Columbia south on both slopes

**Lynx rufus fasciatus** Rafinesque*


**Lynx rufus californicus** Mearns†*


**Lynx rufus peninsularis** Thomas *


*Type Locality.*—Santa Anita, Baja California, México. *Range.*—Cape region of Baja California.

**Lynx rufus baileyi** Merriam † *


**Lynx rufus texensis** J. A. Allen *


Lynx rufus escuinapae J. A. Allen*


Order PINNIPEDIA ¹²

Family OTARIIDAE (eared seals)

Subfamily ARCTOCEPHALINAE

Genus CALLORHINUS ¹³ Gray (northern fur seals)


Callorhinus ursinus cynocephalus (Walbaum) *


Type Locality.—North Pacific Ocean south of Alaska Peninsula at approximately lat. 53° N., long. 155° W. (see Stejneger, op. cit., pl. 12 facing p. 278).


Genus ARCTOCEPHALUS É. Geoffroy-Saint-Hilaire and F. Cuvier
(southern fur seals)


Arctocephalus townsendi Merriam†*


Type Locality.—Guadalupe Island, Baja California, México. Range.—North Pacific Ocean from Guadalupe and San Benita Islands, approximately 135 miles southwest of Point San Antonio, northern Baja California, north formerly at least to Point Mugu, Ventura County, Calif. (Lyon, Journ. Mamm., vol. 16, No. 2, p. 151, May 15, 1935).

Subfamily OTARIINAE

Genus EUMETOPIAS Gill


Eumetopias jubata (Schreber) * (northern sea lion)

1776. Phoca jubata Schreber, Die Säugethiere . . ., Theil 3, Heft, 17, pl. 83b and p. 300 (vernacular name only, and description).


Type Locality.—North Pacific Ocean. Range.—From Bering Strait, Bering, Commander and Pribilof Islands, south along Pacific coast of North America to San Miguel and Santa Rosa Islands off southern California (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 117, Sept. 26, 1933).

Genus ZALOPHUS Gill


Zalophus californianus (Lesson) * (California sea lion)


Type Locality.—Rocks in vicinity of San Francisco Bay, Calif. Range.—North Pacific from Tres Marias Islands, 65 miles off coast of Nayarit, Mexico (Nelson, North Amer. Fauna No. 14, p. 17, Apr. 29, 1899), the Coronados Islands and Guadalupe Island off northern Baja California, north to northern California (Bonnot, California Fish and Game Comm. Fish Bull. 14, p. 10, January 1928); casually to British Columbia (Cowan. Canadian Field-Nat., vol. 50, No. 9, pp. 146–147, Dec. 3, 1936).

Family Odobenidae (walruses)

Genus Odobenus* 14 Brisson


1772. Rosmarus Brünnich, Zoologiae fundamenta ..., p. 38. (Type, "Zavheften" = Phoca rosmarus Linnaeus.)

Odobenus rosmarus divergens (Illiger) * (Pacific walrus)


Type Locality.—About 35 miles south of Icy Cape, Alaska. Range.—Bering Sea north into Arctic Ocean, coasts of northeastern Siberia and northwestern Alaska, commonly north to Point Barrow; a few casual records on north coast of Alaska; one from Herschel Island, Yukon, and one reported in Dolphin and Union Strait (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 81, Jan. 24, 1947).

Odobenus rosmarus rosmarus (Linnaeus) * (Atlantic walrus)


Type Locality.—Arctic regions.  Range.—North Atlantic and Arctic Oceans, within historic times as far south as Magdalen Islands in Gulf of St. Lawrence, Cape Breton, Sable Island off southern Nova Scotia, and into Gulf of Maine (G. M. Allen, Journ. Mamm., vol. 11, No. 2, p. 139, May 9, 1930); now seldom if ever appearing south of Hudson Bay and Hudson Strait; north to northwest Greenland and Ellesmere Island; rare or casual west of Barrow Strait, Somerset Island, and Fury and Heela Strait (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 81, Jan. 24, 1947).

Family PHOCIDAE (hair seals)

Subfamily PHOCINAE

Genus PHOCA ¹ Linnaeus

1758. Phoca Linnaeus, Systema naturae, ed. 10, vol. 1, p. 37.  (Type, Phoca vitulina Linnaeus.)

Subgenus PHOCA Linnaeus  (harbor seals)

Phoca vitulina concolor De Kay*


Phoca vitulina mellonae Doutt


Type Locality.—Lower Seal Lake, Quebec, about 90 miles east of Richmond Gulf, Hudson Bay, lat. 56° 30’ N., long. 74° 30’ W.  Range.—Restricted to Upper and Lower Seal Lakes, Quebec, Canada.

Phoca vitulina richardii (Gray) *


*Type Locality.*—Vancouver Island, British Columbia, Canada. *Range.*—American side of North Pacific Ocean from St. Lawrence Island, Bering Sea, south to Monterey County, California (Doutt, 1942, p. 121); occasionally in Arctic Ocean as far north as Point Barrow, Alaska, and east to Herschel Island, Yukon (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 78, Jan. 24, 1947).

*Phoca vitulina* *geronimensis* J. A. Allen†*


Subgenus HISTRIOPHOCA† Gill (ribbon seals)


*Phoca fasciata* Zimmermann*


*Type Locality.*—Kurile Islands, Japan. *Range.*—Bering Sea from Aleutian Islands north to Point Barrow, Alaska, in Arctic Ocean.

Subgenus PUSA† Scopoli (ringed seals)

1777. *Pusa* Scopoli, Introductio ad historiam naturalem . . . , p. 490. (Type, *Phoca foetida* Fabricius = *Phoca hispida* Schreber.)


Phoca hispida hispida Schreber*


*Type Locality.*—Coasts of Greenland and Labrador. *Range.*—Mostly in Arctic seas; recorded as far north as lat. 82°40' N.; in all parts of the sea in eastern American Arctic from Greenland south to Labrador and Hudson Bay; probably intergrading with *beaufortiana* in central part of Canadian Arctic Archipelago (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 79, Jan. 24, 1947).

Phoca hispida beaufortiana Anderson*


Phoca hispida soperi Anderson*


*Subgenus* PAGOPHILA 18 Gray (harp seals)

1844. Pagophilus Gray, in *The zoology of the voyage of H.M.S. Erebus and Terror,* . . . , vol. 1, pt. 1, p. 3. (Type, *Phoca groenlandica* Erxleben.)


Phoca groenlandica Erxleben*


*Genus ERIGNATHUS* Gill (bearded seals)

*Erignathus barbatus barbatus* (Erxleben) *

*Type Locality.*—Coasts of Scotland, southern Greenland and Iceland. *Range.*—Arctic shores of northern Europe and North America from Greenland south to Hudson Bay, Labrador, and rarely to Newfoundland.

*Erignathus barbatus nauticus* (Pallas) *
(North American specimens regarded by Anderson, Canadian Field-Nat., vol. 44, No. 4, p. 99, Apr. 1, 1930, as identical with *barbatus.*)


*Genus HALICHOERUS* Nilsson (gray seals)

*Halichoerus grypus* (Fabricius) *

Subfamily Monachinae

Genus Monachus Fleming

Monachus tropicalis (Gray) * (West Indian seal)
1851. [ — ] willkianus Gosse, A naturalist's sojourn in Jamaica, p. 308. (Not binomial.)

Type Locality.—Jamaica. Range.—Gulf of Mexico and Caribbean Sea as far south as coast of Honduras, north to coast of Texas (Gunter, Journ. Mamm., vol. 28, No. 3, p. 289, Sept. 3, 1947) and Key West, Fla. (Townsend, Journ. Mamm., vol. 4, No. 1, p. 55, Feb. 9, 1923), east to Jamaica, Cuba, and Hispaniola, and northward through the Bahamas.

Subfamily Cystophorinae

Genus Cystophora Nilsson (hooded seals)
1911. Cystophoca Brass, Aus dem Reiche der Pelze, p. 663, April 1911. (Renaming, perhaps accidental, of Cystophora.)

Cystophora cristata (Erxleben) *

Type Locality.—Southern Greenland and Newfoundland. Range.—North Atlantic coast from Greenland to Labrador, Newfoundland, Nova Scotia, and Gulf of St. Lawrence; the most northerly record Cape Sabine, Ellesmere Island;

Genus MIROUNGA Gray (elephant seals)


1827. Mirounga Gray, in Griffith, The animal kingdom . . . by the Baron Cuvier . . ., vol. 5, p. 179. (Type, Phoca proboscidea Pérón.)

Mirounga angustirostris (Gill) †


Order SIRENIA (sea cows)

Family TRICHECHIDAE

Genus TRICHECHUS* Linnaeus

1758. Trichechus Linnaeus, Systema naturae, ed. 10, vol. 1, p. 34. (Type, Trichechus manatus Linnaeus.)

Trichechus manatus manatus Linnaeus* (manatee)


Trichechus manatus latirostris Harlan*  (Florida manatee)


Order PERISSODACTYLA  (odd-toed ungulates)
Suborder CERATOMORPHA
Superfamily TAPIROIDEA
Family Tapiridae  (tapirs)

Genus TAPIRELLA 20 Palmer

Tapirella bairdii (Gill)†*


Order ARTIODACTYLA  (even-toed ungulates)

Suborder SUIFORMES

Superfamily SUOIDEA

Family TAYASSUIDAE  (peccaries)

Genus PECARI Reichenbach  (collared peccaries)


Pecari tajacu sonoriensis (Mearns) †


Pecari tajacu crassus (Merriam) †


Type Locality.—Metlatoyuca, Puebla, México. Range.—From southeastern San Luis Potosi southward through northeastern Querétaro, eastern Hidalgo, and northeastern Puebla to southern Veracruz, México.

Pecari tajacu angulatus (Cope) *


*Type Locality.*—Guadalupe River, Texas. *Range.*—From sand dunes along eastern edge of Pecos River Valley in extreme southeastern New Mexico (V. Bailey, North Amer. Fauna No. 53 (December 1931), p. 10, Mar. 1, 1932) eastward in Texas south of broken edge of plains to Brazos River Valley, and southward through Coahuila, Nuevo León, and Tamaulipas to San Luis Potosí, México.

**Pecari tajacu humeralis** (Merriam) † *


**Pecari tajacu nelsoni** Goldman † *


**Pecari tajacu yucatanensis** (Merriam) † *


**Pecari tajacu nanus** (Merriam) † *


Type Locality.—Cozumel Island, Quintana Roo, México. Range.—Cozumel Island.

Pecari tajacu nigrescens Goldman†*


Type Locality.—Chamelecón, Cortés, Honduras. Range.—Northwestern Honduras to northern Guatemala and eastern Quintana Roo, México.

Pecari tajacu crusniger (Bangs)


Pecari tajacu bangsi Goldman†*


Type Locality.—Boca de Cupe, Darién, eastern Panamá. Altitude, 250 feet. Range.—From eastern Darién, Panamá, westward to at least Gatún, Canal Zone (Goldman, Smithsonian Misc. Coll., vol. 69, No. 5, p. 73, Apr. 26, 1920).

Genus TAYASSU G. Fischer (white-lipped peccaries)


Tayassu pecari ringens Merriam†


Tayassu pecari spiradens Goldman†


Suborder Ruminantia

Superfamily Cervoidea

Family Cervidae (deer)

Subfamily Cervinae

Genus Cervus Linnaeus (wapiti)


Cervus canadensis canadensis (Erxleben)*


*Type Locality.*—Eastern Canada (Province of Quebec). *Range.*—Formerly distributed from southern Quebec, southern Ontario (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 174, Jan. 24, 1947), south shores of Great Lakes, Min-

**Cervus canadensis manitobensis** Millais


**Cervus canadensis nelsoni** V. Bailey†*


**Cervus canadensis roosevelti** Merriam†*


*Type Locality.*—Mount Elaine, on ridge between heads of Hoh, Elwha and Soleduc Rivers, near Mount Olympus, Mason County, Wash. *Range.*—Western slopes of Cascade Mountains and thence to coast in Washington (Dalquest, Univ. Kansas Publ. Mus. Nat. Hist., vol. 2, p. 394, Apr. 9, 1948) and Oregon (V. Bailey, North Amer. Fauna No. 55 (June), p. 81, Aug. 29, 1936), and south-

**Cervus merriami** Nelson†*


*Type Locality.*—Head of Black River, White Mountains, Apache County, Ariz. Altitude, about 9,000 feet. *Range.*—Formerly distributed from White Mountains south to Chiricahua Mountains (Cahalane, Journ. Mamm., vol. 20, No. 4, p. 438, Nov. 14, 1939) in eastern Arizona; eastward in southern New Mexico through Mogollon group of mountains west of Rio Grande to Sacramento, White and Guadalupe mountains east of Rio Grande (V. Bailey, North Amer. Fauna No. 53 (December 1931), pp. 42-43, Mar. 1, 1932); and southward in Texas to southern part of Guadalupe Mountains (V. Bailey, North Amer. Fauna No. 25, p. 60, Oct. 24, 1905). Elk formerly were found in Wichita Mountains of Oklahoma (V. Bailey, 1905, loc. cit.).

**Cervus nannodes** Merriam†*


*Type Locality.*—Buttonwillow, Kern County, Calif. *Range.*—Formerly (prior to 1860) nearly entire San Joaquin and Sacramento Valleys, especially in their lower parts; occurred north at least to Butte Creek, in Butte County, and south to vicinity of Bakersfield, Kern County; west through southern inner Coast Ranges as far as plains of Cuyama Valley, in San Luis Obispo County and extreme northern Santa Barbara County; also west to near Hernandez, San Benito County, and to south end of San Francisco Bay, in Santa Clara County, Calif. (Grinnell, Univ. California Publ. Zool., vol. 40, No. 2, p. 206, Sept. 26, 1933).

**Subfamily ODOCOILEINAE**

**Genus ODOCOILEUS** Rafinesque


(Type, *Odocoileus speleus* Rafinesque = *Cervus virginianus* Zimmermann, or

*Subgenus EUCERVUS* Gray (black-tailed deer)


*Odocoileus hemionus hemionus* (Rafinesque) *


*Odocoileus hemionus sitkensis* Merriam† *


† Mule deer of Pacific Coastal Region revised by Cowan, *California Fish and Game*, vol. 22, No. 3, pp. 155–246, July 1936.
Type Locality.—Sitka, Alaska. Range.—Coast and coastal islands of southeastern Alaska; from Dall Island north to Inian Island, Icy Straits, and on mainland from Port Simpson, British Columbia, north to Juneau, Alaska, and casually as far north as Atlin, British Columbia; southern limit of range unknown (Cowan, loc. cit.). Coast deer have been reported recently in Teslin and Little Atlin sections of southern Yukon, as far north as Nisutlin River (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 176, Jan. 24, 1947).

**Odocoileus hemionus columbianus** (Richardson)* (Columbian black-tailed deer)


Type Locality.—Mouth of the Columbia River, Oreg. [= Cape Disappointment, Pacific County, Wash.; see Cowan, op. cit., pp. 218–219]. Range.—Coast and most of the coastal islands of western North America, from central British Columbia south to central California; eastward roughly to summit of Cascade–Sierra Nevada mountain chain (Cowan, op. cit., p. 216).

**Odocoileus hemionus californicus** (Caton)*


Type Locality.—Near Gaviota Pass, 40 miles up the coast (west) from Santa Barbara, Santa Barbara County, Calif. Altitude, 1,050 feet. Range.—Chiefly Transition and Upper Sonoran Zones in California from Orange County north on coast to Salmon Creek, Monterey County; through Tehachapi Mountains and northward on western slope of Sierra Nevada to El Dorado County (Cowan, California Fish and Game, vol. 22, No. 3, p. 211, July 1936).

**Odocoileus hemionus inyoensis** Cowan*


Type Locality.—Kid Mountain, 10 miles west of Big Pine, Inyo County, Calif. Altitude, 11,000 feet. Range.—Eastern slope of southern Sierra Nevada, in Owens Valley district of California (Cowan, California Fish and Game, vol. 22, No. 3, p. 228, July 1936).
Odocoileus hemionus fuliginatus Cowan*


Type Locality.—Barona Ranch, 30 miles east of San Diego, San Diego County, Calif. Range.—From San Jacinto and Santa Rosa Mountains, Riverside County, and San Mateo Valley, San Diego County, Calif., southward at least to Corona, Sierra San Pedro Mártir, Baja California, México (Cowan, California Fish and Game, vol. 22, No. 3, p. 230, July 1936).

Odocoileus hemionus peninsulæ (Lydekker) *


Type Locality.—Between La Laguna and Victoria Mountain, Sierra Laguna, Baja California, México (see Cowan, California Fish and Game, vol. 22, No. 3, p. 232, July 1936). Altitude, about 6,000 feet. Range.—Known only from southern part of Baja California; from Cape San Lucas north through Sierra Laguna, and probably considerably farther, as a specimen from Santa Maria Mission is almost exactly intermediate between this race and fuliginatus (Cowan, loc. cit.).

Odocoileus hemionus cerrosensis Merriam†*


Type Locality.—Cerros [=Cedros] Island, off west coast of Baja California, México. Range.—Confined to Cedros Island, where it inhabits brush lands of northern part and the few areas suitable on southern part of island (Cowan, California Fish and Game, vol. 22, No. 3, p. 238, July 1936).

Odocoileus hemionus crooki (Mearns) †*


Odocoileus hemionus eremicus (Mearns)†*


Type Locality.—Sierra Seri, near Gulf of California, Sonora, México. Range.—From type locality in desert region of northwestern Sonora northward into valley of Colorado River as far as Parker, Ariz., westward through Chuckwalla and Chocolate Mountains, Calif., to near Coxcomb and Granite Mountains in northern Riverside County (formerly northwest through Imperial Valley to Indio), and southward into northeastern Baja California (Cowan, California Fish and Game, vol. 22, No. 3, pp. 235–236, July 1936).

Odocoileus hemionus sheldoni Goldman†*


Type Locality.—Tiburon Island, Sonora, Mexico. Range.—Restricted to Tiburon Island.

Subgenus ODOCOILEUS Rafinesque (white-tailed deer)

Odocoileus virginianus virginianus (Zimmermann) *

1777. Dama virginiana Zimmermann, Specimen zoologiæ geographicæ, . . ., p. 532. (A non-binomial work.)


1919. Cariacus wisconsinensis Belitz, Wisconsin Conservationist, vol. 1, p. 1, November 1919. (Name proposed as a substitute for virginianus because author believed that the species originated in Wisconsin and not in Virginia. It is not based on a supposed local form peculiar to Wisconsin.)

Type Locality.—Virginia. Range.—From northern boundaries of Virginia, West Virginia, and Kentucky, south to central Georgia, southern Alabama, and
southern Mississippi; Atlantic Coast west to Mississippi River. Intergrading on north with *borealis*, on south with *osceola* and *seminolus*, and on west with *macrourus*.

**Odocoileus virginianus borealis** Miller*


1905. [*Odocoileus virginianus*] *borealis* Trouessart, Catalogus Mammalium ... Suppl., fasc. 3, p. 704.

*Type Locality.*—Bucksport, Hancock County, Maine. *Range.*—Western Ontario east across southern Quebec, New Brunswick, and Nova Scotia; and from near James Bay (Newpost, Abitibi River), Gaspé Peninsula, and Anticosti Island south to southern Maryland, southern Pennsylvania, Ohio, Indiana, and Illinois. Southern boundaries fixed at Potomac and Ohio Rivers, and western limits at Mississippi and Red Rivers. Intergrading on south with typical *virginianus* and on west with *macrourus* and *dacotensis*.

**Odocoileus virginianus dacotensis** Goldman and Kellogg†*


*Type Locality.*—White Earth River, Mountrail County, N. Dak. *Range.*—Timbered stream valleys traversing northern plains and badlands from North Saskatchewan River Valley in Alberta (Edmonton) and Saskatchewan south through southern Manitoba (Riding Mountains), and the Dakotas to Platte River in Nebraska and northeastern Colorado (Denver and south fork of White River); west from Red River to Montana and Wyoming east of mountains. Intergrading on west with *ochrourus* along Rocky Mountains, on east with *borealis* in forest and lake regions of Ontario and Minnesota, and on south with *macrourus* in Iowa and eastern Kansas, and *texanus* in Colorado.

**Odocoileus virginianus ochrourus** V. Bailey†*


*Type Locality.*—Coolin, south end of Priest Lake, Bonner County, Idaho. *Range.*—Rocky Mountain region, from British Columbia (Babine Mountains) and western Alberta (Jasper), south through eastern Washington, eastern Oregon, Idaho (Snake River), and western Montana to western Wyoming (Valley, South Fork Shoshone River, Green River, and Fort Bridger); formerly present in north-central Utah (north of Ogden) and formerly ranging from central Oregon south to northeastern California and western Nevada (Verdi, Truckee River). Intergrading on the west with *leucurus* and on the east with *dacotensis*.

**Odocoileus virginianus leucurus** (Douglas)*


**Range.**—Formerly Pacific coastal region in southwestern Washington and north-eastern Oregon, south to Umpqua River Valley; now nearly extinct, except for a local colony on islands and so-called “tidelands” along both sides of lower Columbia River in Washington; also a number estimated at between 200 and 300 in the State White-tailed Deer Refuge of 19,500 acres between Roseburg and North Umpqua River, Oreg. Formerly intergrading on the east with ochronus.

**Odocoileus virginianus couesi** (Coues and Yarrow) †*


**Type Locality.**—Camp Crittenden [now Crittenden], on Sonoita Creek, between Santa Rita and Patagonia Mountains, Santa Cruz County, Ariz. *Range.*—Mountain regions, especially steeper slopes, from Colorado River (Ehrenberg) and Mogollon Mesa in southern Arizona and southwestern New Mexico (Datil Mountains), west of Río Grande Valley, south along Sierra Madre through central and eastern Sonora (west to Cobota and Pozo de Luis), western Chihuahua, northern Sinaloa, Durango, northeastern Nayarit (Santa Teresa) to western Zacatecas (Plateado), and northern Jalisco (near Bolaños). Integrating on south and southwest with *sinaloae.*

**Odocoileus virginianus texanus** (Mearns) †*


**Type Locality.**—Fort Clark [north of Eagle Pass on Big Bend of Río Grande], Kinney County, Tex. *Range.*—Río Grande Valley in northeastern Chihuahua (Ojinaga), northern Coahuila (Monclova), northern Nuevo León, northern Tamaulipas, and southern and eastern Texas (San Elizario); north through eastern New Mexico, western Oklahoma, southern Colorado and western Kansas to near Republican River in southern Nebraska. Integrating on north with *docotensis,* on east with *macourus* and *mcilhenny,* and on south with *miquihu-anensis.*
Odocoileus virginianus macrourus (Rafinesque) *


Type Locality.—“Plains of the Kangar [= Kansas] River” [= plains near Wakarusa Creek, Douglas County, Kans.]. Range.—Formerly Iowa, eastern Kansas, Missouri, eastern Oklahoma, Arkansas, northeastern Texas, and northeastern Louisiana. Now extinct throughout much of its former range. Intergrading on northwest with dacotensis, on southwest with texanus, on east with borealis and virginianus, and on south with mcilhennyi.

Odocoileus virginianus mcilhennyi F. W. Miller *


Type Locality.—Near Avery Island, Iberia Parish, La. Range.—From near Matagorda Bay eastward along coast lowlands and adjacent big thicket country of southeastern Texas through coastal marshes and Mississippi River delta to near eastern border (Pearl River) of Louisiana. Intergrading on west with texanus, on north with macrourus, and on east with osceola.

Odocoileus virginianus taurinsulae Goldman and Kellogg† *


Type Locality.—Bulls Island, Charleston County, S. C. Range.—Known from Bulls Island only.

Odocoileus virginianus venatorius Goldman and Kellogg† *


Type Locality.—Hunting Island, Beaufort County, S. C. Range.—Known only from Hunting Island, but doubtless also inhabits Saint Helena and other closely adjoining islands.

Odocoileus virginianus hiltonensis Goldman and Kellogg† *


Type Locality.—Hilton Head Island, Beaufort County, S. C. Range.—Definitely known only from Hilton Head Island.

Odocoileus virginianus nigribarbis Goldman and Kellogg† *


Type Locality.—Blackbeard Island, McIntosh County, Ga. Range.—Blackbeard and Sapelo Islands, and possibly other islands along coast of Georgia.
Odocoileus virginianus osceola (Bangs)*

Type Locality.—Citronelle, Citrus County, Fla. Range.—Western coast of Florida north of Tampa Bay and lowlands west along Gulf coast of southern Alabama, and southern Mississippi to Pearl River. Intergrading on north with virginianus, and on west apparently replaced by mcilhennyi west of lower part of Pearl River Valley.

Odocoileus virginianus seminolus Goldman and Kellogg†*

Type Locality.—Ten miles northeast of Everglades, Collier County, Fla. Range.—Peninsular Florida, north along east coast and through central Florida to southern Georgia (Okefenokee Swamp). Intergrading on north with virginianus and on west with osceola.

Odocoileus virginianus clavium Barbour and G. M. Allen*

Type Locality.—Big Pine Key, one of the southern Florida Keys, Monroe County, Fla. Range.—Formerly generally distributed in the compact, southern group of Florida Keys, where the occurrence of deer was noted in early exploration; said to swim from one key to another. Owing to human occupation of the Keys, combined with the disastrous effects of hurricanes, the deer have gradually disappeared until few are left.

Odocoileus virginianus carminis Goldman and Kellogg†*

Type Locality.—Botellas Cañon, Sierra del Carmen, northern Coahuila, México. Altitude, 6,500 feet. Range.—Known at present to occur in Sierra del Carmen, Coahuila, and closely adjoining Chisos Mountains across Río Grande in Texas. Doubtless also inhabiting Serranias del Burro, east of Sierra del Carmen, and perhaps other mountain ranges of northern Coahuila.

Odocoileus virginianus miquihuanensis Goldman and Kellogg†*

Type Locality.—Sierra Madre Oriental, near Miquihuana, southwestern Tamaulipas, México. Altitude, 6,500 feet. Range.—Sierra Madre Oriental and...
adjacent territory from southeastern Coahuila (Sierra Guadalupe) south to southern San Luis Potosí (mountains near Jesús María), and east to western Tamaulipas.

**Odocoileus virginianus veraeacruceis** Goldman and Kellogg†*


*Type Locality.—*Chijol, northern Veracruz, México. Altitude, 200 feet. *Range.—*Lowlands along Gulf coast from central Tamaulipas (Soto la Marina) south in Arid Tropical Zone to near port of Veracruz.

**Odocoileus virginianus toltecus** (Saussure) *


*Type Locality.—*Near Orizaba, Veracruz, México. *Range.—*High mountains along boundaries of western Veracruz, eastern Puebla, and northeastern Oaxaca (Achotal), especially rain forests on eastern slopes near Orizaba and Mirador, facing Gulf of Mexico. Doubtless intergrading with neighboring forms, including *veraecruceis* and *thomasi*, along eastern basal slopes of mountains, and with *oaxacensis* on high tableland to the west.

**Odocoileus virginianus mexicanus** (Gmelin) *


**Odocoileus virginianus oaxacensis** Goldman and Kellogg†*


*Type Locality.—*Mountains 15 miles west of Oaxaca, Oaxaca, México. Altitude, 9,500 feet. *Range.—*Known only from high mountains in vicinity of Oaxaca and adjoining Cerro San Felipe. Doubtless also inhabiting neighboring high mountain ranges of central Oaxaca.

**Odocoileus virginianus sinaloae** J. A. Allen*


Type Locality.—Escuinapa, Sinaloa, México. Range.—Pacific coast region and adjacent mountain slopes, from northern Sinaloa (Culiacán) south to western Jalisco; intergrading with *acapulcensis* in Colima and extending thence into interior to include central Michoacán. Intergrading on north with *couesi*.

**Odocoileus virginianus acapulcensis** (Caton)*


Type Locality.—Acapulco, Guerrero, México. Range.—A narrow belt along Pacific coastal plain and adjacent slopes, mainly west and south of crest of high mountains of interior of México from Colima (Armería) southeastward to Isthmus of Tehuantepec (Tehuantepec).

**Odocoileus virginianus thomasi** Merriam†*


Type Locality.—Huehuetán, Chiapas, México. Range.—Gulf Coastal Plain from southern Veracruz (Catemaco) to eastern Tabasco (Montecristo) and northern Chiapas (Palenque), and south across Isthmus of Tehuantepec, and thence along Pacific coast west and south of crest of coast range (Chaine de Chiapas) to near or beyond Río Naranjo, Guatemala.

**Odocoileus virginianus nelsoni** Merriam†*


Type Locality.—San Cristóbal, highlands of Chiapas, México. Altitude, 8,500 feet. Range.—High mountains of central Chiapas (San Cristóbal) and southeast along Sierras through Guatemala to El Salvador; southern limits of range undetermined.

**Odocoileus virginianus yucatanensis** (Hays)*


Type Locality.—Yucatán and the southern part of México. Range.—Yucatán, northern Campeche and northern part of Territory of Quintana Roo, México, intergrading with *truei* to the southward.

**Odocoileus virginianus truei** Merriam†*


*Type Locality.*—Segovia River, about 50 miles from sea, Comarca de El Cabo, northern Nicaragua. *Range.*—From northeastern Guatemala, south through lowlands of British Honduras (Belize), Honduras, and Nicaragua to southern Costa Rica (Talamanca district).

**Odocoileus virginianus chiriquensis** J. A. Allen*


*Type Locality.*—Boquerón, Chiriquí, Panamá. *Range.*—Forests and partly open savanna regions from Bayano River, Panamá, west mainly through southern part of Isthmus to western Chiriquí, doubtless intergrading with *truei* in Costa Rica; ranging across to Atlantic coast in partly cleared spaces along route of Panama Canal.

**Odocoileus virginianus rothschildii** (Thomas)


*Type Locality.*—Coiba Island, off west coast of Panamá. *Range.*—Restricted to Coiba Island.

**Genus MAZAMA** Rafinesque (brockets)


**Mazama americana temama** (Kerr)*


1817. *Mazama tema* Rafinesque, Amer. Monthly Mag., vol. 2, No. 1, p. 44, November 1817. (Substitute name for *temama* Kerr.)


Mazama americana cerasina Holllister†*


Mazama americana reperticia Goldman†*


Type Locality.—Gatún, Canal Zone, Panamá. Range.—From southern Darién (Cana) to Gatún in Canal Zone and westward to Bóquete in Chiriquí, Panamá (Goldman, Smithsonian Misc. Coll., vol. 69, No. 5, p. 79, Apr. 26, 1920).

Mazama gouazoubira pandora Merriam†*


Type Locality.—Tunkás, Yucatán, México. Range.—Yucatán Peninsula.

Mazama gouazoubira permira R. Kellogg†*


Type Locality.—Isla San José, Archipiélago de las Perlas, Golfo de Panamá, Panamá. Range.—Known from Isla San José only.
Genus ALCES Gray (moose)


Alces alces americana (Clinton)*

1822. Cervus americanus [Clinton], Letters on the Natural History and Internal Resources of the State of New York, p. 193.


Type Locality.—"Country north of Whitestown" [probably in the western Adirondack region], N. Y. Range.—Wooded portion of eastern Canada, except Prince Edward Island, from Nova Scotia and New Brunswick westward through Quebec to eastern Ontario (see Peterson, op. cit., p. 2); southward formerly through Maine, Vermont, New Hampshire, northwestern Massachusetts (Crane, Journ. Mamm., vol. 12, No. 3, p. 272, Aug. 24, 1931), and New York (Merriam, The mammals of the Adirondack region, northeastern New York, . . . , pp. 138–143, Oct. 11, 1834).

Alces alces andersoni Peterson*


Type Locality.—Fifteen miles east of Brandon, section 27, township 10, range 16, Sprucewood Forest Reserve, Manitoba, Canada. Range.—Northern Michigan and Minnesota, western Ontario, westward to central British Columbia, north
to eastern Yukon Territory and Mackenzie delta, Northwest Territories; southward formerly to Red River Valley and Turtle Mountains region of North Dakota (V. Bailey, North Amer. Fauna No. 49 (December 1926), pp. 31–32, Jan. 8, 1927) and northern Wisconsin.

**Alces alces shirasi** Nelson†*


**Alces alces gigas** Miller†*


**Genus RANGIFER**[2] Hamilton-Smith (reindeer and caribou)


1827. *Tarandus* Billberg, Synopsis faunae Scandinaviae, p. 22. (Type, *Cervus tarandus* Linnaeus.)

**Rangifer arcticus arcticus** (Richardson) * (Barren Ground caribou)


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Type Locality.—Fort Enterprise, about lat. 64° 30' N., long. 113° W., Mackenzie District, Northwest Territories, Canada (see J. A. Allen, Bull. Amer. Mus. Nat. Hist., vol. 24, p. 584, Sept. 11, 1908). Range.—Mainly in unforested parts of Mackenzie and Keewatin Districts, Northwest Territories, from west side of Hudson Bay and Melville Peninsula, west to lower Mackenzie Valley, and north to southern fringe of islands north of mainland Arctic coast in this region. Some individuals and small herds remain in northern part of range at all seasons, but there is a general but irregular migration southward in autumn, reaching as far south as Churchill River or beyond in northern Manitoba, Reindeer Lake on Manitoba–Saskatchewan boundary, Athabaska Lake, and occasionally straggling into Wood Buffalo Park in northeastern Alberta (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 178, Jan. 24, 1947).

Rangifer arcticus caboti G. M. Allen*


1915. Tarandus rangifer labradorensis Millais, in The gun at home and abroad, . . ., vol. 4, p. 259. ("... horns brought into Nain, Davis Inlet, and Fort Chimo.")

Type Locality.—Thirty miles north of Nachvak, eastern Laborad, Canada. Range.—Northern parts of Ungava Peninsula, from Hudson Strait southward in unforested regions of Labrador for an undetermined distance, and on eastern side of Hudson Bay in province of Quebec about to Great Whale River (Anderson, loc. cit.).

Rangifer arcticus fortidens Hollister†*


Type Locality.—Head of Moose Pass branch of Smoky River, Alberta, Canada. Range.—Northern Rocky Mountains from about extreme northern part of Banff National Park, Mount Robson region in British Columbia, and parts of Jasper National Park (Mount Edith Cavell and Tongue Creek); limits of range not determined, nor its relationship to osborni to northwest, montanus on west, and sylvestris to northeast (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 178, Jan. 24, 1947).

Rangifer arcticus osborni J. A. Allen*


Type Locality.—Cassiar Mountains [60 miles southeast of Dease Lake], British Columbia, Canada. Range.—Northern British Columbia and parts of southern Yukon (Teslin Lake, north to Wolf River, headwaters of Pelly and Macmillan Rivers), Canada; intergrading with stonei in parts of southern Yukon (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 179, Jan. 24, 1947).

Rangifer arcticus montanus Thompson-Seton


Type Locality.—Illecillewaet watershed, near Revelstoke, Selkirk Range, British Columbia, Canada. Range.—Interior mountain ranges of southern and central British Columbia; originally in most of the Selkirks and in suitable places in drainage of upper Fraser, North Thompson, and Chilcotin Rivers, and in Gold Range (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 179, Jan. 24, 1947); rare or casual along Canadian boundary in northeastern Washington (Dalquest, Univ. Kansas Publis. Mus. Nat. Hist., vol. 2, p. 404, Apr. 9, 1948); formerly in northern Idaho south at least as far as Elk City, Idaho County (Davis, The Recent mammals of Idaho, p. 371, Apr. 5, 1939).

Rangifer arcticus dawsoni Thompson-Seton


Type Locality.—Graham Island, Queen Charlotte Islands, British Columbia, Canada. Range.—Known only from Graham Island, the northernmost and largest island of Queen Charlotte group (see Cowan, Canadian Field-Nat., vol. 50, No. 9, p. 147, Dec. 3, 1936).

Rangifer arcticus stonei J. A. Allen

Type Locality.—Kenai Peninsula, Alaska. Range.—Most of central and northern Alaska, excluding Alaska Peninsula and Unimak Island; also in western Yukon, Canada, more sparingly to the eastward; the form is absent from most of southern coastal belt of Alaska, having been exterminated on Kenai Peninsula, and is scarce in western and parts of northern Alaska (Murie, loc. cit.). Caribou found in small strip of Northwest Territories west of Mackenzie River delta are also referable to this form (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 180, Jan. 24, 1947).

Rangifer arcticus granti J. A. Allen*
Type Locality.—Western end of Alaska Peninsula, opposite Popof Island, Alaska. Range.—Alaska Peninsula and Unimak Island, formerly Unga and other islands at west end of Alaska Peninsula and probably northward some distance along Bering seacoast (Murie, loc. cit.).

Rangifer arcticus asiaticus Jacobi*
Type Locality.—Kolyma, Siberia, U.S.S.R. Range.—A total of 1,280 reindeer were transported to northwestern Alaska, mainly on Seward Peninsula, between years 1891 and 1902 from Chukotsk Peninsula and coast of Anadir Gulf; existing herds of domesticated reindeer in Alaska are mainly descendants of these introduced animals (Jackson, Report on introduction of domestic reindeer into Alaska, Senate Doc. 111, 54 Cong. 1 Sess., vol. 4, pp. 9–16, 1896; Palmer, U. S. Dept. Agr. Misc. Publ. 207, pp. 1–40, November 1934). Reindeer from herds at Buckland, Alaska, were driven across northern Alaska to Arctic coast region west of Mackenzie River delta in 1933, the main herd of 2,730 animals crossing the Mackenzie River in 1935; as the herds increased in region just east of Mackenzie delta and on Richards Island they were divided and distributed eastward to lower Anderson River (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 187, Jan. 24, 1947).

Rangifer pearyi J. A. Allen*
Type Locality.—Ellesmere Land, lat. 70° N., Franklin District, Northwest Territories, Canada. Range.—Ellesmere Island (Craig Harbour, Fram Fjord), Sverdrup Islands (Hyperit Point, Axel Heiberg Island), and probably other islands in northern part of Canadian Arctic Archipelago, but specimens from some of the larger islands (Devon, Bathurst, Cornwallis, Melville, and Prince of Wales Islands) are needed for determination of range of this species or its relationship with other forms of caribou. Caribou of northwestern Greenland north of Kane Basin are perhaps referable to this form (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 180, Jan. 24, 1947).
Rangifer caribou caribou (Gmelin) *(woodland caribou)*


*Type Locality.*—Eastern Canada [=Province of Quebec]. *Range.*—Formerly found in most parts of Nova Scotia but has been extinct in that province since about 1924; possibly exists in very small numbers in northeastern New Brunswick; in Quebec found locally on Gaspé Peninsula (Mount Albert, 4,000 feet) and in some numbers in suitable areas north of Gulf of St. Lawrence and probably in southern Labrador; irregularly in wooded areas in western Quebec; in Ontario considered to have disappeared entirely from east of a line drawn from east end of Lake Superior to James Bay; one small band on Shakespeare Island in Lake Superior, a few about Lake Nipigon, Lake of the Woods, and Rainy Lake area in western Ontario; local bands in small numbers north of Canadian National Railway lines in northern Ontario (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 180, Jan. 24, 1947). Formerly present in Michigan (Burt, Mammals of Michigan, p. 262, 1946) and northern Minnesota (Swanson, Minnesota Dept. Conserv. Tech. Bull. 2, p. 100, 1945). Recorded also from northern Somerset County, Maine (Palmer, Journ. Mamm., vol. 30, No. 4, p. 437, Nov. 17, 1949).

*Rangifer caribou sylvestris* (Richardson) *


1915. *Tarandus rangifer keewatinensis* Millais, in The gun at home and abroad, . . . , vol. 4., p. 257. (Central and northern Manitoba, Keewatin, North and [South] Saskatchewan and as far north as the Peace River and Lake Athabasca.)


*Rangifer caribou terraenovae* Bangs *


*Type Locality.*—Codroy, Newfoundland. *Range.*—Restricted to Newfoundland.
Rangifer tarandus tarandus (Linnaeus)
Type Locality.—High mountains of Swedish Lapland. Range.—Attempts were made to introduce raindeer from Lapland to central Yukon, Newfoundland, Fort Smith in Northwest Territories, and Lake Harbour in southern Baffin Land, Canada (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 187, Jan. 24, 1947).

Rangifer tarandus grönlandicus (Borowski)*
Type Locality.—Greenland. Range.—West coast of Greenland as far north as Melville glacier region northeast of Baffin Bay; formerly common, but now absent from many formerly occupied areas and greatly reduced in numbers elsewhere (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 181, Jan. 24, 1947).

Superfamily BOVOIDEA

Family Antilocapridae (pronghorns)

Genus Antilocapra Ord
(Type, Antilope americana Ord.)

Antilocapra americana americana (Ord)*
westward to western Montana, southern Idaho, Nevada (Hall, Mammals of Nevada, p. 629, July 1, 1946), and California (Grinnell, loc. cit.).

**Antilocapra americana oregona** V. Bailey†*


*Type Locality.*—Hart Mountain (Warner Mountains), Lake County, Oreg. Range.—Open sagebrush country of eastern Oregon (V. Bailey, North Amer. Fauna No. 55 (June), p. 70, Aug. 29, 1936); limits of range not determined.

**Antilocapra americana mexicana** Merriam†*


**Antilocapra americana sonoriensis** Goldman†*


*Type Locality.*—Forty miles north of Costa Rica, a ranch on northern side of Río de Sonora, southwest of Hermosillo, Sonora, México. Range.—Desert plains of central western Sonora and north to southern Arizona

**Antilocapra americana peninsularis** Nelson†*


*Type Locality.*—Forty-five miles south of Cahnallí, Baja California, México. Range.—Middle Baja California, south to head of Ballenas Bay in about lat. 27° N., and north on west coast to about lat. 29°30' N.; on gulf side to beyond lat. 32° N., to southern end of Colorado Desert.

**Family** Bovidae

**Subfamily** Bovinae

**Genus** BISON ☰ Hamilton-Smith


**Bison bison bison** (Linnaeus) ☰ (plains bison)


*Bison bison athabascae* Rhoads* (woodland bison)


ARTIODACTYLA: BOVIDAE

Subfamily Caprinae

Genus Oreamnos Rafinesque (mountain goats)


**Oreamnos americanus americanus** (Blainville) *


**Oreamnos americanus missoulae** J. A. Allen *


**Oreamnos americanus columbiana** Hollister *


*Type Locality.*—Shesley Mountains, northwestern British Columbia, Canada. *Range.*—High mountains of northwestern British Columbia and southern Yukon (Ida Lake, Lake Arkell, Lake Bennett, Pelly River, head), irregular in distribution. Immature specimens from Mackenzie Mountains (Nahanni region, Glacier Lake in Iron Mountains, 4,500 feet) in southwestern part of Mackenzie
District, Northwest Territories, are probably referable to this form. Limits of range very imperfectly known (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 186, Jan. 24, 1947).

Oreamnos kennedyi Elliot


Type Locality.—Mountains at mouth of Copper River, opposite Kayak Island, Alaska. Range.—Recorded also from area between headwaters of Knik and Matanuska Rivers, Alaska (Osgood, North Amer. Fauna No. 21, p. 62, Sept. 26, 1901), and Knik, Alaska (Elliot, Field Columb. Mus. Publ. 115, Zool. Ser., vol. 3, p. 95, Mar. 4, 1907).

Genus OVIBOS* Blainville (musk oxen)


Ovibos moschatus moschatus (Zimmermann) *


Type Locality.—Between Seal and Churchill Rivers, Manitoba, Canada. Range.—Formerly generally distributed in suitable areas from west side of Hudson Bay (except in range of niphoecus) to Arctic coast and Arctic Alaska west to Point Barrow region; now restricted to a few small isolated bands from upper Thelon and upper Back Rivers, probably intergrading with niphoecus in some areas; scattered south of Bathurst Inlet, and a few in region north of Great Bear Lake (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 183, Jan. 24, 1947).

Ovibos moschatus niphoecus Elliot


Type Locality.—Head of Wager River, Keewatin District, Northwest Territories, Canada. Range.—Undetermined. Musk oxen are not known to occur east of Repulse Bay; J. A. Allen (Mem. Amer. Mus. Nat. Hist., new ser., vol. 1, p. 190, March 1913) states that they probably range north from Chesterfield Inlet, Baker Lake, and Dubawant River to Arctic coast of mainland, but apparently only specimens from Wager Inlet region were examined (see Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 183, Jan. 24, 1947).

Ovis moschatus wardi Lydekker*


Type Locality.—East Greenland. Claraing Island. Range.—Along the south end of Greenland from about lat. 70° N., ranging north around North Greenland, and thence southward along the west coast to about lat. 81° N. Formerly through Canadian Arctic Archipelago from northern Ellesmere Island and Devon Island, south to Lancaster Sound, westward to Prince Patrick Island, Melville Island, Banks Island, and Victoria Island. Extinct on Banks Island since about beginning of present century and probably, if not entirely, exterminated on Victoria Island a few years later. Still found in some numbers from northern Ellesmere Island to Melville Island (Anderson, Nat. Mus. Canada Bull. 102 (1946), p. 184, Jan. 24, 1947).

Genus OVIS Linnaeus (sheep)

1758. Ovis Linneaus, Systema naturae, ed. 10, vol. 1, p. 70. (Type, Ovis aries Linneaus.)

Ovis canadensis canadensis Shaw* (mountain sheep)

1804. Ovis canadensis Shaw, Naturalist’s Misc., vol. 51, text to pl. 610. (? possibly December 1803.)
1891. Ovis canadensis Merriam, North Amer. Fauna No. 5, p. 81, July 30, 1891.


Ovis canadensis auduboni Merriam†*


**Ovis canadensis mexicana** Merriam†*  
1901. *Ovis canadensis mexicana* Lydekker, The great and small game of Europe, western and northern Asia and America, p. 11.  

Type Locality.—Lago de Santa María, Chihuahua, México. Range.—Mountain ranges of México, extreme southwestern Texas, southern New Mexico and Arizona; south in Sonora to Seriland, opposite Tiburón Island, and to central Chihuahua; in western and northwestern Arizona along valley of Colorado River intergrading with *cremnobates, nelsoni, and canadensis* (Cowan, loc. cit.).

**Ovis canadensis californiana** Douglas*  

Type Locality.—Near Mount Adams, Yakima County, Wash., (see J. A. Allen, loc. cit.; Falls of the Columbia, near mouth of Deschutes River re-
garded as the type locality by V. Bailey, North Amer. Fauna No. 55 (June), pp. 64–65, Aug. 29, 1936). Range.—Formerly from Chilcotin River, British Columbia, south through Cascades of Washington and Oregon and Sierra Nevada of California to vicinity of Mount Whitney (Cowan, loc. cit.) ; and western Nevada south probably to Mineral County (Hall, Mammals of Nevada, p. 639, July 1, 1946).

Ovis canadensis nelsoni Merriam†*


1898. Ovis canadensis nelsoni Lydekker, Wild oxen, sheep, and goats of all lands, living and extinct, p. 208.

Type Locality.—Grapevine Mountains [high limestone ridge forming middle of range, about 5 miles southerly from Grapevine Peak], on boundary between Inyo County, Calif., and Esmeralda County, Nev., just south of lat. 37° N. Range.—California, south and east of Sierras and eastward locally through desert ranges of Nevada (Cowan, Amer. Midl. Nat., vol. 24, No. 3, p. 560, November 1940).

Ovis canadensis cremnobates Elliot*


Type Locality.—Mattomi, Sierra San Pedro Mártir, Baja California, México. Range.—Extreme southern California and northern Baja California for an undetermined distance southward (Cowan, Amer. Midl. Nat., vol. 24, No. 3, p. 565, November 1940).

Ovis canadensis weemsi Goldman†*


Type Locality.—Cajón de Tecomaja, Sierra de la Giganta, about 30 miles south of Cerro de la Giganta, southern Baja California, México. Altitude, 2,000 feet. Range.—Sierra de la Giganta and northward, grading toward cremnobates in Sierra de San Borjas in central part of Peninsula.

Ovis dalli dalli Nelson†* (white sheep)


Type Locality.—Mountains south of Fort Yukon on west bank of Yukon River, Alaska; probably Tanana Hills. Range.—Mountains of Alaska, Yukon Territory, Northwest Territories west of Mackenzie River, south in main chain of Rockies [Mackenzie Mountains] to Nahanni River. In northern British Columbia and central Yukon intergrades broadly with stonei, but typical dalli is to be found in St. Elias Range in northwestern British Columbia bordering on boun-

**Ovis dalli kenaiensis** J. A. Allen*


*Type Locality.*—Head of Sheep Creek, Kenai Peninsula, Alaska. *Range.*—Kenai Peninsula.

**Ovis dalli stonei** J. A. Allen*  (black sheep)


1898. *Ovis canadensis liardensis* Lydekker, Wild oxen, sheep, and goats of all lands, living and extinct, p. 215. (Liard River, British Columbia, Canada.)


*Type Locality.*—Che-on-nee Mountains, headwaters of Stikine River, British Columbia, Canada. Altitude, about 6,500 feet. *Range.*—Omineca and Cassiar districts of British Columbia completely north of lat. 56° 30’ N., to summit of Coast Range and Lake Atlin, east to Rocky Mountains, south to Peace River along slopes bordering on Nabesche River, Ingenika Range, and Klappan Range; north in Cassiar Mountains and adjacent ranges at least as far as Pelly River, but in northern Cassiar and Pelly Mountains blending into *dalli* (Cowan, op. cit., p. 531).
Type Localities

The type localities mentioned in the foregoing list are arranged under the following general headings:

<table>
<thead>
<tr>
<th>Arctic Region</th>
<th>United States</th>
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<tr>
<td>North Pacific Ocean</td>
<td>México</td>
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<tr>
<td>Greenland</td>
<td>Central America</td>
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<tr>
<td>North America (no definite locality)</td>
<td>Caribbean Sea</td>
</tr>
<tr>
<td>Canada</td>
<td>West Indies</td>
</tr>
</tbody>
</table>

Names recognized as valid are given as they now appear in the present list; those that are regarded as synonyms are left in the form used by the first describer.

Place names used by the original describer have, where possible, been made to conform in spelling and accent with the current usage of the country involved. The original has been left unchanged and the current usage added in brackets where a change might have been misleading. Variant names appearing in the list are shown in parentheses.

**ARCTIC REGION**

No exact locality: *Odobenus rosmarus rosmarus.*

**NORTH PACIFIC OCEAN**

No exact locality: *Orca pacifica; Eumetopias jubata.*

Lat. 53° N., long. 155° W., approximately, south of Alaska Peninsula: *Callorhinus ursinus cynocephalus.*

Lat. 12° N., long. 120° W.: *Tursiops truncatus.*

North America, off: *Lagenorhynchus thicolea.*

Northwest Coast of North America and Coast of Japan: *Eubalaena sieboldii.*

Oregon to Aleutian Islands, off coasts of: *Orca ater.*

**GREENLAND**

No exact locality: *Alopex lagopus groenlandicus; Halichoerus grypus; Rangifer tarandus grönlandicus.*

Greenland and Labrador, coasts of: *Phoca hispida hispida.*

Greenland and Newfoundland: *Phoca groenlandica.*

Southern Greenland and Newfoundland: *Cystophora cristata.*

Southern Greenland, Iceland, and Coasts of Scotland: *Erignathus barbatus barbatus.*

Eastern Greenland, pack ice off: *Thalarctos eogroenlandicus.*

Western Greenland: *Thalarctos maritimus groenlandicus.*

Cape York, Baffin Bay: *Canis lupus orion.*

Clavering Island: *Lepus arcticus persimilis; Ovibos moschatus wardi.*

Discovery Island (probably Ellesmere Island): *Mustela audax.*

Gap Valley, 71⁄4 miles northeast of Cape Brevoort: *Mustela erminea polaris.*

Greenland Seas: *Balaena mysticetus.*

Jameson Land: *Dicrostonyx groenlandicus groenlandicus.*

Julianehaab, near: *Lepus arcticus porsildi.*

Robinson's (Robertson) Bay, about 60 miles southeast of Etah: *Lepus arcticus groenlandicus.*

Upernavik: *Beluga rhinodon.*
NORTH AMERICA

No exact locality: *Parascalops breweri*; *Procyon lotor rufescens*.

Eastern North America: *Homo sapiens americanus*; *Urocyon cinereourgentis cinereourgentis*; *Euarctos americanus americanus*; *Martes americana americana*.

Northeastern North America: *Lutreola vison borealis*.

Northwest Coast of North America: *Odocoileus lewisi*.

Western limits beyond Rocky Mountains: *Cervus canadensis occidentalis*.

CANADA

No exact locality: *Canis lupus canadensis*.

Hudson Bay: *Citellus parryii phaeognatha*; *Castor canadensis canadensis*; *Microtus xanthognathus*; *Zapus hudsonius hudsonius*; *Procyon hudsonius*; *Gulo luscus luscus*; *Rangifer caribou sylvestris*.

Labrador and Hudson Bay (probably southwest of Hudson Bay): *Taxidea taxus taxus*.

Marshy places from Hudson Bay to Rocky Mountains: *Sorex palustris palustris*.

Seas of Canada: *Delphinus canadensis*.

Alberta

No exact locality: *Ursus hylobates*.

Athabasca River, Rocky Mountains on headwaters of: *Ursus canadensis rungiusi*.

Athabasca River, headwaters of, near Athabasca Pass: *Ochotona princeps princeps*.

Banff, Canadian National Park: *Citellus columbianus albertae*.

Calgary: *Vulpes velox velox*.

Chief Mountain (Waterton) Lake, 3½ miles north of international boundary: *Eutamias amoenus luteiventris*.

Exshaw, near, mountains on Bow River: *Ovis canadensis canadensis*.

Henry House: *Myotis lucifugus pernox*; *Myotis alfitfrons*.

Jackpine River, head of, near Mount Bess, close to British Columbia boundary: *Ursus horribilis dusorgus*.


Medicine Hat, South Saskatchewan River: *Thomomys talpoides andersonii*.

Moose Pass Branch of Smoky River, head of: *Marmota caligata oxtona*; *Citellus lateralis tescorum*; *Rangifer arcticus fortidens*.

Mount Inglesmaldie, near Bauff: *Ochotona princeps lutescens*.

Peace River, near headwaters of one of southern tributaries of, or between there and Jasper House region: *Lemmus trinucronatus helvolus*.

South Edmonton: *Thomomys talpoides loringi*.

Wolf Plain, 30 miles west of Rock Lake: *Arctomys parryi erythrogelutea*.

British Columbia

No exact locality (see Ontario also): *Alces columbae*.

Eastern British Columbia: *Ursus opphus*.

Edge of humid western slope of Rocky Mountains, somewhere between Kicking Horse Pass and Columbia River: *Martes americana abietinoides*.

Southern British Columbia: *Perognathus parvus lordi*.

Agassiz: *Microtus oregoni serpens*.

Anarchist Mountain, near Osoyoos—Bridesville summit, about 8 miles east of Osoyoos Lake: *Perognathus parvus laingi*.

Ashcroft: *Eutamias amoenus affinis*; *Peromyscus manipulatus artemisiae*.

Atarko River: *Ursus warburtoni*.

Balaclava Island: *Peromyscus manipulatus balaclavae*.

Beaverfoot Range, Kootenay District: *Ursus pulchellus eremetes*.

Beunett City, head of Lake Bennett, Skeena (Cassiar) District: *Citellus parryii plesius*; *Neotoma cinerea saxamans*.

Bowen Island, Howe Sound: *Microtus townsendii cummingi*.

Calvert Island, Safety Cove: *Sorex obscurus calvertensis*.

Cassiar Mountains, 60 miles southwest of Dease Lake: *Rangifer arcticus osborni*.

Che-on-nee Mountains, headwaters of Stikine River: *Ovis dalli stonei*.

Chezacut Lake, Chilcotin River: *Lepus americanus pallidus*. 
CANADA—Continued

British Columbia—Continued

Clearwater Creek, a north branch of Stikine River: *Ursus hooqs.*

Church (Lihumiton) Mountain, Lihumiton Park, Mount Baker Range, New Westminster District: *Eutamias amoenus felix; Phenacomys intermedius armontis.*

Coldstream, 3½ miles southwest of Vernon: *Microtus pennsylvanicus junebris.*

Columbia Valley: *Ursus klauane insipiger.*

Dease Lake: *Gulo niediecki.*

Denny Island, Fort McLauglin: *Sciurus lanuginosus.*

Doyle Island, Gordon Group: *Peromyscus maniculatus doylei.*

Ducks: *Tamiasciurus hudsonicus streaktori; Neotoma cinerea columbiana.*

Duncan Island: *Peromyscus maniculatus saxamans.*

Glacier, Selkirk Range: *Glaucomys sabrinus latipes; Synaptomys borealis chapmani.*

Gold (Shuswap) Range: *Marmota caligata okanaganana.*

Goose Island Group, northern island: *Peromyscus maniculatus plurialis.*

Great Glacier, Stikine River: *Clethrionomys gapperi stikinesis.*

Green Mountain, head of Murphy Creek, about 10 miles north of Rossland, West Kootenay District: *Zapus princeps kootenayensis.*

Gribble [Gribbell] Island: *Evarctos americanus kermodet.*

Hells Gate, Liard River: *Microtus cautus.*

Hope, Roab's Ranch: *Lepus americanus cascades; Apodontia californica columbiana.*

Huntington: *Mustela erminea fallenda.*

Indianpoint Creek, 16 miles northeast of Barkerville: *Castor canadensis sagittatus.*

Isaac Lake, Bowron Lake region: *Canis latrans incolatus.*

Itcha Mountains, Chillcotin Plateau, south of Tscha Lake: *Ochotona princeps septentrionalis; Marmota caligata raceyi.*

Jervis Inlet, head of: *Ursus chelidonias; Ursus kewakiut.*

Kamloops, basaltic plateau about 30 miles northwest of: *Phenacomys intermedius intermedius; Zapus hudsonius tenellus.*

Kettle River, source of: *Mustela frenata orientalis.*

Kimsquit River, Cornice Creek, near head of Dean Inlet: *Phenacomys intermedius laingi.*

Klappan Creek (third south fork of Stikine River): *Ursus talhtulcanus; Ursus crassodon.*

La Clas Hache: *Microtus microcephalus.*

Lake Bennett, head of, site of old Bennett City: *Peromyscus maniculatus algidus.*

Lake Osoyoos, at head of Okanagan River: *Ondatra zibethicus osoyoosensis.*

Level Mountains: *Synaptomys andersoni.*

Liard River: *Microtus stonei; Ovis canadensis liardensis.*

Lonesome Lake, Attnarko River, one of upper forks of Bella Coola: *Glaucomys sabrinus reductus; Ursus atranorko.*

Lulu Island, mouth of Fraser River: *Zapus trinitatus trinitatus.*

Lund, Malaspina Inlet: *Clethrionomys occidentalis caurinus.*

Monashee Divide, Gold Range: *Ochotona princeps cuppes.*

Moore Islands, largest of: *Peromyscus maniculatus maritimus.*

Moose Pass, near Mount Robson: *Ursus canadensis canadensis.*

Mount Baker Range: *Peromyscus maniculatus oreas; Microtus principalis.*

Mount Logan, near: *Ovis cowani.*

Mount Revelstoke, 19 miles northeast of Revelstoke: *Peromyscus maniculatus alpinus.*

Nelson, Kootenay River: *Clethrionomys gapperi saturatus.*

Okanagan: *Marmota flaviventris avara; Glaucomys sabrinus colombiensis.*

Ootsa Lake Post Office, north shore of Ootsa Lake: *Eutamias amoenus septentrionalis.*

Paradise Mine, near Toby Creek, 19 miles west of Invermere, Purcell Range: *Eutamias minimus selkirkii.*

Pemberton (Lillooet) Lake: *Ursus pervagor.*

Pine Island, Queen Charlotte Sound: *Peromyscus maniculatus isolatus.*

Ptarmigan Hill, near head of Ashnola River, east side of Cascade Range: *Ochotona princeps fenisex.*

Queen Charlotte Islands.—Cumshewa Inlet, Moresby Island: *Sorex obscurus elasodon.*

Gawi, west coast of Moresby Island: *Lutra canadensis pericyzomae.*
British Columbia—Continued

Graham Island: Rangifer arcticus dawsoni.
Masset, Graham Island: Myotis keenii keenii; Myotis californicus caurinus; Peromyscus maniculatus keenii; Euarctos carlottae; Martes caurina nesophilia; Mustela erminea haidarum.
Prevost (Kunghit) Island, Houston Stewart Channel: Sorex obscurus prevostensis; Peromyscus sikthensis prevostensis.
Raspberry Creek, about 30 miles southeast of Telegraph Creek: Tamiasciurus hudsonicus columbiensis.
Revelstoke, Illecillewaet watershed, Selkirk Range: Marmota monax petrensis; Rangifer arcticus montanus.
Ruth Island, Hunter Island complex: Peromyscus maniculatus rubriventer.
Saturna Island, Gulf of Georgia: Peromyscus maniculatus saturatus.
Sawmill Lake, near Telegraph Creek: Microtus pennsylvanicus rubidus.
Selkirk Mountains, upper Columbia River: Ursus selkirkii.
Shesley: Putorius microtis.
Shesley Mountains: Oreamnos americanus columbiæ.
Shesley River: Erethizon dorsatum nigrescens.
Shuswap, Yale District: Thomomys talpoides incensus.
Sicamous: Ochotona princeps brooksi.
Silver King Mine, summit of Toad Mountain, 4 miles south of Nelson, West Kootenay District: Thomomys talpoides medius.
Similkameen Mountains: Ovis canadensis similkameenensis.
Skeena River, mouth of, North Pacific Salmon Cannery: Peromyscus maniculatus macrorhinus.
Skeena River, mountains at head of: Ovis canadensis niger.
Smythe Island, Bardswell Group: Sorex obscurus insularis.
Stevenson (Sixmile) Creek, on Hope-Princeton trail, southwest of Princeton, Cascade Range: Synaptomys borealis ariemisiae.
Stuart Lake, near headwaters of Fraser River: Vulpes fulva abietorum; Martes pennanti columbiana; Lutra canadensis e vexa.
Sumas: Mustela vison energumenos; Mephitis spissigorda

Table Island, Queen Charlotte Sound: Peromyscus maniculatus cancrivorus.
Tatletuey (Tatlatui) Lake, near head of Skeena River: Ursus sitkenensis.
Telegraph Creek, Stikine River: Phenacomys constablei; Zapus princeps saltator.
Texada Island, Vananda, Georgia Strait: Sorex obscurus mixtus; Peromyscus maniculatus georgiensis.
Upper Liard River: Microtus longicaudus vellerus.
Vancouver Island.—No exact locality: Castor canadensis leucodontus; Phoca vitulina richardi.
Beaver Creek, 15 miles northwest of Alberni: Peromyscus maniculatus angustus.
Black Creek, Comox District: Sorex palustris brooksi.
Campbell Lake: Felis concolor vancouverensis.
Duncan Station: Tamiasciurus hudsonicus vancouverensis.
Forbidden Plateau, about 17 miles west of Comox: Peromyscus maniculatus intoleritus.
French Creek: Mustela erminea anguinae.
Goldstream: Sorex vagrans vancouverensis.
Great Central Lake: Gulo luscus vancouverensis.
King Solomon’s Basin: Euarctos americanus vancouveri.
Little Qualicum River, 8 or 9 miles west of Parksville: Mustela vison evagor.
Millstone Creek, mouth of, Nanaimo: Sorex obscurus isolatus.
Mount Douglas: Marmota vancouverensis.
Port Hardy, on Queen Charlotte Strait: Microtus townsendii laingi.
Quatsino: Lutra canadensis vancouverensis.
Quatsino Sound: Procyn lotor vancouverensis.
Tahsis Canal, Nootka Sound: Canis lupus crassodon.
Vernon: Lepus americanus colombiensis.
Victoria, Beacon Hill Park: Microtus townsendii tetramerus.
Wistaria, north side of Ootsa Lake, Coast District: Canis lupus columbianus.
Yellowhead (Cowdung) Lake: Eutamias amoenus ludibundus.
Labrador

No exact locality: Hesperomys bairdii; Hesperomys arcticus; Dicrostonyx hudsonius.

Black Bay, Strait of Belle Isle: Sorex cinereus miscix; Marmota monax ignava; Microtus chrotorhinus rarus.

Hamilton Inlet: Clethrionomys gapperi pro- teus; Microtus pennsylvanicus enixus.

Hamilton River, 5 miles above Grand Falls: Castor canadensis labradorensis.

L’Anse au Loup, Strait of Belle Isle: Synaptomys borealis medioximus; Erethizon dorsatum picinum; Vulpes fulva bangsi.

Makkovik: Glaucomyys sabrinus makkoviken- sis.

Moravian Settlements: Peromyscus maniculatus maniculatus.

Nachvak, 30 miles north of: Rangifer arcticus caboti.

Nain and Davis Inlet, and Fort Chimo, Que- bec: Rangifer labradorensis.

Ookak [Okak]: Ursus (Euarctos) americanus sornborgeri; Thalarctos labradorensis; Martes americana brumalis.

Red Bay, Strait of Belle Isle: Sorex palustris labradorensis.

Red Bay, 15 miles northwest of: Erethizon epixanthum doani.

Rigolet, Hamilton Inlet: Phenacomys ungava crassus; Ondatra zibethicus aguilo- nius; Zapus hudsonius ladas.

Manitoba

Manitoba, central and northern, Keewatin, and north and [south] Saskatchewan: Tarandus rangifer keewatiniensis.

Manitoba and eastern Saskatchewan: Cervus canadensis manitobensis.

Bird (Mile 349), Hudson Bay Railway: Eutamias minimus hudsonius.

Brandon, 15 miles east of, Sprucewood Forest Reserve: Alces alces andersoni.


Fort Churchill: Dicrostonyx groenlandicus richardsoni; Ondatra zibethicus hudsonius.

Hubbart Point, Hudson Bay, about 75 miles north of Churchill: Lepus arcticus canus.

Lake Audy, 2½ miles northwest of, Riding Mountain National Park: Sorex ob- scurus soperi.

Max Lake, Turtle Mountains: Blarina brevi- cauda manitobensis.

Portage la Prairie: Glaucomyys sabrinus canescens.

Robinson Portage, upper Hayes River, about 35 miles southwest of Oxford Lake: Microtus hoyi alnorum.

Seal and Churchill Rivers, between: Ovibos moschatus moschatus.

Swanson Creek, near, Riding Mountain Na- tional Park: Phenacomys ungava soperi.

Thicket Portage, Mile 165, Hudson Bay Rail- way: Synaptomys borealis smithi.

New Brunswick

No exact locality: Ondatra zibethicus zibethi- cus.


Restigouche River: Napaeozapus insignis insig- nis.

Trousers Lake: Clethrionomys fuscodorsalis.

Newfoundland

No exact locality: Canis lupus beothucus.

Newfoundland and New York: Gulo audu- boni.

Bay St. George: Castor caecator; Vulpes fulva deletrix; Martes atrata; Mustela cicog- nani mortigena; Lutra degener.

Codroy: Lepus arcticus bangsi; Microtus pennsylvanicus terraenovae; Ondatra obscurus; Lynx canadensis subso- lanus; Rangifer caribou terraenovae.

Northwest Territories

District:

Franklin.—Baffin Island, Hantsch River, east side of Foxe Basin: Canis lupus manningi.

Baffin Island, Takuiring River, near mouth of, Nettling Lake: Phoca his- pida soperi.

Banks Island, Cape Kellett: Canis lupus bernardii.

Bylot Island, Possession Bay: Lepus arcticus arcticus.

Ellesmere Island, no exact locality: Rangifer pearyi.

Ellesmere Island, Buchanan Bay: Lepus arcticus monstrabilis.

Melville Island: Canis lupus arctos; Ovibos moschatus melvillensis.

Melville Peninsula, Malugsitaq: Mustela arctica labiata.
Northwest Territories—Continued


Fort Franklin, Great Bear Lake: Synap-tomyys borealis borealis; Mustela erminea richardsonii. Fort Good Hope: Citellus kennicottii. Fort Liard: Sorex sphagnicola; Eutamias minimus borealis. Fort Resolution, 50 miles southwest of: Bison bison athabascae. Fort Simpson: Tamiasciurus hudsonicus preblei; Peromyscus maniculatus borealis; Putorius arcticus imperii. Fort Smith, Slave River: Clethrionomys gapperi athabascae; Phenaomys un-gava mackenziizii.

Great Slave Lake: Ovibos moschatus mackenziizians. Hood River, about 8 miles from mouth of, near first cascade, Arctic Sound, on west side of Bathurst Inlet, northeast of Coronation Gulf: Ursus richardsonii. Innanuit, west of Kater Point, Bathurst Inlet: Canis lupus mackenziizii. Kidluit Bay, northeast corner of Richards Island, lat. 69° 31' N., long. 133° 49' W.; Microtus pennsylvanicus arcticus. Little Keele River, near headwaters of, 82 miles west of Mackenzie River on Canol Road: Microtus miurus andersonii.


Nova Scotia

No exact locality: Zapus hudsonius acadicus. Bear River, 15 miles back of: Lynx rufus gigas. Cape Breton Island: Frizzleton, Inverness County: Glaucomys sabrinus gouldii. Digby, Digby County: Sorex palustris gow-oldenti; Lepus americanus struthopus; Microtus pennsylvanicus acadicus; Vulpes fulva rubricosa. Halifax, Halifax County: Sorex cinereus aca-dicus; Myotis keenii septentrionalis. James River, Antigonish County: Sorex fumeus umbrosus; Peromyscus maniculatus abietorum. Wolfville, Kings County: Sorex arcticus mar-timensis; Blarina brevicauda pallida; Condylura cristata nigra; Peromyscus leucopus caudatus; Clethrionomys gapperi rufescens; Clethrionomys gapperi pallacens.

Ontario

No exact locality: Alces columbae. Fort Severn [Severn Settlement, now Severn], mouth of Severn River, southwest side of Hudson Bay: Sorex cinereus cine-reus; Sorex arcticus arcticus; Lepus americanus americanus.
Ontario—Continued

Kapuskasing, Kapuskasing River, about 64 miles east of Cochrane; Clethrionomys gapperi ungava; Phenacomys latimanus; Phenacomys ungava ungava; Microtus pennsylvanicus labradorius; Canis lupus labradorius; Alopex lagopus ungava; Lutra canadensis chiono.

Godbout, Saguenay County: Phenacomys celatus.

Godbout, 35 miles north of: Canis tundrae ungavensis.

Grindstone Island, Pleasant Bay, Magdalen Islands: Peromyscus maniculatus eremus.

Kelly's Camp, Berry Mountain Brook, near head of Grand Cascapédia River, Gaspé County: Blarina brevicauda angusta. Killinek, near, Ungava Bay: Thalarctos maritimus ungavnensis.

Lac Marchant, Moisie Bay, near, Saguenay County: Tamiasciurus hudsonicus laurentianus.

Lake Edward: Synaptomys fatus; Microtus pennsylvanicus fontigenus.

Lake Waswanipi, Abitibi County: Tamiasciurus hudsonicus ungavensis.

Lower Seal Lake, about 90 miles east of Richmond Gulf, Hudson Bay: Phoca vitulina mellonae.

Mistassini Post, Mistassini Lake, Mistassini District: Mustela vison lowii.

Mount Albert, Gaspé Peninsula: Sorex gaspensis.

Percé, Gaspé County: Marmota monax johnsoni.

Pigou River, Gulf of St. Lawrence, Saguenay County: Peromyscus maniculatus plumbeus.

Quebec [city]: Marmota monax canadensis; Zapus hudsonius canadensis; Canis lupus lycaon.

St. Félicien, Lake St. John County: Tamias striatus quebecensis.

Trout Lake, near Moisie Bay, Gulf of St. Lawrence, Saguenay County: Napaeozapus insignis saguenayensis.

Saskatchewan

No exact locality: Sorex richardsonii.

Carbon House (now Carlton), North Saskatchewan River: Lepus townsendi campanius; Citellus richardsonii richardsonii; Citellus tridecinneatus hoobii; Citellus jankittinii; Thomomys talpoides talpoides; Mustela frenata longicauda.

Cumberland House: Ondatra zibethicus albus; Canis lupus knightii; Martes americana abieticola.
No exact locality, "Carolina": Sciurus carolinensis carolinensis.

Eastern United States: Sorex personatus; Lasionycteris noctivagans; Mustela erminea cicoignani.

From Alleghenies to Connecticut: Mephitis dentata.

Georgia, probably: Pipistrellus subflavus subflavus.

Lower parts of Ohio River: Corynorhinus rafinesquii rafinesquii.

Mississippi Valley: Probably between southern Illinois and central Tennessee: Sciurus niger rufiventer.

Missouri Territory: Sciurus niger.

New England, coast of: Eschrichtius gibbosus; Megaptera novaeangliae; Megaptera nodosa.

Pacific Coast, from Puget Sound to Cascade Mountains: Procyon lotor pacificus.

Plains and highlands of Missouri River: Antilocapra americana americana.

Rocky Mountains: Perognathus laiurostris.

Southern United States: Procyon lotor flavidus.

Upper Missouri River: Cynomys ludovicianus ludovicianus; Spilogale interrupta.

Alabama

Western Alabama: Sylvilagus aquaticus aquaticus.

Ketza Divide, Pelly Mountains: Ursus pelvynsis.

Kletson Creek, a tributary of White River: Rangifer meguirei.

Kluane, 6 miles southwest of: Microtus pennsylvanicus alcorni.

Lake Laberge: Eutamias minimus caniceps.

Lake Marsh: Ondatra zibethicus spatulatus.

McConnell River: Ursus kluane kluane.

Ogilvie Mountains, north of Dawson: Rangifer ogilvynensis.

Ross River: Ursus pulchellus pulchellus.

Saint Elias Range, north slope near Tepee Lake at head of Harris Creek: Microtus miurus cantator.

Sheldon Mountain, Canol Road, Mile 222: Euarctos americanus randi.

South Fork of Macmillan River, mountains south of: Rangifer montanus selousi.

Upper Liard River, near British Columbia boundary: Ursus oribasus.

Upper Macmillan River: Ursus crassus.

States

Counties:

Autauga.—Autaugaville: Scalopus aquaticus howelli; Mustela frenata olivacea.

Baldwin.—Point Clear, Mobile Bay: Geomys pinetis mobilensis.

Concuh.—Castleberry: Procyon lotor varius.

Hale.—Greensboro: Spilogale ringens.

Houston.—Dothan: Glaucomys volans saturatus.

Jackson.—Woodville: Peromyscus gossypinus megacephalus; Sigmodon hispidus komareki.

Alaska

Mainland, no exact locality: Vulpes lagopus kenaiensis.

Probably between Cross Sound and Alek River delta: Ursus townsendi.

Admiralty Island, Alexander Archipelago.—No exact locality: Ursus insularis; Ursus eulophus; Ursus mirabilis.

Hawk Inlet, near: Ursus neglectus.

Mole Harbor: Mustela erminea salva.

Pleasant Bay: Castor canadensis phaeus.

Pybus Bay: Ursus shirasi.

Windfall Harbor: Microtus pennsylvanicus admiraltiae; Mustela vison nesolestes.

Alaska Peninsula.—Becharof Lake: Ondatra zibethicus zalophus.
Copper River, mountains at mouth of, opposite Kayak Island: Oreamnos kennedyi.


Dall Island, Alexander Archipelago, Rocky Bay, now Bobs Bay: Euarctos americanus pugnax.

Forrester Island, Alexander Archipelago, Peromyscus sikenis oceanicus.

Fort Yukon: Citellus osgoodi; Martes americana actouosa; Mustela vison ingens.

Fort Yukon, mountains of, probably Tanana Hills: Ovis dalli dalli.

Fortymile Creek: Marmota monax ochracea.


Glacier Bay: Marmota caligata vigilis; Clethrionomys rutilus glacialis.

Glacier Mountain, Tanana Mountains: Ursus phaeonyx.

Golofnin Bay, south side of Seward Peninsula: Ursus inuinitus.

Hall Island, Bering Sea: Microtus abbreviatus abbreviatus; Alopec halletsi.

Hawkins Island, Canoe Passage, Prince William Sound: Clethrionomys rutilus insularis.

Helm Bay, Cleveland Peninsula: Glaucomys sabrinus zaphaeus.

Hinchinbrook Island, Nuchek Bay, head of, Prince William Sound: Ursus nuchek.

Icy Cape, about 35 miles south of: Odobenus divergens.

Itialo River: Ursus orgiloides.

Juneau: Mustela erminea alascensis.

Kalkut River, near junction with Malchatna River: Lemmus trimucronatus minusculus.

Karogar River, Point Barrow: Alopec lagopus inuinitus.

Kenai Peninsula.—No exact locality: Vulpes fulva kenaiensis; Martes americana kenaiensis; Mustela vison melampeplus; Rangifer arcticus stonei.

Cape Elizabeth: Ursus kenaiensis.

Homer: Euarctos americanus perriger.

Kachemak [Katschmak] Bay: Canis lupus alces; Gulo katschmakensis.

Kasilof Lake: Lepus niediecki; Ursus alexandrae.

Sheep Creek, head of: Ovis dalli kenaiensis.

Tustumena Lake, north side of: Alces alces gigas.
United States—Continued

Alaska—Continued

Kodiak Island.—No exact locality: *Citellus kodiakensis*; *Microtus oeconomus kodiakensis*; *Vulpes fulva harrimani*; *Ursus middendorffii*; *Mustela erminea kodiakensis*.

Uyak Bay: *Lutra canadensis kodiakensis*.

Kupreanof Island, Alexander Archipelago.—

Duncan Canal, head of: *Canis lupus ligoni*.

Kake village, 26 miles south of, southern end of Keku Straits: *Tamiasciurus hudsonicus picatus*.

Kutuk [Pish] River, tributary to Alatna River, Endicott Mountains: *Microtus miurus muriel*.

Lakina River, south slope of Wrangell Range: *Ursus cressonus*.

Marten Arm, Boca de Quadra: *Clethrionomys gapperi phaeus*.

Meade River, near Point Barrow: *Rangifer excelsifrons*.

Montague Island, Prince William Sound.—

No exact locality: *Marmota caligata sheldoni*; *Ursus sheldoni*.

East side of: *Microtus oeconomus elymocetes*.

Zaikof Bay: *Lutra canadensis optiva*.

Mount Saint Elias: *Ursus glacilis*.

Norton Sound Region.—St. Michael: *Sorex cinereus hollisteri*; *Sorex tundrensis*; *Lepus othus othus*; *Dicrostonyx nelsoni*; *Clethrionomys alascensis*; *Microtus oeconomus operarius*.

Shaktolik River: *Ursus kidderi tundrensis*.

Unalakleet: *Lutra canadensis yukonensis*.

Nulato, Yukon River: *Synaptomys borealis dalli*.

Nulato River: *Lepus americanus dalli*.

Nunivak Island: *Lemmus trimucronatus harroldi*.

Nushagak: *Citellus parryii abalus*.

Orca, Prince William Sound: *Clethrionomys rutilus orca*.

Point Barrow: *Citellus parryii barrowensis*; *Dicrostonyx hudsonius alascensis*; *Lemmus trimucronatus alascensis*; *Canis lupus tundrarum*; *Mustela erminea arctica*; *Mustela rixosa eskimii*.

Point Gustavus, on east side of entrance to Glacier Bay: *Sorex glacialis*; *Sorex alaskanus*.

Point Lay, Arctic Coast: *Marmota caligata browerti*; *Microtus oeconomus gigmorei*.

Pribilof Islands.—No exact locality: *Callorhinus alascanus*.

St. George Island: *Lemmus nigripes*; *Alopex pribilofensis*.

St. Paul Island: *Sorex pribilofensis*; *Phoca richardii pribilofensis*.

Prince of Wales Island, Alexander Archipelago.—

Hollis, Kasaan Bay: *Peromyscus maniculatus hylaecus*.

Kasaan Bay: *Mustela erminea celenda*; *Lutra mira*.

Lake Bay: *Glaucousmys sabrinus griseifrons*.

Shakan: *Microtus longicauda littoralis*.

Revillagigedo Island, Alexander Archipelago, Loring: *Clethrionomys gapperi solus*.

Saint Elias Alps, near Yakutat Bay: *Uracetus americanus emmonsii*.

St. Lawrence Island, Bering Sea.—No exact locality: *Dicrostonyx exsul*; *Microtus oeconomus innutus*.

Iviktook Lagoon, about 35 miles northwest of Northeast Cape: *Citellus parryii lyratus*.

Sevoonga, 2 miles east of North Cape: *Sorex jacksoni*; *Clethrionomys albiventer*.

St. Matthew Island, Bering Sea: *Microtus abbreaviatus fisheri*.

Shumagin Islands.—No exact locality: *Dalaenoptera velifera copei*.

Nagai Island: *Citellus parryii nebulicola*; *Lutra canadensis extera*.

Popof Island: *Sorex obscurus shumaginen시스*; *Microtus oeconomus popofensis*.

Sitka: *Myotis lucifugus alascensis*; *Peromyscus sikthensis sikthensis*; *Microtus oeconomus sikthensis*; *Ursus sikthensis*; *Odocoileus hemionus sikthensis*.

Suemez Island, Alexander Archipelago, Santa Cruz: *Mustela erminea seclusa*.

Susitna River, region of Mount McKinley: *Canis lupus pambasileus*; *Gulo hylaecus*.

Talkeetna Mountains, east slope of, near headwaters of Osheina or Black River: *Ursus holworthii*.

Tananu River, near head of, about 200 miles south of Fort Yukon: *Ochotona collaris*.

Toklat River, Alaska Range, near Mount McKinley: *Microtus miurus ores*; *Ursus toklat*.

Tolugak Lake, Brooks Range: *Microtus miurus panceki*.

Unalaklik River: *Ursus alascensis*.

Wainwright Inlet: *Lynx canadensis mollipilosus*. 
UNITED STATES—Continued

Alaska—Continued


Wrangell, Alexander Archipelago: Sorex obscurus longicauda; Synaptomys borealis wrangeli; Clethrionomys gapperi wrangeli.

Yakutat: Sorex cinereus streatori; Ursus nortoni.

Yakutat Bay: Sorex obscurus alascensis; Microtus oeconomus yakutatensis; Zapus hudsonius alascensis; Ursus dalli.

Yerrick Creek, 21 miles west and 4 miles north of Tok Junction: Microtus pennsylvanicus tananaensis.

Arizona

County:

Apache.—Black River, head of, White Mountains: Cervus merriami.

Black River, west fork of: Thomomys bottae nasutus.

Escudilla Mountains, east side of: Ursus arizonae.

Fort Defiance, Navajo country near: Ursus texensis navaho.

Marsh Lake, White Mountains: Citellus tridecemlineatus monticola.

Springerville: Microtus montanus arizonensis.

Wheatfields Creek, 27 miles east of Chin Lee [Chinle], Tunitcha Mountains: Thomomys bottae peramplus.

White Mountains, Little Colorado River: Clethrionomys gapperi arizonensis.

White Mountains, south of Mount Ord: Sylvilagus nuttalli pinetis.

Cochise.—Cave Creek, Chiricahua Mountains: Sciurus chiriacaue.

Dos Cabezos: Dipodomys spectabilis spectabilis.

Fairbank: Lepus californicus eremicus; Dipodomys merriami olivaceus; Peromyscus leucopus arizonae.

Fly Park, Chiricahua Mountains: Thomomys bottae collinus.

Hereford, 7 miles west of: Baiomys taylori afer.

Huachuca Mountains: Sylvilagus floridanus holtzneri; Sciurus arizonensis huachuca; Thomomys umbrinus intermedius.

Huachuca Mountains, Peterson’s Ranch (Sylvania), 2 miles north of Sunny-side. Sigmodon ochrognathus montanus.

Pinery Canyon, Chiricahua Mountains: Thomomys umbrinus chiriacaue.

Point of Mountain, near Willcox: Cynomys ludovicianus arizonensis.

Rock Creek, Chiricahua Mountains: Reithrodontomys megalotis arizonensis.

San Bernardino Ranch: Perognathus conditi.

San Pedro River, Mexican boundary line: Taxidea taxus apache.

Willcox: Citellus spilosoma canescens; Thomomys bottae extenuatus.

Coconino.—Baker Butte (north of Gila–Coconino County line), Mogollon Mountains [Mesa]: Microtus mexicanus mogollonensis.

Black Tank, Little Colorado Desert: Hesperomys megalotis.

Black Tank lava beds, northeast of San Francisco Mountain: Onychomys leucogaster fuliginosus.

Bright Angel Creek, Kaibab Plateau: Sciurus kaibabensis; Castor canaden sis repentinus.

Bright Angel Trail, south side of Grand Canyon: Peromyscus crinitus perdoneus.

Cameron, 2 miles south of: Perognathus amplus ammodytes.

De Motte Park, Kaibab Plateau: Thomomys talpoides kaibabensis.

Echo Cliffs, Painted Desert: Citellus leucurus cinnamomeus; Dipodomys ordii longipes.

Grand Canyon of Colorado, north of San Francisco Mountain: Spilogale gracilis gracilis.

Greenland Spring, Bright Angel Creek, Kaibab Plateau, Grand Canyon National Park: Microtus longicaudus baileyi.

House Rock Valley, 6 miles west of Colorado River Bridge: Dipodomys microps leucotis.

Jacob’s Pools, House Rock Valley: Thomomys bottae absonus.

Jacob’s Pools, House Rock Valley, 10 miles south of: Perognathus longimembritis arizonensis.

Little Colorado River, Painted Desert: Thomomys latirostris.

Moccasin Spring, north of Colorado River: Lynx rufus baileyi.
UNITED STATES—Continued

Arizona—Continued

Powell Plateau, Grand Canyon National Park: *Felis concolor kaibabensis.*
Prospect Valley, lower end of, Grand Canyon, Hualpai Indian Reservation: *Citellus leucurus tersus; Thomomys bottae muralis; Onychomys leucogaster capitulatus.*
Quaking Aspen Settlement, between Stone Mountain and Mormon Lake: *Tamiasciurus hudsonicus mogollonensis.*
Rainbow Lodge, plain 5 miles southeast of, near Navajo Mountain: *Thomomys bottae alexandreae.*
Ryan, Kaibab National Forest: *Neotoma lepida monstrabilis.*
San Francisco Mountain: *Sorex vagrans monticola; Eutamias cinereicollis cinereicollis; Scirius aberti aberti; Thomomys bottae fulvus; Perognathus penicillatus penicillatus; Peromyscus maniculatus rufinus; Neotoma mexicana pinetorum.*
San Francisco Mountain, cedar belt northeast of: *Citellus spilosoma obsidiyanus; Perognathus flavus fuliginosus.*
San Francisco Mountain, little spring, at north base of: *Myotis subulatus melanorhinus; Citellus lateralis arizonensis; Microtus longicaudus alticola; Mephitis mephitis estor.*
San Francisco Mountain, pine plateau at north foot of: *Citellus spilosoma pratenensis.*
Swamp Point, 18½ miles northwestward of Bright Angel Point, north rim of Grand Canyon: *Thomomys bottae bororarius.*
Tanner Tank, Painted Desert: *Neotoma lepida devia.*
Winona: *Perognathus apache cleomophila.*
Winona, 5 miles northeast of: *Dipodomys ordii cleomophila.*
Wupatki Ruins, 2.6 miles west of, Wupatki National Monument, about 27 miles northeast of Flagstaff: *Perognathus amplus cineris; Perognathus intermedius crinitus.*
Graham.—Camp Grant: *Onychomys torridus torridus.*
Graham (Pinaleno) Mountains: *Tamiasciurus hudsonicus grahamensis; Thomomys bottae grahamensis; Microtus longicaudus leucophaeus.*
Marijilda Canyon, Graham Mountains: *Sorex melanogenys.*
Safford: *Sigmodon hispidus confinis.*
Greenlee.—Cosper Ranch, Blue River, about 12 miles south of Blue: *Bassariscus astutus arizonensis; Conepatus mesoleucus venaticus.*
Prieto Plateau, Blue Range: *Eutamias minimus arizonensis.*
Whorton Creek, on south slope of White Mountains, a few miles west of Blue: *Ursus apache.*
Maricopa.—Gila Bend, 10 miles south of, and about 2 miles north of Black Gap: *Thomomys bottae aridicola; Neotoma lepida harteri.*
Hassayampa River, bottomland along, 2 miles below Wickenberg: *Thomomys bottae patulus.*
New River, north of Phoenix: *Dipodomys merriami merriami.*
Phoenix: *Thomomys bottae cervinus.*
Tempe: *Citellus tereticaudus arizonae.*
Mohave.—Bea's Springs, 2 miles from Kingman: *Sylvilagus audubonii arizonae.*
Beaverdam Creek, Littlefield (Beaverdam): *Thomomys bottae virgineus.*
Big Sandy River, near Owen: *Thomomys bottae desititus.*
Dolans Spring, 12 miles northwest of Chloride: *Citellus tereticaudus neglectus.*
Fort Mohave: *Nyctinomus mohavensis.*
Hackberry: *Perognathus amplus per gracilis.*
Hualpai Mountains: *Neotoma stephensi stephensi.*
Hualpai Peak, Hualpai Mountains: *Thomomys bottae hualpaiensis; Microtus mexicanus hualpaiensis.*
Kanab Wash, Kaibab Indian Reservation: *Dipodomys ordii cupidineus.*
Mount Trumbull: *Perognathus parvus trumbullensis.*
Mount Trumbull, 3 miles south of Nixon Spring: *Thomomys bottae trumbullensis.*
Mud (Muddy) Spring, Detrital Valley: *Thomomys bottae desertorum; Perognathus intermedius intermedius.*
Old Searchlight Ferry, Colorado River, about 40 miles northwest of Kingman: *Thomomys suboiles.*
Arizona—Continued

Toroweap Valley, about ½ mile east of Vulcan’s Throne: Dipodomys merriami vulcani.

Virgin River, sand flat along, 7 miles above Bunkerville: Perognathus penicillatus sobrinus.

Wolf Hole, 20 miles south of, Shivwits Plateau: Thomomys bottae nicholi.

Wolf Hole, 6 miles north of, about 30 miles south of St. George, Utah: Dipodomys microps celsius.

Navajo—Cibecue, near: Felis onca arizonensis.

Keams Canyon, Painted Desert: Corynorhinus rafinesquei pallascens; Eutamias quadrivittatus hopiensis; Perognathus apache apache; Neotoma stephensi relict; Neotoma cinerea arizonae.

Moki Pueblos: Onychomys melanophrys pallascens.

Oraibi, Hopi Indian Reservation: Perognathus flavus hopiensis.

Winslow: Peromyscus leucopus ochraceus.

Pima.—Agua Dulce Mountains, 9 miles east of Papago Well: Neotoma lepida auripila.

Black Mountain, 10 miles south of Tucson: Perognathus intermedium nigrimontis; Peromyscus eremicus pullus.

Coyote (Quinland) Mountains, 40 miles west-southwest of Tucson: Thomomys bottae pusillus.

Fort Lowell, near Tucson: Neotoma albicula albicula; Mephitis macroura milleri.

Fort Lowell, 4 miles east, Bullock’s Ranch: Sigmodon hispidus cienegae.

La Osa, Altar Valley: Thomomys bottae modicus.

Old Parker Ranch, 4 miles west of Greaterville, Santa Rita Mountains: Thomomys umbrinus proximus.

Papago Well, 7 miles east of, Growler Valley: Thomomys bottae growlerensis.

Pass between Santa Catalina and Rincon Mountains, 25 miles east-northeast of Tucson: Thomomys bottae parvulus.

Quitobaquito: Canis latrans mearnsi.

Rillito, Southern Pacific Railroad: Lepus alleni alleni.

Santa Catalina Mountains: Neotoma mexicana bullata.

Santa Rita Range Reserve, 35 miles south of Tucson: Perognathus amplus taylori.

Sells, 5 miles northwest of: Thomomys bottae comobadiensis.

Soldier Camp, near, Santa Catalina Mountains: Sciurus arizonensis catalinae.

Spud Rock Ranger Station, 25 miles east of Tucson, Rincon Mountains: Thomomys bottae hueyi.

Summerhaven, Santa Catalina Mountains: Thomomys bottae catalinae.

Pinal.—No exact locality: Urocyon cinereorargentus scottii.

Casa Grande, 11 miles west of: Perognathus longimembris pimens.

Mammoth, San Pedro River: Thomomys bottae alienus.

Oak Flat, 5 miles east of Superior, Pinal Mountains: Thomomys bottae pinalensis.

Oracle: Citellus spilosoma macrospilotus.

Santa Cruz.—Calabasas: Sylvilagus arizonae major; Dipodomys spectabilis perblandus.

Camp Crittenden, Sonora Creek, between Santa Rita and Patagonia Mountains: Odocoileus virginianus couesi.

Madera Canyon, Santa Rita Mountains: Thomomys umbrinus burti.

Peña Blanca Spring, Pajarito (Tumacacori) Mountains: Thomomys umbrinus quercinus.

Santa Cruz Valley: Citellus harrisi harrisi.

Yavapai.—Congress Junction: Perognathus amplus jacksoni.

Fort (Camp) Verde: Thomomys bottae mutabilis; Perognathus amplus amplus; Perognathus intermedius umbrosus; Dipodomys ordii chapmani; Sigmodon hispidus arizonae; Ondatra zibethicus pallidus; Spilogale gracilis arizonae.

Fort Whipple, near Prescott: Sciurus arizonensis arizonensis; Perognathus flavus bimaculatus; Sigmodon hispidus jacksoni; Erethizon dorsatum couesi.

Montezuma Well, Beaver Creek: Lutra canadensis sonora.

San Francisco Forest: Mustela frenata arizonensis.
Arizona—Continued

Yarnell, 6 miles north of, Peoples Valley: Thomomys bottae operatus.
Yuma.—Castle Dome, at base Castle Dome Peak: Perognathus baileyi domensis.
Castle Dome Mountains, Kofa Game Refuge: Taxidea taxus hallorani.
Colorado River at Mexican boundary monument No. 204: Onychomys torridus perpallidus.

Ehrenberg: Thomomys bottae chrysonotus.

Gadsden, 4 miles south of: Ondatra zibethicus bernardi.

Gila Mountains, between Tinajas Altas and Mexican boundary: Ovis canadensis gaillardi.
Harquahala Mountains: Thomomys bottae subsimilis.
Lower Colorado River, 12 miles south of Yuma: Felis concolor browni.

Parker: Thomomys fulvus flavidus; Sigmodon hispidus plenus.

Ranegras Plain, 10 miles west of Hope: Thomomys harquahalae.

Tinajas Altas, Gila Mountains: Citellus harrisi saxicola; Perognathus intermedius phasma; Peromyscus crinitus disparilis; Neotoma albicala mearnsi; Neotoma lepida flava; Bassariscus astutus yumanensis.

Tinajas Altas Mountains, 7 miles south of Raven Butte: Thomomys bottae depauperatus.
Tule Tanks, Tule Desert, 2 miles south of, near Mexican boundary: Thomomys bottae phasma; Vulpes macrotis arizonensis.

Tule Well, Tule Desert between Cabeza Prieta Mountains and Tule Mountains: Dipodomys merriami regillus.

Wellton: Perognathus amplus rotundus.
Yuma: Perognathus longimembris bonnebycicus.

Arkansas
No exact locality: Felis pardalis albescens.

COUNTY:
Pike.—Delight: Scalopus aquaticus pulcher; Peromyscus nuttalli flammecus.
Washington.—Winslow, 3 miles south of: Peromyscus maniculatus ozarkiarum.

California
No exact locality: Nyctinomus brasiliensis californicus; Nyctinomus macrotis nevadensis; Erethizon dorsatum epixanthum; Odocoileus punctatus.

No exact locality, probably some part of California: Lasius borealis teliotis.

Coast of California: Grampus rectipinn.

North Pacific Ocean, near San Francisco: Lagenorhynchus obliquidens.

Northern California, no exact locality: Tamiasciurus douglasii mollipilosus.

Sacramento River, probably between Colusa and Sacramento: Ursus colusus.

San Francisco Bay, rocks in vicinity of: Zalophus californianus.

Sierra Nevada, no exact locality: Euarctos americanus californiensis.

COUNTY:

Alameda.—Alameda Island: Scapanus latimanus parvus.

Berkeley: Perognathus californicus californicus; Dipodomys heermannii berkeleyensis.

Melrose Marsh: Microtus californicus paludicola.

Alpine.—Hope Valley: Lepus campestris sierae.

Amador.—Carbondale: Perodipus streator; Neotoma fuscipes streator.

Calaveras.—Calaveras River, vicinity of, Sierra Nevada: Dipodomys heermannii.

Colusa.—Sites: Dipodomys californicus pallidulus.

Contra Costa.—Mount Diablo: Perognathus armatus.

Walnut Creek, near town of: Sorex ornatus californicus.

Del Norte.—Crescent City: Microtus longicaudus angusticeps.

El Dorado.—Auburn [East Auburn], near, Middle Fork of American River: Peromyscus boylii boylii.

Echo: Mustela erminea muricus.

Emerald Bay, Lake Tahoe: Citellus beecheyi sierae.

Fyffe: Scapanus latimanus minusculus.

Mount Tallac: Eptesicus fuscus melanapterus; Thomomys monticola monticola.

Pyramid Peak, near Lake Tahoe: Zapus princeps allenii.

Tallac: Glaucomys sabrinus lascivus.

Fresno.—Fresno, San Joaquin Valley: Thomomys bottae pascalis; Perognathus inornatus inornatus.

Fresno, 4 miles north of, San Joaquin Valley: Dipodomys nitratoides exilis.

Hayes Station, 19 miles southwest of Mendota, near mouth of Panoche
California—Continued

Creek Canyon: Dipodomys nitratoides brevirostris.
Little Panchee Creek, mouth of: Ammospermophilus nelsoni amplus.
Oxalis, San Joaquin Valley: Myotis yumanensis oxalis.
Humboldt.—Arcata, redwoods, near Humboldt Bay: Phenacomys albipes.
Cape Mendocino, near Capetown: Microtus californicus constrictus.
Carlotta: Aplodontia rufa humboldtiana.
Carson's Camp, Mad River, Humboldt Bay: Sorex troubridgi humboldtensis.
Coyote Peak, near, 16 miles east of Patrick's Point: Thomomys bottae silviculus.
Cuddeback [Carlotta], ridge about 5 miles northeast of: Martes caurina humboldtensis.
Eureka: Clethrionomys occidentalis californicus.
Fair Oaks, 6 miles southwest of: Zapus trionotatus eureka.
Humboldt Bay: Thomomys bottae laticeps.
Trinity Mountains, east of Hoopa Valley: Citellus lateralis trinitatis.
Imperial.—Carrizo Creek, Colorado Desert: Perognathus penicillatus angustirostris; Neotoma albicula venusta.
Colorado Desert, western edge of, east base of Coast Range: Lepus californicus deserticola.
Colorado River, 20 miles above Picacho: Neotoma lepida grinnelli.
Fort Yuma, old: Macrotrus californicus; Myotis yumanensis yumanensis; Pipistrellus hesperus hesperus; Citellus tereticaudus tereticaudus; Peromyscus eremicus eremicus; Neotoma cumulata.
Mountain Spring, east slope Coast Range Mountains: Perognathus fallax pallidus.
Mountain Spring, 3 miles east of: Peromyscus crinitus stephensi.
New River, about 6 miles west of Imperial, Colorado Desert: Procyon lotor pallidus.
New River, near Laguna Station, Colorado Desert: Lynx rufus eremicus.
Niland, 1 1/2 miles west of: Thomomys bottae crassus.
Old Hanlon Ranch, near Pilot Knob, west side of Colorado River: Thomomys bottae albatus.

Inyo.—Alabama Hills (Lone Pine Creek), summit of, near Lone Pine: Sorex tenellus.
Beveridge Canyon, Inyo Mountains: Urocyon cinereoargenteus inyoensis.
Big Cottonwood Meadows, southeast of Mount Whitney: Eutamias alpinus; Thomomys bottae alpinus; Microtus montanus dutcheri.
Cottonwood Creek, east slope of White Mountains: Sorex tenellus myops.
Cottonwood Lakes, near Mount Whitney, Sierra Nevada: Ochotona princeps albata.
Furnace Creek, Death Valley: Sylvilagus ryufipes; Citellus cremnemonus; Dipodomys merriami mortitallis; Neotoma desertorum.
Grapevine Mountains, about 5 miles south of Grapevine Peak: Ovis canadensis nelsoni.
Greenwater, 8 miles southwest of Ryan, Black Mountains: Thomomys bottae oreoecus.
Hannopoe (Hanaupah) Canyon, Panamint Mountains: Sylvilagus perpliatus; Thomomys bottae scaperus; Peromyscus lasius.
Independence, 2 miles north of, Carl Walter's Ranch: Mustela frenata inyoensis.
Johnson Canyon, Panamint Mountains: Eutamias panamintinus panamintinus.
Junction Ranch, Argus Mountains: Thomomys bottae argusensis; Dipodomys mohavensis argusensis.
Keeler, east side of, Owens Lake: Citellus leucurus vinnulus; Thomomys bottae operarius; Perognathus pericales; Dipodomys deserti helleri; Dipodomys merriami nitratus; Onychomys torridus clarus.
Kid Mountain, 10 miles west of Bigpine: Odocoileus hemionus inyoensis.
Lone Pine, Owens Valley: Thomomys bottae perpes; Dipodomys micros micros; Peromyscus petrai; Peromyscus paraisoticus; Neotoma fuscipes dispar.
Lone Pine Creek, Alabama Hills, near Lone Pine: Microtus californicus vallicola.
Mesquite Valley, Death Valley: Perognathus penicillatus stephensi.
California—Continued

Mount Baxter, east slope of, Sierra Nevada; *Ovis cervina sierrae*.

Old Fort Independence, 2 miles north of Independence: *Scapanus latimanus grinnellii*.

Perognathus Flat, Emigrant Gap, 2 miles northwest of Harrisburg, Panamint Mountains: *Perognathus longimembris panamintinus*; *Dipodomys microps levipes*.

Salt Camp, 1 mile north of, on edge of salt lake, Saline Valley: *Perognathus longimembris saltinensis*.

Shepherd Canyon, Argus Mountains: *Citellus beecheyi parvulus*.

Shoshone, Amargosa River: *Thomomys bottae amargosae*; *Microtus californicus scirpensis*.

White Mountains near head of Black Canyon: *Eutamias quadrivittatus inyoensis*.

Willow Creek, head of, Panamint Mountains: *Dipodomys panamintinus panamintinus*.

Kern.—No exact locality: *Felis concolor californica*.

Bakersfield: *Onychomys torridus tularensis*.

Buena Vista Lake: *Sorex ornatus relictus*.

Buena Vista Lake, east side levee, 2 miles west of Millux: *Thomomys bottae ingens*.

Buttonwillow: *Mustela frenata pulchra*; *Cervus nannodes*.

Cameron Lake: *Neotoma desertorum grandis*.

Fay Creek, 6 miles north of Weldon: *Eutamias merriami kernensis*.

Fay Creek, near South Fork of Kern River: *Microtus californicus kernen*.

Fort Tejon, Tehachapi Mountains; *Myotis yumanensis sociabilis*; *Myotis thysanodes thysonades*; *Antrozous pallidus pacificus*; *Neotoma fuscipes simplex*.

Fort Tejon, Canada de las Uvas, Tehachapi Mountains: *Perognathus longimembris longimembris*; *Ursus talaris*.

Freeman Canyon, east slope of Walker Pass: *Perognathus xanthonotus*.

French Gulch, 2½ miles northwest of Claraville, Piute Mountains: *Thomomys bottae piutenensis*.

Havilah, near, Southern Sierra Nevada: *Ursus henshawi*.

Lebec, 14 miles west of, near head of Cuddy Valley: *Perognathus alticolus inexpectatus*.

McKittrick: *Perognathus inornatus neglectus*.

Onyx, west end of Walker Pass: *Dipodomys merriami kernensis*.

Onyx, 3 miles above, South Fork of Kern River: *Citellus beecheyi fisheri*; *Chinchilla platyrhina*.

San Emigdio: *Neotoma desertorum sola*.

San Emigdio Canyon, head of, Mount Pinos; *Sorex ornatus ornatus*.

San Emigdio ranch, 25 miles southwest of Bakersfield: *Sylvilagus audubonii vallicola*.

Santiago Springs, 16 miles southwest of McKittrick: *Perognathus californicus ochrus*.

Walker Basin: *Dipodomys agilis perplexus*.

Warren, ½ mile east of railway station, about 5 miles north of Mohave: *Dipodomys mohavensis*.

Lake.—Lakeport: *Sitomys robustus*.

Lassen.—Susanville, 1 mile north of: *Thomomys bottae saxatilis*.

Susanville, 2 miles south of: *Thomomys townsendii relictus*.

Los Angeles.—Alhambra: *Eumops perotis californicus*.

Hyperion: *Perognathus longimembris cantwelli*.

Los Angeles: *Dipodomys agilis agilis*.

Playa del Rey: *Sorex ornatus salicornicus*; *Reithrodontomys megalotis limicolana*; *Microtus californicus stephensi*.

San Clemente Island, Smuggler's (Pyramid) Cove, Santa Barbara Islands: *Peromyscus maniculatus clementis*; *Urocyon littoralis clementae*.

San Fernando: *Sylvilagus bachmani cinerascens*.

Santa Catalina Island, Santa Barbara Islands; no exact locality: *Urocyon littoralis catalinae*. Avalon, near: *Citellus beecheyi nesioticus*; *Reithrodontomys megalotis catalinae*; *Peromyscus maniculatus catalinae*. Avalon Canyon; *Sorex willetti*.

Madera.—Raymond: *Thomomys bottae mewa*. 
UNITED STATES—Continued

California—Continued

Marin.—No exact locality: Neotoma splendens.
Angel Island, San Francisco Bay: Scapanus cooperi.
Inverness: Eutamias sonomae aleni.
Lagunitas: Urocyon cinereoargenteus sequiensis.
Nicasio: Neirotichus gibbsii hyacinthinus; Spilogale gracilis phenax; Lynx fuscus.
Point Reyes; near Inverness: Aplodontia rufa phaea; Zapus orarius; Mustela frenata munda.
Mariposa.—El Portal: Eutamias merriami mariposae; Peromyscus californicus mariposae.
El Portal, 1 3/4 miles west of: Microtus californicus mariposae.
El Portal, near, McCauley Trail: Sylvilagus bachmani mariposae.
Merced Lake, 1 mile east of, Yosemite National Park: Myotis yumanensis altipetens.
Yosemite: Scapanus latimanus sericatus.
Yosemite Valley: Microtus montanus yosemitae.
Yosemite Valley, near old Sentinel Hotel: Sorex troubidgii mariposae; Thomomys bottae awahnee.
Mendocino.—Fort Bragg: Thomomys bottae minor.
Laytonville: Scapanus latimanus cahirinus.
Long Valley, north of Sherwood: Ursus mendoceinensis.
Mendocino: Eutamias townsendii ochrogenys; Peromyscus maniculatus rubidus.
Mount Sanhedrin, 4 miles south of, Lierly’s Ranch: Microtus californicus eximius.
Philo: Scirius hudsonicus orarius.
Point Arena: Aplodontia rufa nigra.
Sherwood: Glaucous sabrinus stephensi.
Ukiah: Dipodomys heermannii californicus.
Merced.—Delhi, near Merced River: Dipodomys heermannii dixoni.
Los Banos: Thomomys bottae angularis.
Los Banos, 22 miles south of, Sweeney’s Ranch: Thomomys bottae diabolii; Neotoma fusipes perplexa.
Snelling: Scapanus latimanus campi.
Modoc,—Eagleville, 3 miles east of: Dipodomys microps aquilonius.
Lake City: Scapanus truei.
Parker (Shields) Creek, Warner Mountains: Neotoma cinerea alitcola.
Warren Peak, Warner Mountains: Ochotona princeps taylori.
Mono.—Big Prospector Meadow, White Mountains: Ochotona princeps sheltori; Callospermophilus chrysodeiris perpallidus; Thomomys bottae melanos.
Blanco Mountain, near, White Mountains: Eutamias minimus scrutator.
Kuhlee Ranch, Dexter Creek Meadow, 12 miles northwest of Benton: Thomomys talpoides monensis.
Mammoth, near, head of Owens River, east slope of Sierra Nevada: Sorex vagrans amoenus.
McAfee Meadow, White Mountains: Marmota flaviventris fortirostris.
McKeever’s Ranch, 2 miles south of Benton Station: Microdipodops megacephalus polionotus.
Oasis, 3 miles southeast of: Microdipodops megacephalus dickeyi.
Pellisier Ranch, 5 miles north of Benton Station: Dipodomys panamintinus leucogenys; Dipodomys ordii monoenis.
Taylor Ranch, 2 miles south of Benton Station: Scapanus latimanus monoenis.
Warren Fork of Leeving Creek: Eutamias amoenus monoenis.
Monterey.—Abbotts Ranch, Arroyo Seco: Neotoma lepida petricola.
Arroyo Seco Wash, west side of, 4 miles south of Soledad: Perognathus longimembris psammpophilus; Perognathus inornatus sylimani.
Elkhorn Slough, salt marsh at mouth of, Moss Landing: Sorex vagrans paludivagus.
Indian Harbor, 1 1/2 miles south of Marina: Perognathus californicus marinensis.
Jolon, 1 mile southwest of: Dipodomys heermannii jolonensis; Dipodomys venustus sanctiluciae.
Jolon, probably on interior slope of mountains near: Lepus californicus richardsonii.
Lime Kiln Creek, southwest of Santa Lucia Mountains: Myotis ruddi.
Mission of San Antonio, west of, Jolon: Lepus californicus californicus.
UNITED STATES—Continued

California—Continued

Monterey: Sorex trowbridgii montereyensis; Myotis evotis evotis; Myotis californicus californicus; Citellus beecheyi beecheyi; Thomomys bottae bottae; Peromyscus californicus californicus; Peromyscus maniculatus gambellii; Microtus edax; Microtus trowbridgii; Tursiops illii; Grampidelphis stearnsii; Ursus californicus.

Monterey Bay: Eschrichtius glaucus.

Moss Landing: Microtus californicus holophthalmus.

Salinas, mouth of Salinas Valley: Dipodomys heermannii goldmani.

Salinas River, salt marsh at mouth of: Sorex ornatus salarius; Reithrodontomys megalotis distichalis.

Seaside: Neotoma fuscipes luciana.

Soledad: Sylvilagus bachmani virgultii.

Stonewall Creek, about 6½ miles northeast of Soledad: Perognathus californicus bensoni.

Orange.—Santa Ana Canyon, 12 miles northeast of Santa Ana: Scapanus latimanus occultus.

Placer.—Auburn: Corynorhinus rosinus quii intermedius.

Blue Canyon, Sierra Nevada: Aplodontia rufa californica; Eutamias macrohabdotes; Tamiasciurus douglasii albolimbatus.

Donner (Summit): Ochotona princeps schisticeps; Citellus beldingi beldingi: Eutamias speciosus frater.

Donner Pass, summit of: Eutamias townsendii senex.

Michigan Bliuf, east of: Eutamias quadrinauculatus.

Sierra Nevada, no exact locality: Aplodontia major.

Tahoe Tavern, ½ mile south of: Lepus americanus taoheensis.

Plumas.—Beckwith [Beckwourth], Sierra Valley: Thomomys talpoides fisheri.

Sierra Valley, near Vinton: Microtus podops megacephalus californicus.

Riverside.—Banning: Neotoma lepida gilva.

Blythe: Thomomys bottae riparius.

Cabazon, San Gorgonia Pass: Thomomys bottae cabezonae; Dipodomys agilis cabezonae.

Clements Well, 2 miles east of: Thomomys bottae rupestris.

Lost Horse Mine, Little San Bernardino Mountains, 69 miles east of Riverside: Peromyscus truei chlorus.

Palm Springs (formerly Agua Caliente):

Citellus tereticaudatus chlorus; Tadarida femorosacca; Dipodomys merriami similis; Thomomys bottae perpallidus; Perognathus longimembris bangsi; Perognathus formosus mesembrius; Neotoma bella.

Riverside: Vulpes macrotis macrotis.

Riverside Mountains: Bassariscus astutus willetti.

Round Valley, San Jacinto Mountains: Thomomys bottae jacinteus.

San Gorgonio Pass, east of Banning: Citellus leucurus leucurus.

Tahquitz Valley, San Jacinto Mountains: Urocyon cinereargenteus californicus.

White Water: Dipodomys similis.

Winchester, San Jacinto Valley: Dipodomys stephensi.

Sacramento.—Sacramento: Procyon lotor psora.

Sacramento River, probably below junction with Feather River: Mustela frenata xanthogenys.

San Benito.—Bear Valley: Peromyscus truei gilberti; Neotoma lepida californica.

Cook Post Office, near, Bear Valley: Dipodomys elephantinus; Peromyscus californicus benitoensis.

Laguna Ranch, Gabilan Range: Odocilus columbianus scaphiotus.

San Bernardino.—Bear Flat Meadows, San Antonio Peak, San Gabriel Mountains: Thomomys bottae neglectus.

Bonanza King Mine, Providence Mountains: Perognathus formosus mohavensis.

Daggett, Mojave Desert: Vulpes macrotis arsippus.

Dry Lake, San Bernardino Mountains: Microtus longicaudus bernardinus.

Grapeandel, about 10 miles northwest of San Bernardino: Thomomys bottae pallescens.

Hesperia, Mojave River: Dipodomys deserti deserti.

Horse Spring, 1.4 miles southeast of, Kingston Range: Eutamias panamintinus acrus.

Mojave Desert: Hesperomys leucopus deserticolus.

Morongo Pass, San Bernardino Mountains: Onychomys torridus pulcher.

Needles, 10 miles above, west side of Colorado River: Myotis occultus.
UNITED STATES—Continued

California—Continued

Oro Grande, Mojave Desert: Sylvilagus laticinctus; Sitomys insokutus; Neotoma fuscipes mohavensis.

Providence Mountains, 6 miles south of Granite Well: Dipodomys panamintinus caudatus.

Purdy, 6 miles southeast of New York Mountains, Providence Range: Thomomys bottae providentialis.

Rabbit Springs, near, 15 miles east of Mojave River, opposite Hesperia: Citellus mohavensis.

Reche Canyon, 3 miles southeast of Colton: Perognathus fallax fallax; Dipodomys merriami parvus; Peromyscus harronis; Onychomys torridus ramona.

San Bernardino: Eptesicus fuscus bernardinus; Perognathus longinembris brevinasus.

San Bernardino Mountains: Eutamias merriami merriami; Thomomys bottae altivallis.

San Bernardino Peak: Citellus lateralis bernardinus.

Seven Oaks, near San Bernardino Mountains: Myotis californicus querinus.

Squirrel Inn, near Little Bear Valley, San Bernardino Mountains: Glaucomys sabrinus californicus; Perognathus alticolus alticolus; Sitomys major.

Strawberry Peak, 2 miles east, San Bernardino Mountains: Perognathus californicus bernardinus.

The Needles, 25 miles below, Colorado River: Perognathus spinatus spinatus, Thruman’s Camp (now Bluff Lake), western side of San Bernardino Peak: Sorex obscurus parvidens.

Victorville: Microtus californicus moha- vensis.

Victorville, near, Mojave River bottom: Thomomys bottae mohavensis.

West Cajon Pass: Sitomys harroni nigellus.

White Water Creek, head of, San Bernadino Mountains: Eutamias speciosus speciosus.

San Diego.—Barona Ranch, 30 miles east of San Diego: Odocoileus hemionus fuliginatus.

Beatty Ranch, Borego Valley: Thomomys bottae boregoensis.

Campbell’s Ranch, Laguna Mountains: Sciurus griseus anthonyi.

Carrizo Creek: Thomomys bottae aderrans.

Dulzura: Perognathus californicus fe- moralis; Dipodomys agilis simulans; Peromyscus californicus insignis; Peromyscus eremicus fraterculus; Neotoma lepida intermedia; Neotoma fuscipes macrotis.

Escondido: Microtus californicus sancti- diegi.

Jacaumba: Thomomys bottae affinis.

Julian: Spilogale gracilis microrhina.

La Puerta (Mason’s Ranch), 5 miles west of Vallecitos: Thomomys bottae puertae.

Los Biacitos, head of San Onofre Can- yang, Santa Ana Mountains: Ursus magister.

Mexican boundary monument No. 258, shore of Pacific Ocean: Sylvilagus audubonii sanctidiegii; Perognathus longinembris pacificus: Procyon lotor californicus.

Palm Canyon, mouth of, Borego Valley: Perognathus spinatus rufescens.

San Diego: Lepus californicus beunnetii; Thomomys bottae sanctidiegii; Neotoma fuscipes macrotis; Mustela frenata latiostra; Lynx rufus californicus.

San Felipe Narrows: Perognathus pan- amintinus arenicola.

San Luis River, near Escondido: Bas- sariscus astatus octans.

Santa Ysabel, San Jacinto Mountains: Reithrodontomyys pallidus.

Vallecitos: Myotis californicus stephensi; Myotis californicus pallidus.

Witch Creek, 7 miles west of Julian: Thomomys bottae nigricans.

San Francisco.—San Francisco: Sylvilagus audubonii audubonii.

San Joaquin.—Tracy: Canis latrans ochro- pus; Vulpes macrotis mutica.

San Luis Obispo.—Morro, 4 miles south of: Dipodomys heermanni morroensis.

Painted Rock, 12 miles southeast of Simmler: Dipodomys ingens.

San Luis Obispo: Sylvilagus bachmani bachmani.

San Miguel, 2 miles south of: Neotoma fuscipes bullatior.

Simmler, 7 miles southeast of, Carrizo Plain: Thomomys bottae infrapallidus; Dipodomys heermanni swarthi.

San Mateo.—Coast region, no exact lo- cality: Sciurus grisaeus nigripes.

Portola: Eutamias merriami pricei; Peromyscus dyselius; Neotoma fuscipes annectens.
Carberry Ranch, between Mount Shasta and Mount Lassen: *Neurotrichus gibbsii major.
Cassel, on Hat Creek, near Pit River: *Castor canadensis shastensis.
Fort Crook, about 2 miles northeast of Burgettville: *Perognathus parvus miltipilosis; *Taxidea taxus neglecta.
Siskiyou.—Beswick, near mouth of Shovel Creek: *Ursus klawathensis.
Jackson Lake: *Aplodontia chrysela.
Mayten, Shasta Valley: *Reithrodontomys klawathensis.
Mount Shasta, near, headwaters of Sacramento River: *Microtus montanus montanus.
Sisson, west base of Mount Shasta: *Thomomys monticolus pinetorum.
Studhorse Canyon, Siskiyou Mountains: *Eutamias amoena ochraceus.
Wagon Camp, Mount Shasta: *Sorex shastensis.
White Mountain, near summit of, Siskiyou Mountains: *Eutamias townsendii siskiyou.
Solano.—Grizzly Island, Suisun Bay: *Sorex sinuosity; *Microtus californicus asturinus; *Mustela vison oestricina; *Lutra canadensis brevipilos.
Sonoma.—Glen Ellen: *Bassariscus astutus raptor.
Gualala River, near Gualala: *Sorex pacificus sonomae.
Guerneville, 1 mile west of: *Eutamias sonomae sonomae; *Peromyscus truei sequoensis.
Petaluma: *Reithrodontomys megalotis longicaudus; *Neotoma fuscipes fusceans; *Mephitis mephitis occidentalis.
Petaluma, salt marsh 3 miles south of: *Reithrodontomys ravinventris haliotes.
Stanislaus.—Grayson, San Joaquin River: *Castor canadensis subauratus.
Kincaid’s Ranch, 2 miles northeast of Vernalis: *Sylvilagus bachmani riparius; *Neotoma fusiceps riparia.
Sutter.—Marysville Buttes, 3 miles northwest of Sutter: *Dipodomys heermanni extimus.
Tehama.—Dale’s, mesa near, north side of Paines Creek: *Dipodomys heermanni saxatilis.
Dale’s, Paines Creek: *Sylvilagus bachmani tehamae.
Red Bluff: *Pipistrellus hesperus merriami; *Thomomys bottae navus.
UNITED STATES—Continued

California—Continued

South Yolla Bolly Mountain: Citellus lateralis nitratius.
South Yolla Bolly Mountain, 2 miles south of: Thomomys monticola premaxillaris; Microtus oregoni adocetus.
Trinity.—Bear Creek: Glaucous sabrinus flaviwentrис.
Helena: Dipodomys californicus trinitatis.
Mad River, valley of, 7 miles above Ruth: Thomomys bottae acroirostratus.
South Fork Mountain, Kohnenberger's Ranch: Neotoma cinerea pulla.
Tuolare.—Alila [Earlimart]: Lepus tularensis; Dipodomys hermanni tularensis.
Crater (Groundhog) Meadows, Whitney (Golden Trout) Creek: 27 miles south of Mount Whitney: Gulo luscus luteus.
Jordan Hot Springs, near Kern River, Sierra Nevada: Neotoma cinerea acraia.
Kennedy Meadows, 1 mile west of, South Fork Kern River: Perognathus longimembris tularensis.
Kern River, head of, Mount Whitney: Marmota flaviwentrис sierra.
Mineralking, east fork of Kaweah River: Eutamias speciosus sequoieni.
Mount Whitney: Myotis albicinctus.
Tipton, San Joaquin Valley: Citellus nelsoni; Dipodomys nitrotoides nitrotoides.
Whitney Meadow, near Mount Whitney: Vulpes fulva necator.
Tuolome.—Lyell Canyon, head of, Yosemite National Park: Martes curina sierra.
Mount Lyell, near head of Lyell Fork of Tuolome River: Sorex lyelli.
Muir Meadow, Tuolome Meadows, Yosemite National Park: Phenacomys intermedius celusus.
Ten Lakes, near, Yosemite National Park: Ochotona princeps mutri.
Tuolome Meadows, Yosemite National Park: Microtus longicaudus sierra.
Ventura.—Lockwood Valley, near Mount Piños: Perognathus elibatus; Peromyscus montipinoris; Neotoma fuscipes crenophila.
Mount Piños, summit of: Eutamias speciosus callipeplus.
Piru, near: Euderma maculata.

San Nicolas Island, Santa Barbara Islands: Urocyon littoralis dickeyi.
Santa Barbara Island, Santa Barbara Islands: Peromyscus maniculatus elusus.
West Anacapa Island, Fish Camp: Peromyscus maniculatus anacapae.
Yolo.—Stralock Farm, 3 miles west of Davis: Thomomys bottae agricolaris.

Colorado

No exact locality, probably in foothills or on western edge of plains: Ursus planiceps.
Rocky Mountains, lat. 39° N.: Reithrodontomys montanus montanus.
Rocky Mountains, probably in park region of central Colorado: Tamiasciurus hudsonicus fremontii.

County:

Alamosa.—Medano Ranch, 15 miles northeast of Mosca, San Luis Valley: Eutamias minimus caryi; Thomomys talpoides agrestis; Perognathus apache relictus; Reithrodontomys megalotis caryi.
Archulete.—Chromo, northeast of: Taxidea taxus pippsii.
Baca.—Furnace Canyon: Conepatus mesoleucus ffigginsi.
Gaume Ranch: Neotoma albigula warreni.
William's Corner, near, I. N. Pruitt farm, 11 miles north of Springfield: Sigmodon hispidus alfredi.
Bent.—Las Animas, near, Arkansas River; Crotogomys castanops castanops.
Boulder.—Boulder: Eptesicus fuscus pallidus.
Gold Hill: Eutamias minimus operarius; Neotoma mexicana fallax.
Twin Peak, near Long's Peak: Phenacomys preblei.
Ward: Clethrionomys gapperi galei.
Chaffee.—Salida: Thomomys bottae internatus; Dipodomys ordi evexus.
Costilla.—Medano Creek: Reithrodontomys montanus montanus.
Old Fort Massachusetts (now Fort Garland): Dipodomys ordi montanus.
Custer.—Marion Reservoir, or Lake, near, Wet Mountains: Marmota flaviventris notioros.
Douglas.—D'Arcy Ranch, 2 miles north of Parker: Thomomys talpoides macrotis.
Colorado—Continued

El Paso.—Glen Eyrie Estate, about 5 miles northwest of Colorado Springs: *Nemorhaedus palmeri*.

Monument Creek, southwest of Monument: *Castor canadensis concisor*.

Fremont.—Garden Park, near Canyon [Cañon] City: *Conepatus mesoleucus fremonti*.

Garfield.—Marvine Mountain: *Martes caurina origenes*.

Rifle, 8 miles west of: *Perognathus apache caryi*.

Gunnison.—Smith Trail, 2 miles west of Crested Butte: *Marmota flaviventris varreni*.

Jackson.—Canadian River, sandhills 5 miles east of, Medicine Bow Range, east of Walden, North Park: *Lagurus curtatus ledensis*.


Jackson.—-Canadian River, sandhills 5 miles east of, Medicine Bow Range, east of Walden, North Park: *Lagurus curtatus ledensis*.

Higho Post Office, range 8 miles northwest of: *Marmota flaviventris varreni*.

Kit Carson.—Flagler: *Thomomys talpoides retrosus*.

Lake.—Twin Lakes: *Ursus macrodon*.

La Plata.—Bondad, near: *Neotoma albicula laptaeensis*.

Florida: *Thomomys talpoides fassor*; *Zapus princeps princeps*.

Larimer.—Arkins: *Spilogale gracilis tenuis*.

Estes Park: *Sorex nasus*; *Peromyscus nasutus nasutus*; *Ursus shoshone*.

Loveland: *Sciurus aberti ferreus*; *Perognathus fasciatus infralutus*.

Las Animas.—Irwin's Ranch: *Eutamias quadrivittatus animosus*.

Purgatory [Purgatoire] River, near mouth of Chacuaco Creek: *Citellus variegatus grannimurus*.

Logan.—South Platte River: *Vulpes velox velox*.

Mesa.—Grand Junction: *Citellus leucurus pennipes*; *Thomomys bottae howelli*.

Montrose.—Coventry, Naturita Creek Valley: *Sylvilagus audubonii warreni*; *Thomomys bottae optabilis*.

Naturita, 5 miles west of: *Dipodomys ordii mexilis*.

Otero.—Arkansas River, near La Junta: *Myotis subulatus subulatus*.

Park.—Montgomery, near Mount Lincoln: *Ochotona princeps saxatilis*.

Rock Creek, head of, South Park: *Bison bison hankinonti*.

Prowers.—Lamar, Arkansas River Valley: *Geomys bursarius jugosscularis*.

Pueblo.—Arkansas River, about 26 miles below Canyon [Cañon] City: *Citellus lateralis lateralis*; *Eutamias quadrivittatus quadrivittatus*.

Rio Blance.—Pagoda Peak: *Ochotona princeps figginsi*.

Routt.—Snake River, south of Sunny Peak: *Myotis lucifugus phasma*.

Saguache.—Center, 9 miles east of: *Perognathus flavus sanluisii*.

Northwest: *Cochetopa (Sawatch) Pass: Cynomys gunnisoni gunnisoni*; *Microtus pennsylvanicus modestus*.

Northwest: *Cochetopa Pass, 21/2 miles east of summit of: Microtus montanus fuscus*.

Saguache Valley, 20 miles west of Saguache: *Neotoma cinerea orolestes*.

San Juan.—Silverton: *Putorius streatori lepus*.

Summit.—Blue River: *Ursus horribilis bankii*.

Connecticut

County:

New London.—Liberty Hill: *Sylvilagus transitionalis*; *Tamiasciurus hudsonicus loquax*.

Delaware

County:

Newcastle.—Wilmington: *Sciurus niger neglectus*.

Florida

No exact locality: *Atalapha borealis peninsularis*; *Lynx rufus floridanus*; *Odocoileus fraterculus*.

Capes of east Florida, near: *Trichechus manatus latirostris*.

St. Johns River, no exact locality: *Sigmodon hispidus hispidus*.

County:

Alachua.—Alachua Savanna (now Payne's Prairie): *Canis niger niger*.

Gainesville: *Scalopus aquaticus australis*; *Oryzomys palustris natator*; *Sito mys niveiventris subgricus*; *Peromyscus floridanus*.

Bay.—St. Andrews Point Peninsula: *Peromyscus polionotus peninsularis*.

Brevard.—Chester Shool, 11 miles north of Cape Canaveral: *Cryptotis floridana*.

East Peninsula, opposite Micco: *Peromyscus polionotus niveiventris*; *Sigmodon hispidus littoralis*.

Eau Gallie: *Geomys pinetis goffi*.

Georgia.—*Neofiber alleni alleni*.
UNITED STATES—Continued

Florida—Continued

Micco: Mephitis mephitis elongata; Lutra canadensis vaga.
Oak Lodge, on East Peninsula opposite Micco: Didelphis marsupialis pigra; Sylvilagus floridanus amnophilus; Peromyscus gossypinus palmarius; Procyon lotor elucus; Spilogale ambarvalis.
Sebastian River: Sylvilagus floridanus floridanus.
Wilderness back of Sebastian: Felis concolor coryi.
Citrus,—Citronelle: Glaucomys volans quercesti; Odocoileus virginianus osceola.
Fort Island, near Crystal River: Sylvilagus palustris paludicolica.
Collier,—Chokoloskee, near: Procyon lotor marinus.
Everglades: Sciurus niger avicennia; Oryzomys natator floridanus.
Everglades, 10 miles northeast of: Odocoileus virginianus seminolus.
Monroe Station, 2\(\frac{1}{2}\) miles east of: Nycticeius humeralis subtropicalis.
Royal Palm Hammock: Peromyscus gossypinus telmahophilus.
Tamiami Trail (U. S. Route 41), 5 miles southeast of Royal Palm Hammock: Mustela vison evergladensis.
Dade,—Biscayne Bay, 6 miles south of Miami: Lynx floridanus.
Key Biscayne: Euarctos americanus floridanus.
Miami: Sciurus carolinensis extimus.
Miami, 21 miles west of: Neofiber allenii strux.
Miami River: Blarina brevicauda peninsulae.
Uleta: Scalops aquaticus porteri.
Duval.—St. Johns River, probably near Jacksonville: Neotoma floridana floridana.
Hillsborough,—Ancote River: Peromyscus polionotus rhoadsi.
Lee.—Captiva Island: Sigmodon hispidus insulicola.
Marion,—Lynne, near, Lynne Planting Station, U. S. Forest Service: Pitymys parvulus.
Monroe,—Big Pine Key: Sigmodon hispidus exsputus; Odocoileus virginianus cleavidum.
Cape Sable: Oryzomys palustris coloratus; Sigmodon hispidus spadicipygus.
Key Largo: Sciurus carolinensis matecumbe.
Key Largo, 12 miles northeast of Rock Harbor: Peromyscus gossypinus allapaticola.
Marathon, Key Vaca: Procyon lotor auspatus.
Torch Key, Big Pine Key group: Procyon lotor incautus.
Upper Matecumbe Key: Procyon lotor inesperatus.
Osceola,—Lake Kissimmee: Dasypus floridanus.
Palm Beach,—Canal Point: Sigmodon hispidus floridanus.
Lake Worth: Hesperomys macropus.
Ritta, Lake Okeechobee: Neofiber allenii nigrescens.
Pasco,—Hudson (14 miles north of Tarpon Springs, Pinellas County): Mustela frenata peninsulae.
Willow Oak: Reithrodontomys humulis dickinsoni.
Pinellas,—Belleair: Geomys pinetis australinus.
Tarpon Springs: Scalops aquaticus parvus; Myotis auroriparius australiparius; Eptesicus fuscus osceola; Lasiurus borealis seminolus; Urocyon cinereoargenteus floridanus.
Putnam,—Horse Landing, St. Johns River, about 12 miles south of Palatka: Canis floridanus.
Sarasota,—Chadwick Beach, near Englewood: Peromyscus gossypinus restrictus.
Englewood: Scalops aquaticus bassi.
St. Johns,—Anastasia Island, Point Romo: Scalops aquaticus anastases; Peromyscus polionotus phasma; Peromyscus gossypinus anastases.
Matanzas Inlet, salt marsh off: Mustela vison lutensis.
St. Augustine: Geomys pinetis floridanus.
Volusia,—Ponce Park, near Mosquito Inlet: Peromyscus polionotus decoloratus.
Walton,—Whitfield: Peromyscus polionotus albifrons.

Georgia

No exact locality: Peromyscus polionotus polionotus.
UNITED STATES—Continued

Georgia—Continued

County:
Baldwin.—Milledgeville: *Molossus fuliginosus.*
Camden.—Arnot Plantation, about 4 miles west of St. Mary’s: *Geomys colonus.*
Cumberland Island: *Peromyscus insulanus.*
Stafford Place, Cumberland Island: *Geomys cumberlandius.*
Chatham.—Savannah, about 7 miles north-west of: *Geomys fontanelus.*
Glynn.—St. Simon Island: *Procyon lotor litoreus.*
Liberty.—Le Conte plantation near Riceboro, probably: *Myotis lucifer*; *Corynorhinus concolor*; *Ta
darida cynocephala*; *Peromyscus gossypinus*; *Pitymys pinetinus*.
Lumpkin.—Blood Mountain: *Neotoma floridana haematorea.*
McIntosh.—Blackbeard Island: *Odocoileus virginianus nigrarbis.*
Richmond.—Augusta, pine barrens near: *Geomys taza taza.*
Screven.—Pine woods, no definite locality: *Geomys pinetis pinetis.*
Hrusman Lake: *Peromyscus subgriseus arenarius.*

Idaho

County:
Adams.—New Meadows: *Citellus brunnneus.*
Smith Mountain, summit of, near head of Bear Creek, Seven Devils Mountains: *Ochotona princeps howelli.*
Bannock.—Pocatello: *Lepus californicus depressius; Thomomys townsendii similis.*
Bear Lake.—Copenhagen Basin, north rim of: *Ochotona princeps clamosa.*
Montpelier Creek, about 10 miles northeast of Montpelier: *Thomomys talpoides pygmaeus.*
Raymond: *Glaucomys sabrinus bangsi.*
Benewah.—Benewah: *Mustela erminea invicta.*
Bingham.—Blackfoot: *Onychomys leucogaster brevicaudus.*
Snake River, west side of, near Blackfoot: *Eutamias minimus melanurus.*
Blaine.—Big Wood River, near Bellevue: *Castor canadensis taylori.*
Sawtooth (Alturas) Lake, east base of Sawtooth Mountains: *Sorex dobsoni; Glaucomys bullatus; Clethrionomys gapperi idahoensis; Microtus longicaudus mordax.*
Bonner.—Coblin, Priest Lake: *Odocoileus virginianus ochrurus.*
Butte.—Big Lost River, lower part of: *Citellus mollis pessinus.*
Echo Crater, Craters of the Moon National Monument, 20 miles southwest of Arco, Snake River Desert: *Ochotona princeps goldmani; Perognathus parvus idahoensis.*
Grassy Cone, Craters of the Moon National Monument, 26 miles southwest of Arco, Snake River Desert; *Eutamias amoena cratericus.*
Canyon.—Nampa: *Thomomys nevadensis atrogriseus; Thomomys townsendii townsendii.*
Clearwater.—Jim Ford Creek, about 7 miles northeast of mouth of Lolo Fork of Clearwater River: *Citellus columbianus columbiaus.*
Lower Clearwater River, Canp Chopunnish, near mouth of Jim Ford Creek: *Euarctos americanus cinnamomum.*
Custer.—Big Lost River, head of: *Tamiascurus hudsonicus richardsoni.*
Double Springs, 16 miles northeast of Dickey: *Citellus richardsonii aureus.*
Mill Creek, 14 miles west of Challis: *Peromyscus maniculatus serratus.*
Pahsimeroi Mountains, head of Pahsimeroi River: *Microtus richardsoni macropus; Microtus montanus nanus.*
Pahsimeroi Valley, near Goldburg: *Sylvilagus idahoensis.*
Summit Creek, in mountains at head of Big Lost River: *Thomomys talpoides fuscus.*
Fremont.—Teton River, north fork of: *Ursus idahoensis.*
Jerome.—Shoshone Falls, north side of Snake River: *Peromyscus crinitus crinitus.*
Kootenai.—Coeur d’Alene: *Eutamias ruficaudus simulans.*
Latah.—Cedar (Moscow) Mountain: *Lepus americanus pineus.*
Lemhi.—Birch Creek, 10 miles south of Nicholia: *Citellus townsendii artemisiae; Thomomys talpoides idahoensis.*
Timber Creek, Lemhi (Salmon River) Mountains, 10 miles west of Junction: *Sorex idahoensis; Sorex obscurus obscurus; Ochotona princeps lemhi.*
UNITED STATES—Continued

Idaho—Continued

Timber Creek, near head of, Salmon River Mountains: Phenacomys orophilus.


Owyhee.—Castle Creek, 8 miles south of Oreana: Thomomys townsendii owyhenisis.

Murphy, in hills west of Snake River: Citellus leuromon.

Murphy, 5 miles southeast of: Dipodomys microps idahoensis.

Payette.—Payette, at junction of Payette and Snake Rivers: Citellus townsendii idahoensis; Reithrodontomys megalotis nigrescens.

Valley.—Warm Lake, 5 miles east of: Zapus princeps idahoensis.

Illinois

No exact locality: Sciurus rubicadatus.


COUNTY:

Kankakee.—Momence, 1 mile south of: Geomys bursarius illinoensis.

Mason.—San Jose: Mephitis mephitis avia.

McLean.—Bloomington: Peromyscus maniculatus bairdii; Synaptomys cooperi saturatus.

Union.—Wolf Lake: Neotoma floridana illinoensis.

Indiana

Wabash River Valley: Sorex cinereus lesueurii.

COUNTY:

Crawford.—Wyandotte Cave: Myotis sodalis.

Posey.—New Harmony: Cryptotis parva harlani; Pedomys ochrogaster ochrogaster; Hesperomys indiansus.

Iowa

COUNTY:

Wright.—Clarion, near: Taxidea taxus iowae.

Kansas

Northeastern Kansas, no exact locality: Sciurus macroura.

COUNTY:

Barber.—Sun City, 7 miles south of: Antrozous bunkerii.

Douglas.—Lawrence: Reithrodontomys megalotis dychei.

Lawrence, 7 miles southwest of: Marmota monax bunkerii.

Lawrence, 5½ miles north and 1¾ miles east of: Zapus hudsonius pallidus.

Wakarusa Creek: Odocoileus virginianus macrourus.

Hamilton.—Coolidge, 1 mile east of, Cord Farm: Perognathus flavus bunkerii.

Lane.—Pendennis: Citellus tridecemlineatus arenicola; Neotoma floridana campestris.

Leavenworth.—McLouth, 4 miles southwest of: Taxidea taxus kansensis.

Meade.—Fowler, 1½ miles north of: Geomys bursarius industrius; Pedomys ochrogaster taylori.

Meade County State Park, 14 miles southwest of Meade: Synaptomys cooperi paludis.

Montgomery.—Independence: Lepus californicus melanotis.

Riley.—Manhattan: Scalopus aquaticus machrinoides.

Trego.—Banner, near, Hackberry Creek, about 1 mile from Castle Rock: Vesperililio ciliolabrum.

Benson.—Perognathus hispidus paradoxus; Taxidea taxus merriami.

Wakeeny: Ondatra zibethicus cinnamominus.

Woodson.—Neosho Falls: Synaptomys cooperi gossii.

Kentucky

No exact locality: Nycticeius humeralis humeralis.

Pine barrens, no exact locality: Peromyscus leucopus leucopus.

COUNTY:

Fayette.—Lexington, near: Scalopus aquaticus machrinus.

Harlan.—[Big] Black Mountains, 4½ miles southeast of Lynch: Clethrionomys gapperi maurus.

Pulaski.—Eubank: Pitymys pinetorum carbonarius.

Louisiana

No exact locality: Euarchontos americanus luteolus; Mephitis mephitis mesomelas.

PARISH:

Acadia.—Cartville: Mephitis mephitis ochrogaster; Pecosius cooperi gossii.

Calcasieu.—Iowa: Pedomys ludovicianus.
United States—Continued

Louisiana—Continued

Concordia.—Vidalia, 12 miles southwest of: Felis arundinava.
East Baton Rouge.—Comite River, 13 miles northeast of Baton Rouge: Blarina brevicauda miniua.
University Campus, near Baton Rouge: Myotis auroriparius gatesi.
Iberia.—Avery Island, near: Odocoileus virginianus melvhenyi.
Marsh Island: Procyon lotor megalodous.
Iberville.—No exact locality: Scirius niger subauratus.
Lafayette.—Lafayette: Reithrodontomys fulvescens aurantiu.s.
Madison.—Mack’s Bayou, 3 miles east of Tensas River, 18 miles southwest of Tallulah: Canis niger gregoryi.
Morehouse.—Mer Rouge: Odocoileus virginianus louisianae.
Prairie Mer Rouge: Geomys bursarius breviceps.
Natchitoches.—Red River: Scirius niger ludovicianus.
Orleans.—New Orleans: Scirius corolinensis fulginosus; Scirius auduboni.
Plaquemines.—Burbridge: Peromyscus gossypinus nigricalus; Ondatra zibethicus rivalicus; Mustela vison vulgivuga.
St. James.—Remy: Mustela frenata arthuri.
Terrebonne.—Gibson: Neotoma floridana rubida.
Houma: Sylvilagus aquaticus littoralis.
Washington.—Enon, 10 miles northwest of: Scirius niger bachmani.
West Feliciana.—Tunica, 5 miles south of: Tamias striatus pipilans.

Maine

COUNTY:

Cumberland.—Casco Bay, near Portland: Lagenorhynchus gubenerator.
Flagg Island, Casco Bay: Lutraola vison antiqua.s.
Hancock.—Brooklin, shell heaps at: Mustela macrodon.
Bucksport, near mouth of Penobscot River: Mustela frenata occisor; Odocoileus virginianus borealis.
Mount Desert Island: Zapus hudsonius hardyi.
Tumble Down Dick Island, near Long Island, Penobscot Bay: Microtus pennsylvanicus shattucki.
Piscataquis.—Greenville, near Moosehead Lake: Tamiasciurus hudsonicus gymnica.

Maryland

No exact locality: Marmota monax monax; Mustela vison mink; Mephitis mephitis nigra.

COUNTY:

Dorchester.—No exact locality: Scirius niger bryanti.
Blackwater National Wildlife Refuge: Procyon lotor maritimus.
Prince Georges.—Beltsville, near: Sorex cinereus fontinalis.

Massachusetts

Woods Hole or Cape Cod: Lagenorhynchus perspicillatus.

COUNTY:

Barnstable.—Monomoy Island: Peromyscus leucopus annamodyes.
Berkshire.—Williamstown: Mustela frenata noveboracensis.
Dukes.—West Tisbury, Martha’s Vineyard Island: Blarina brevicauda alaqa; Peromyscus leucopus fusus.
Middlesex.—Wilmington: Marmota monax preblorum.
Nantucket.—Muskeget Island, off Nantucket: Microtus breweri.
Nantucket Island: Blarina brevicauda compacta.

Michigan

No exact locality: Peromyscus maniculatus gracilis.

COUNTY:

Keweenaw.—Belle Isle, Isle Royale: Tamiasciurus hudsonicus regalis.
Lake.—Tahquamenon [Taquamenon] River, 5 miles above falls: Castor canadensis michiganensis.
Presque Isle.—Millersburg, 3 miles southeast of, Barnhard Lake: Tamias striatus peninsulae.

Minnesota

No exact locality: Mephitis minnesota.e.
Central Minnesota, no exact locality: Citellus tridecimlineatus tridecimlineatus.
TYPE LOCALITIES

UNITED STATES—Continued

Minnesota—Continued

County:
Clay.—Moorhead: Tamiasciurus hudsonicus marit.
Hennepin.—Fort Snelling: Sylvilagus floridanus mearnsii; Tamias striatus griseus; Tamiasciurus hudsonicus minnesota; Peromyscus leucopus minimus; Mustela frenata spadix.

Kittson.—Hallock: Lepus americanus pheonotus; Odocoileus virgultus.

Sherburne.—Elk River: Sorex arcticus laricorum; Marmota monax rufescens; Scirius carolinensis hypophaeus; Geomys bursarius bursarius; Vulpes fulva regalis; Procyon lotor hirtus; Mustela erminea bangsi; Mustela vison letifera.

Mississippi

County:
Adams.—Washington: Pitmys pinetorum auricularis.

Missouri

County:
Jasper.—Avilla, 5 miles northeast of: Mustela frenata primulina.

Vernon.—Stotesbury: Citellus tridecemlineatus badius.

Montana

County:
Beaverhead.—Dillon, 35 miles south of: Taxidea taxus montana.

Big Horn.—Fort Custer: Peromyscus leucopus aridulus.

Little Bighorn River, about 1½ miles above Fort Custer: Sorus merriami merriami.

Carbon.—Little Bighorn River, head of: Bighorn Mountains: Ursus abarokus.

Red Lodge: Canis lupus irresolutus.

Sage Creek, head of, Pryor Mountains: Thomomys talpoides poryri.

Cascade.—Great Falls, near: Neotoma cinerea cinerea.

Custer.—Calf Creek: Peromyscus maniculatus osgoodi.

Dawson.—Camp Thorne, near Glendive, Yellowstone River: Eutamias minimus pallidus.

Glendive: Microtus pennsylvanicus walthama.

Deer Lodge.—No exact locality: Peromyscus texanus subarcticus.

Flathead.—Chief Mountain (Waterton) Lake: Ochotona princeps levis.

Summit Mountain, north of Summit Station: Eutamias minimus oreocetes.

Glacier.—St. Mary Lake: Phenacomys intermedius levis.

Upper St. Mary Lake: Eutamias rufocaudus rufocaudus.

Upper St. Mary Lake, mountains near: Marmota caligata nivaria.

Lewis and Clark.—Helena: Citellus lateralis cinerascens.

Mineral.—Silver, near Saltse, Coeur d'Alene Mountains: Thomomys talpoides saturatus.

Missoula.—Missoula: Oreamnos americanus americanus.

Sleeman Creek, about 10 miles southwest of Missoula: Felis concolor missoulen-sis.

Park.—West Boulder Creek, Absaroka Mountains, 18 miles southeast of Livingston: Thomomys talpoides kelloggi.

Powder River.—Powderville: Thomomys talpoides bullatus.

Kavalli.—Bass Creek, near Stevensville: Eutamias amoenus vallicola.

Gird Creek, near Hamilton: Thomomys talpoides confinis.

Hamilton, 6 miles east of: Microtus montanus pratinculus.

Willow Creek, 7 miles east of Corvallis: Marmota flaviventris nosophora.

Richland.—Yellowstone River, mouth of: Citellus tridecemlineatus pallidus.

Roosevelt.—Fort Union: Sorex cinereus haydeni.

Rosebud.—Yellowstone River, 5 miles west of Forsyth: Dipodomys ordii terrosus.

Sweet Grass.—Big Timber Creek, near head of, about 15 miles northwest of Big Timber, Crazy Mountains: Thomomys talpoides trivialis.

Valley.—Missouri River, a little above mouth of Poplar River: Ursus horribilis horribilis.

Nebraska

County:
Antelope.—Neligh: Scalopus aquaticus caryi.

Boyd.—Spencer: Geomys bursarius levisagittalis.

Brown.—Johnstown: Canis latrans nebracensis.
UNITED STATES—Continued

Nebraska—Continued

Cherry.—Kennedy: Perognathus flavescens flavescens; Reithrodontomys dypehi nebrascensis; Peromyscus lutescens.
Kennedy, 18 miles northwest of: Reithrodontomys montanus albescens.
Valentine: Sylvilagus floridanus similis; Neotoma floridana baileyi.
Cheyenne.—Duluth, 2 miles south of: Thomomys talpoides cheyennensis.
Cuming.—Beemer: Mustela rixosa campesiris.

Dawes.—Chadron: Perognathus flavescens olivaceogriseus.
Chadron, 10 miles south of: Geomys bursarius hylaecus.
Wayside: Thomomys talpoides pierreiculus.
Dawson.—50 miles west of Fort Kearney: Citellus spilosoma obsoletus.
Lancaster.—Lincoln: Geomys bursarius majuscus.
Lincoln.—Birdwood Creek, sandhills on: Geomys bursarius lutescens.
Merrick.—Palmer, 6 miles northeast of: Bison bison septemtrionalis.
Otoe.—Nebraska City: Glaucomyys volans nebrascensis.
Scotts Bluff.—Mitchell, 3 miles east of: Erethizon dorsatum bruneri.
Scottsbluff: Geomys bursarius vinaceus.
Seward.—Lincoln Creek, west of Seward: Lutra canadensis interior.
Sheridan.—Deer Creek: Peromyscus maniculatus nebrascensis.
Washington.—Engineer Cantonment, near Blair, west bank of Missouri River: Blarina brevicauda brevicauda; Cryptotis parva parva; Canis latrans latrans; Canis lupus nubilus.

Nevada

COUNTY:
Churchill.—Dixie Meadows, south end of Humboldt Salt Marsh: Thomomys bottae depressus.
East Gate: Thomomys bottae lucrificus.
Fallon: Ondatra zibethicus miersii.
Mountain Well: Microdipodops pallidus pallidus.
Clark.—Bunkerville, 7 miles above, sand flats along Virgin River: Perognathus penicillatus sobrinus.

Charleston Peak, Charleston Mountains: Eutamias palmeri; Neotoma cinerea lucida.
Charleston Peak, north base of, Charleston Mountains: Citellus lateralis certus.
El Dorado Canyon: Bassariscus astutus nevadensis.
Hidden Forest, Sheep Mountains: Eutamias quadrivittatus nevadensis; Thomomys bottae phelloeocanus.
Mormon Well, Sheep Mountains: Eutamias dorsalis grinnelli.
Wheeler Well, ½ mile west of, Charleston Mountains (Peak): Eutamias panumintinus juniperus.
White Sage Flat, between Desert Range and Sheep Range, Desert Game Range: Taxidea taxus halli; Taxidea taxus nevadensis.

Douglas.—Carson Valley: Citellus mollis washoensis.
Gardnerville: Peromyscus crinitus scutulus.

Elko.—Deeth, near Humboldt River: Lutra canadensis naxa.
Halleck, East Humboldt Valley: Perognathus longimembri nevadensis; Microdipodops megacephalus megacephalus.
Pilot Peak, ½ mile west of Debs Creek: Peromyscus truei nevadensis.
Ruby Mountains: Zapus princeps nevadensis.
Ruby Mountains, southwest of Ruby Valley Post Office: Ochotona princeps nevadensis.

Esmeralda.—Arlemont (Chiatovich Ranch), Fish Lake Valley: Thomomys bottae lacrymalis.
Clayton Valley, 8 miles southeast of Blair: Microdipodops megacephalus lucidus.
Mount Magruder: Perognathus parvus magruderensis.
Pigeon Spring, Mount Magruder: Lagurus curtatus curtatus.

Eureka.—Evans: Thomomys townsendii elkoensis.
Romano, 4 miles southeast of, Diamond Valley: Dipodomys microps centralis.
Humboldt.—Big Creek, head of, Pine Forest Mountains: Citellus lateralis trepidae; Eutamias amoenus celeris; Lagurus curtatus intermedius; Zapus princeps curtatus.
Fish Spring Valley, 2 miles southeast of Tulle Peak: Thomomys bottae abstrusus.
Greenmonster Canyon, Monitor Mountains: Ochotona princeps tutelata.
Jefferson, Toquema Range: Marmota flaviventris parvula.
Kawich Post Office, 5 miles southeast of, Kawich Valley: Microdipodops megacephalus subulonis; Microdipodops pallidus rufocollaris.
Milman Ranch, Moores Creek, 19 miles southeast of Millett Post Office: Thomomys bottae fuscus.
Mount Jefferson, south slope of, Toquema Range: Thomomys bottae vescus.
Oasis Valley: Reithrodonotomys megalotis desertii.
Potts Ranch, Monitor Valley: Thomomys bottae concisor.
Railroad Valley, Able Spring, 12½ miles south of Lock's Ranch: Microdipodops pallidus ammophilus.
San Antonio: Thomomys bottae curtatus.
Toyabe Mountains, near Cloverdale: Canis latrans lestes.
Wisconsin Creek, Toyabe Mountains: Microtus longicaudus latus; Zapus princeps palatinus.
Pershing.—Lovelock: Microtus montanus undosus.
Vernon, 3 miles south of: Microdipodops megacephalus medium.
Washoe.—California Boundary, 6 miles east of, lat. 40° 28' E.: Perognathus formosus melanurus.
Deep Hole, north end of Smoke Creek Desert: Thomomys bottae canus.
Pyramid Lake: Dipodomys merriami nevadensis.
White Pine.—Baker, 3 miles east of: Mustela frenata nevadensis.
Baker, 2½ miles east of: Thomomys bottae centralis.
Cherry Creek: Thomomys bottae latus.
Spring Valley, Cleveland Ranch: Microtus montanus microps.
Smith Creek Cave, ½ mile south of, Mount Moriah: Perognathus longimembris gulosus.
Smith Creek Cave, 2 miles west of, Mount Moriah: Perognathus formosus incolatus.

New Hampshire

Carroll.—Jackson: Synaptomys cooperi cooperi.
UNITED STATES—Continued

New Hampshire—Continued

Cheshire.—Marlboro, 7 miles from Monadnock: Urocyon cinereoargenteus borealis.

Coos.—Alpine Garden, near head of Tuckerman’s Ravine, Mount Washington: Clethrionomys gapperi ochraceus.

Fabyans, Mount Washington: Synaptomys borealis sphagnicola.

Tuckerman’s Ravine, head of, Mount Washington: Microtus chrotorrhinus chrotorrhinus.

Grafton.—Profile Lake, Franconia Mountains: Sorex palustris albibarbis.

New Jersey

New Jersey and Delaware: Fiber niger.

County:


Cape May.—Tuckahoe River, east of Tuckahoe: Sorex cinereus nigrilatus.

Cumberland.—Maurice River, mouth of: Globicephalus brachypterus.

Ocean.—Tuckerton, near: Sciurus hiemalis.

Salem.—Salem, near, Fast Land: Oryzomys palustris palustris.

New Mexico

County:

Bernalillo.—Albuquerque: Citellus spilosoma major; Cratogeomys castanops hirtus.

Clawson Dairy, 5 miles north of Albuquerque: Thomomys bottae connectens.

Catron.—Glenwood, on Rio San Francisco, Mogollon Mountains: Citellus variegas tus juglans.

S. A. Creek, 10 miles northwest of Luna: Canis lupus mogollonensis.

Willow Creek, Gila River, Mogollon Mountains: Clethrionomys gapperi limitis.

Chaves.—Roswell: Cratogeomys castanops lacrimalis.

Roswell, 40 miles northwest of: Dipodomys spectabilis baileyi.

Colfax.—Rayado Canyon: Sciurus fremonti neomexicanus.

De Baca.—Fort Sumner: Sylvilagus audubonii neomexicanus.

Dona Ana.—Armstrongs Lake, Mesilla Valley: Mustela frenata neomexicana.

Baird’s Ranch, eastern side of San Andres Mountains: Vulpes macrotis neomexicana.

Kenzin, lava beds near: Perognathus intermedius ruvestris.

Eddy.—Carlsbad Cave, near, Carlsbad Caverns National Monument: Thomomys pectoralis.

Eddy, near Carlsbad: Perognathus merriami gilius; Ondatra zibethicus ripensis.

Grant.—Cactus Flat, 20 miles north of Cliff: Sylvilagus audubonii cedrophilus.

Fort Webster, Gila River, near Santa Rita: Eutamias dorsalis dorsalis.

Granite Gap: Sitomys rowleyi pinalis.

Santa Rita, old copper mines near: Euartos americanus ambyceptors; Ursus horariaeus.

Guadalupe.—Santa Rosa: Pipistrellus hesperus santarosae; Dipodomys ordii medius.

Hidalgo.—No exact locality, southwest corner: Neotoma intermedia angusticeps.

Animas Peak, Animas Mountains: Thomomys umbrinus emotus.

Camp Apache, Big Hatchita [Hatchet] Mountains: Perognathus obscurus; Peromyscus eremicus anthonyi.

Carrizalillo Mountains, near Mexican boundary monument No. 31: Sylvilagus rigidus.

Dog Mountains, summit of: Odocoileus hemionus crooki.

Dog Spring: Pipistrellus hesperus maximus.

Gray Ranch, Animas Valley: Thomomys baileyi mearnsi.

Mexican boundary monument No. 40, near: Sigmodon minimus minimus.

West Fork of Playas Valley, near Mexican boundary monument No. 63: Lepus gailhardi gailhardi.

Lincoln.—Carrizozo, 4 miles west of: Neotoma mexicana atrata.

Corona: Thomomys bottae actuosus.

French’s Ranch, 12 miles northwest of Carrizozo: Citellus variegas tus tularose.

Malpais, 3½ miles west of Carrizozo: Peromyscus nasutus griseus.

Malpais Spring, Malpais lava beds near Carrizozo: Neotoma albigua melas.

Ruidoso: Thomomys bottae ruidosae; Onychomys leucogaster ruidosae.

Ruidoso, White Mountains near: Myotis baileyi.
UNITED STATES—Continued

New Mexico—Continued

Ruidoso Creek, Forks of: Tamiasciurus hudsonicus lychnuchus.
Ruidoso Creek, 6 miles below Ruidoso: Castor canadensis mexicanus.
McKinley.—Chuska Mountains: Sciurus aberti chusensis.
Fort Wingate: Peromyscus truei truei.
Wingate: Vesperillocus nitidus henshawi; Cynomys gunnisoni zueniensis.
Mora.—Hall Peak, at south end of Cimarron Mountains: Sciurus aberti minus; Thomomys bottae cutellus.
Mora River, near Mora: Odocoileus macrotis.
Otero.—Cloudcroft: Sorex obscurus neomexicanus.
Cook Ranch, ½ mile west of Tularosa: Thomomys baileyi tularosae.
Elk Valley, Mescalero Indian Reservation, Sacramento Mountains: Citellus tridecemlineatus hollisteri.
Malpais Spring, 15 miles west of Three Rivers: Perognathus intermedius ater.
Peñasco Creek, Sacramento Mountains, 12 miles east of Cloudcroft: Eutamias minimus atristriatus.
Tularosa, 9 miles west of: Geomys arenarius brevirostris.
White Sands, 12 miles southwest of Alamogordo: Perognathus apache gypsi.
White Sands, 10 miles west of Point of Sands, White Sands National Monument: Neotoma micropus leucophaea.
Rio Arriba.—Espanola: Thomomys bottae pervagus; Zapus luteus luteus.
Lake La Jara, Jicarilla Apache Indian Reservation: Thomomys bottae apache.
Sandoval.—Goat Peak at head of Santa Clara Peak, Jemez Mountains: Ochotona princeps nigrescens.
San Juan.—Aztec: Microtus pennsylvanicus aztecus.
Blanco: Dipodomys spectabilis clarenci.
Chuska Mountains: Neotoma mexicana inopinata.
Laplata: Reithrodontomys megalotis aztecus.
Santa Fe.—Pecos Baldy [Baldy Peak]: Ochotona princeps inanca.
Sierra.—Las Palomas, on Rio Grande: Thomomys bottae opulentus.
Las Palomas, 7 miles north of, at hot springs: Sigmodon hispidus goldmani.
Socorro.—Magdalena Mountains, Copper Canyon: Eutamias cinereicollis cineurus.
San Pedro: Eutamias quadrivittatus gracilis.
Socorro: Zapus luteus australis.
Taos.—Twining: Clethrionomys gapperi gauti.
Twining, 5 miles south of, Taos Mountains: Myotis volans interior.
Twining, 5 miles south of, west base of Wheeler Peak: Marmota flaviventris obscura.
Torrence.—Tajique, near summit of Manzano Mountains: Sylvilagus floridanus cognatus.
Union.—Clapham: Onychomys leucogaster arcticeps.
Valencia.—Bill Porter’s Ranch, 8 miles southeast of Paxton: Thomomys bottae morulus.
Cebolleta (Seboyeta Post Office), ½ mile north of: Thomomys bottae paguatae.
Mount Taylor, canyon on, 12 miles east of San Mateo: Ursus perturbans.
Mount Taylor, 6 miles northeast of summit of, near Fernandez summer camp: Thomomys talpoides taylori.
San Mateo, 1½ miles southwest of: Thomomys bottae planorum.
Shuman’s Ranch, 30 miles south of Grants: Thomomys bottae collis.

New York

No exact locality: Lasiusurus borealis borealis; Vesperillocus noveboracensis; Perognathus leucopus noveboracensis; Mustela pusilla; Lynx rufus rufus.
Long Island: Pitymys pinctorum scolopoides.
Whitestown, north of, probably western Adirondack region: Alces alces americanus.

County:

Essex.—Beedes (sometimes called Keene Heights): Sorex dispar.
Greene.—Hunter Mountain, Catskill Mountains: Glaucomys sabrinus macrotis.
Madison.—Peterboro: Sorex fumeus fumeus; Sitomys americanus canadensis.
Nassau.—Long Island Sound, near Sands Point: Phoca vitulina concolor.
Suffolk.—Great Gull Island, off Long Island: Microtus nesophilus.
Warren.—Lake George: Pipistrellus subflavus obscurus.
UNITED STATES—Continued

New York—Continued

Westchester.—Merrills Corners, 4 miles east of Ossining: Tamias striatus fisheri.

North Carolina

County:
Buncombe.—Weaverville: Mustela neovaroracensis notius.
Carteret.—Beaufort Harbor: Mesoplodon mirus.
Currituck.—Currituck: Microtus pennsylvanicus nigrans.
Macon.—Highlands: Tamiasciurus hudsonicus abieticola.
Mitchell.—Roan Mountain: Blarina brevicauda churchi; Peromyscus maniculatus nubiterrae; Clethrionomys gapperi carolinensis; Napaeozapus insignis roanensis.
Stokes.—Dan River, near Danbury: Castor canadensis carolinensis.
Swain.—Smokemont, about 5 miles north of, Great Smoky Mountains: Microtus chrotoorrhinus carolinensis.
Wake.—Raleigh: Sylvilagus floridanus mallurus.

North Dakota

County:
Bottineau.—Bottineau, Turtle Mountains: Pedomys ochrogaster minor.
Burleigh.—Apple Creek, 7 miles east of Bismarck: Castor canadensis missouriensis.
McHenry.—Upham, 8 miles east of: Tamiasciurus hudsonicus pallescens.
Mountrail.—White Earth River: Odocileus virginianus dacotensis.
Oliver.—Mandan Indian Village, near Fort Clark: Onychomys leucogaster leucogaster.
Minnetaree Village, now Old Fort Clark, about 6 miles south of Stanton: Thomomys talpoides rufescens.
Pembina.—Pembina: Sorex pachyurus; Arvicola cinnamomea.
Rolette.—Mill Lake, Turtle Mountains: Lepus bishopi.
Traill.—Portland: Clethrionomys gapperi loringi.
Williams.—Fort Buford: Lagurus curtatus pallidus.
Fort Union, near Buford: Perognathus fasciatus fasciatus; Onychomys leucogaster missouriensis; Gulo haidri.

Ohio

County:
Belmont.—Cat Run: Zapus hudsonius rafinesquei.
Cuyahoga.—Hunting Valley: Sorex cinereus ohiensis.
Erie.—No exact locality: Myotis subulatus lebii.
Geauga.—Chesterfield Caves, Chester Township: Tamias striatus rufescens.
Hamilton.—Cincinnati: Tamias striatus ohionensis.
Lake.—Hollen Arboretum, Kirtland Township, Lake County, and Chardon Township, Geauga County (county line bisects type locality): Blarina brevicauda kirtlandi.
Lawrence.—Symmes Creek, 2 miles north of Chesapeake: Pedomys ochrogaster ohionensis.
Seneca.—Bettsville: Cryptotis parva classon; Zapus hudsonius brevipes.

Oklahoma

County:
Adair.—Stillwell: Scalopus aquaticus aereus; Tamias striatus venustus; Peromyscus bellus; Pitymys pinetorum nemoralis.
Stillwell, Boston Mountains: Sylvilagus floridanus alacer.
Canadian.—Fort Reno: Onychomys leucogaster brevioratus.
Cimarron.—North Beaver Creek (North Canadian River): Neotoma micropus canescens.
Cleveland.—Noble: Perognathus hispidus maximus.
South Canadian River, 2½ miles south of Norman: Dipodomys ordii oklahomae.
Harper.—Beaver (North Canadian) River, one of sources of: Dipodomys ordii richardsoni.
Murray.—Dougherty: Blarina brevicauda halophaga; Sylvilagus fulva; Reithrodontomys chrysotis.
Muskogee.—Fort Gibson: Geomys bursarius dutcheri.
Osage.—Okesa: Neotoma floridana osagensis.
Payne.—Cimarron River, about 100 miles west of Fort Gibson: Canis latrans frustror.
Woods.—Alva: Scalopus aquaticus intermedius.
Oklahoma—Continued

Alva, 3 miles west of: Neotoma macropus surberi.
White Horse Spring: Cynomys pyrotrichus.

Oregon

Columbia River, no exact locality: Corynorhinus rafinesi townsendii.
Columbia River, banks of, below The Dalles, in Oregon or Washington: Canis lupus fuscus.
Columbia River, banks of: Citellus beecheyi douglasii.
North Pacific Ocean, approximately 500 miles off mouth of Columbia River: Lissodelphis borealis.

Willamette River Valley: Odocoileus virginianus leucurus.

County:
Baker.—Homestead: Citellus lateralis connectens.
Pine Creek, head of, near Cornucopia, Wallowa Mountains: Ochotona princeps jewetti.
Clackamas.—Ely, near Oregon City, Willamette Valley: Thomomys monticola oregonus.
Mount Hood: Aplodontia rufa rufa.
Clatsop.—Astoria, mouth of Columbia River: Sorex trowbridgii trowbridgii.
Astoria: Sorex obscurus bairdi; Sorex bendirii palmeri; Microtus oregoni oregoni.
Netul River (now Lewis and Clark River) near Astoria: Lynx rufus fasciatus.

Columbia.—Lower Columbia River, near lower mouth Willamette River: Eutamias townsendii townsendii.
St. Helens, near: Glaucomys sabrinus oregonensis.

Coos.—Marshfield: Eutamias townsendii littoralis; Phenacomys longicaudus.
Crook.—Crooked River, 12 miles south and 6 miles east of Prineville: Peromyscus truei preblei.

Curry.—Gold Beach, near mouth of Rogue River: Thomomys monticola hellertii; Peromyscus perimekurus.
Pistol River (town), 1½ miles south of: Thomomys bottae detumidus.

Deschutes.—Farewell Bend, Deschutes River: Thomomys monticola nasicus.
Douglas.—Drew, 5 miles southeast of: Canis latrans umpquensis.

Fort Umpqua, mouth of Umpqua River:
Sorex pacificus pacificus; Neotoma cinerea fusca.

Gardiner: Neotoma fuscus apicalis.
Roseburg: Spilogale gracilis latifrons.

Grant.—Canyon City, 12 miles south of:
Lepus americanus oregonus.

Harney.—Malheur Lake: Bison bison oregonus.
Narrows, Malheur Lake: Dipodomys microps preblei.

Wild Horse Creek, 4 miles northwest of Lake Alvord, Alvord Desert: Microdipodops megacephalus oregonus.

Hood River.—Mount Hood: Marmota flaviventris flaviventris; Sciurus douglasi cascadensis.

Jackson.—Ashland: Sorex trigonirostris.
Brownsboro: Dipodomys heermanni gabrielsoni.
Prospect, upper Rogue River Valley: Clethrionomys occidentalis obscurus; Zapus trinotatus pacificus.
Siskiyou: Mustela frenata saturata.
Josephine.—Grants Pass, Rogue River Valley: Thomomys bottae leucodon; Neotoma fuscipes monochoura; Bassariscus flavus oregonus; Mustela frenata oregonensis.

Klamath.—Anna Creek, near Crater Lake, Mount Mazama: Thomomys monticola mazama.

Crater Lake, Mount Mazama: Scapanus alpinus; Clethrionomys occidentalis mazama; Zapus trinotatus montanus.

Fort Klamath: Scapanus latimanus dilatus; Eutamias amoenus amoenus; Glaucomys sabrinus klamathensis; Mephitis mephitis major.

Fort Klamath, mountains near: Citellus lateralis chrysodeirus.

Glacier Peak, Crater Lake: Microtus oregoni bairdi.

Swan Lake Valley, Klamath Basin: Citellus beldingi oregonus.

Williamson River, near, 18 miles southeast of Fort Klamath: Sorex bendirii bendiri.

Wood River, head of, near Fort Klamath: Lepus americanus klamathensis.

Lake.—Ilart Mountain, Warner Mountains: Antilocapra americana oregona.

Warner Mountains: Zapus princeps major.
Oregon—Continued

Lane.—Florence: *Ondatra zibethicus occipitalis.*
Seaton (Mapleton), near mouth Umpqua River (head tide water on Siuslaw River): *Thomomys monticola niger.*
Lincoln.—Newport, south of Yaquina Bay: *Aplodontia rufa pacifica.*
Yaquina Bay: *Sorex yaquina.*
Malheur.—Ironside: *Eutamias amoenus propinquus; Onychomys leucogaster fuscogriseus; Microtus curtatus artemisiae; Mustela frenata efera.*
Jordan Valley: *Sorex preblei.*
Owyhee River, near mouth of North Fork: *Procyon lotor excelsus.*
Vale, Malheur River Valley: *Sylvilagus nuttallii nuttallii; Citellus townsendii vigilis.*
Marion.—Permilia Lake, west base Mount Jefferson, Cascade Range: *Sorex obesus permiliensis; Ochotona princeps fumosa.*
Muntonmah.—Columbia River, banks of probably near Portland: *Thomomys bulbivorus.*
Wappatoo (Sauvie) Island, Columbia River, near mouth of Willamette River: *Microtus townsendii townsendii.*
Polk.—McCoy, Willamette Valley: *Microtus montanus canicandus.*
Tillamook.—Foley Creek, tributary to Nehalem River: *Castor canadensis idoneus.*
Tillamook: *Thomomys monticola hesperus; Mustela frenata altifrontalis.*
Tillamook, 5 miles southeast of: *Phenacomys silvicola.*
Walker's Ranch, Pleasant Valley, 8 miles south of Tillamook: *Microtus longicaudus abditus.*
Umatilla.—Umatilla, mouth of Umatilla River, Plains of Columbia: *Dipodomys ordii columbianus.*
Union.—Catherine Creek, 7 miles east of Telocaset, Wallowa Mountains: *Thomomys talpoides wallowa.*
Elgin, Blue Mountains: *Zapus princeps oregonus.*
Wallowa.—Wallowa Lake: *Citellus columbianus ruficauda.*
Wasco.—Antelope: *Citellus townsendii canus.*
The Dalles: *Sylvilagus griseus griseus; Thomomys talpoides quadratus; Perognathus monticola; Perognathus parvus parvus.*

Washington.—Beaverton: *Sylvilagus bachmani ibericolor.*

Pennsylvania
No exact locality: *Procyon lotor lotor; Felis concolor couguar; Bison americanus pennsylvanicus.*
Eastern Pennsylvania, no exact locality: *Condyura cristata cristata.*

County:
Berks.—The Pinnacle: *Clethrionomys gapperi ripicola.*
Blair.—Frankstown Cave, near Hollidaysburg: *Sorex frankstounensis.*
Crawford.—Pymatuning Swamp, 4 miles west of Linesville: *Clethrionomys gapperi paludicola.*
Cumberland.—Carlisle, cave near, or near Harrisburg, Dauphin County: *Neotoma magister.*
South Mountain, near top of, some 6 miles from Pine Grove, Lewis' Cave: *Neotoma pennsylvanica.*
Dauphin.—Blue Mountains, northeast of Harrisburg: *Lepus americanus virginianus.*
Lycoming.—Drury's Run, a branch of, tributary of west branch of Susquehanna River: *Sorex palustris Jimbripes.*
Philadelphia.—Philadelphia: *Scalopus aquaticus aquaticus; Eptesicus fuscus fuscus; Lasiurus cinereus cinereus.*
Philadelphia, meadows below: *Microtus pennsylvanicus pennsylvanicus.*
Philadelphia, near: *Zapus hudsonius americanus.*
Union.—No exact locality: *Ursus arctos schwenki.*
Washington.—Beavilsille, near: *Mustela rixosa allegheniensis.*

Rhode Island

South Carolina
No exact locality: *Spilogale putorius; Lutra canadensis lataxina.*
Eastern South Carolina, no exact locality: *Blarina brevicauda carolinensis.*
Near coast, no exact locality: *Sylvilagus palustris palustris.*
South Carolina—Continued

South Carolina, probably: Sciurus cinereus; Sciurus vulgaris.
Southern South Carolina, no exact locality: Sciurus niger niger.
Upper Savannah River, no exact locality: Tamias striatus striatus.

County:
Beaufort.—Hilton Head Island: Procyn lotor solutus; Odocoileus virginianus hiltonensis.
Hunting Island: Odocoileus virginianus venatorius.
Charleston.—Bull Island: Odocoileus virginianus taurinsulae.
Charleston: Sciurus capistratus; Reithrodontomys humulis humulis; Ziphius semijunctus.
Georgetown.—Hume Plantation, swamp of Santee River (Cat Island, mouth of Santee River): Sorex longirostris longirostris.

South Dakota

Upper Missouri River, probably badlands between Cheyenne and White Rivers: Ovis canadensis auduboni.

County:
Clay.—Vermillion: Perognathus flavescens perniger.
Custer.—Custer, Black Hills: Marmota flaviventris dacota; Citellus tridecemlineatus olivaceus; Neotoma grangeri; Microtus pennsylvanicus insperatus; Microtus longicaudus longicaudus; Mustela frenata alleni.
Custer, 3 miles north of, Black Hills: Clethrionomys gapperi brevicaudus.
Folsom: Taxidea taxus dacotensis.
Squaw Creek, Black Hills: Tamiasciurus hudsonicus dakotensis.

Fall River.—Corral Draw, southeastern base of Black Hills: Neotoma cinerea rupicola.
Sheep Mountain, Big Bad Lands: Eutamias minimus cacoemus.
Pennington.—Hill City, Black Hills: Sylvilagus nuttallii grangeri.

Robert.—Lake Traverse: Onychomys leucogaster pallidus.

Stanley.—Fort Pierre: Pedomys ochrogaster haydenii.
Union.—Big Sioux River, near mouth of: Odocoileus hemionus hemionus.

Tennessee

County:
Marion.—Nickajack Cave, near Shellmound: Myotis grisescens.
Obion.—Samburg, Reelfoot Lake: Peromyscus gossypinus mississippiensis.

Texas

No exact locality: Bassariscus astutus flavus; Mephitis mephitis varianus.
Brazos River, no exact locality: Sigmodon hispidus texianus.
Guadalupe River, no exact locality: Pecari angulus angulus.
Llano Estacado, near border of New Mexico: Taxidea taxus berlandieri.
Western Texas, no exact locality: Lepus californicus texianus.

County:
Aransas.—Marano Mill, 1/2 mile west of: Blarina brevicauda plumbea.
Mustang Island, 14 miles southwest of Port Aransas: Dipodomys ordii largus.
Rockport: Scalopus aquaticus elleni; Geomys bursarius attwateri; Oryzomys palustris texensis.
Bexar.—San Antonio: Myotis velifer incaeus; Reithrodontomys montanus grisaeus; Peromyscus maniculatus pellucens.
San Antonio, 15 miles southwest of, Watson's Ranch: Perognathus mearnsi; Reithrodontomys laceyi.
San Antonio, 18 miles south of, Medina River: Sylvilagus aquaticus attwateri.
Brazoria.—Angleton, 20 miles west of: Lutra canadensis texensis.
Austin Bayou, near Alvin: Reithrodontomys montanus grisaeus; Peromyscus maniculatus pellucens.
Bernard Creek, near Columbia: Baiomys taylori subater.
Brazos.—College Station: Scalopus aquaticus cryptus.
Brewster.—Alpine: Citellus spilosoma marginatus; Thomomys baileyi spatiosus.
Boquillas, 4 miles west of: Thomomys bottae limitaris.
Chisos Mountains: Sigmodon ochrognathus ochrognathus.
Pinnacle Spring, Johnson's Ranch, Big Bend of Rio Grande: Perognathus collis popei.
Santa Helena Canyon, mouth of, Big Bend of Rio Grande: Dipodomys ordii attenuatus.
Texas—Continued

Briscoe.—Quitaque, old “F” Ranch headquarters: Sylvilagus floridanus llanensis.
Tule Canyon: Peromyscus nasutus comanche.
Cameron.—Brownsville: Didelphis marsupialis texensis; Sylvilagus simplicanus; Totu novemcinctus texianum; Liomys irroratus texensis; Perognathus merriami merriami; Oryzomys couesi aquaticus; Reithrodontomys fulvescens intermedius; Vesperimus mearnsii; Conepatus leuconotus texensis; Felis limitis.
Padre Island: Geomys personatus personatus; Dipodomys ordii compactus.
Santa Rosa stage station: Dipodomys ordii sennetti.
The Tanks, 12 miles from Point Island, Padre Island: Citellus spilosoma annectens.
Clay.—Henrietta: Dipodomys elator.
Colorado.—Cummings Creek: Castor canadensis texensis.
Concho.—No exact locality: Onychomys leucogaster longipes.
Cooke.—Gainesville: Citellus tridecemlineatus texensis; Perognathus hispidus spilotus.
Culberson.—McKittrick Canyon, Guadalupe Mountains: Thomomys bottae guadalupensis.
De Witt.—Cuero: Geomys bursarius ammobilis.
Dimmit.—Carizo Springs: Geomys personatus streckeri.
Donley.—Clarendon, 8 miles west of: Geomys bursarius major.
Duval.—San Diego: Baiomys taylori taylori.
El Paso.—El Paso: Antrozous pallidus pallidus; Sylvilagus audubonii minor; Citellus spilosoma aren; Citellus interpres; Geomys arenarius arenarius; Perognathus flavus flavus; Dipodomys merriami ambiguus; Dipodomys ordii ordii; Peromyscus eremicus arenarius.
El Paso, arid foothills 1 mile northeast of: Thomomys bottae lachguilla.
Fort Bliss, near, about 2 miles above El Paso: Notiosorex crawfordi crawfordi.
Franklin Mountains, near El Paso: Peromyscus boylii penicillatus.
Guadalupe Mountains: Eutamias cinereicollis canipes; Microtus mexicanus guadalupensis; Ovis canadensis texanus.
Rio Grande, about 6 miles above El Paso: Peromyscus leucopus tornillo; Onychomys torridus arenicola; Sigmodon hispidus pallidus.
Galveston.—Texas City, 1 mile north of: Geomys bursarius terricolis.
Grimes.—Kurten, 5 miles east of: Geomys bursarius brazensii.
Hardin.—Big Thicket, 7 miles northeast of Sour Lake: Conepatus mesoleucus telmales.
Sour Lake: Glaucomyx volans texensis.
Harris.—Clear Creek, Galveston Bay: Geomys bursarius sagittalis.
Hudspeth.—Bat Cave, 1 1/2 miles west of, Sierra Diablo: Thomomys bottae scotophilus.
Fort Hancock: Lepus texianus griseus; Perognathus penicillatus eremicus.
Sierra Blanca (Railway Station): Thomomys baileyi baileyi.
Jeff Davis.—Davis Mountains: Sylvilagus floridanus robustus; Ursus texensis texensis.
Limpia Canyon, 1 mile north of Fort Davis, Davis Mountains: Thomomys bottae limpiae; Perognathus collis.
Limpia Canyon, 16 miles north of Fort Davis: Neotoma albigna robusta.
Limpia Creek, head of, Davis Mountains: Thomomys bottae texensis.
Jefferson.—Fannett, 7 miles southwest of: Geomys bursarius ludemani.
Kerr.—No exact locality: Mustela frenata texensis.
Guadalupe River, north fork of, 15 miles west of Japonica: Thomomys bottae conflagris.
Lacey Ranch, near Kerrville: Peromyscus pectoralis laccianus; Neotoma floridana attwateri.
Turtle Creek: Peromyscus boylii attwateri; Peromyscus boylei laceyi.
Kinney.—Fort Clark (Brackettville): Morno moicus megalophylla semiculata; Lepus californicus merriami; Sylvilagus floridanus caniculans; Citellus mexicanus parvident; Geomys personatus fuscus; Peromyscus canus; Odocoileus virginianus texanus.
Las Moras Creek, Fort Clark: Procyon lotor fusiceps.
Kleberg.—Santa Gertrudis, 45 miles southwest of Corpus Christi: Canis latrans texensis.
Texas—Continued

Leon.—Centerville, 13 miles east of: Scalopus aquaticus nanus.
Liberty.—Liberty, 2 miles east of: Geomys bursarius pratincolus.
Llano.—Llano: Geomys bursarius llanensis.

Packsaddle Mountain: Citellus variagatus buckleyi.

Mason.—Mason: Geomys bursarius texensis; Spilogale leucoparia; Conepatus mesoleucus mearnsi.

Mason, probably vicinity of: Peromyscus leucopus texanus.

Matagorda.—Indianola, Matagorda Bay: Spilogale indiana.

Maverick.—Eagle Pass: Cratogeomys castanops angusticeps; Felis wiedii cooperi.
San Pedro, near Eagle Pass: Urocyon cinereoargentus texensis.

Medina.—Castroville, vicinity of, on headwaters of Medina River: Lynx rufus texensis.

Ney Cave, 20 miles north of Hondo: Tadarida texana.

Nueces.—Corpus Christi: Sylvilagus floridanus chapmani; Taxidea taxus littoralis.

Flour Bluff, 11 miles southeast of Corpus Christi: Geomys personatus maritimus.

Nueces Bay, south side of: Geomys personatus fallax.

Oldham.—Tascosa: Cratogeomys castanops perplanus.

Presidio.—No exact locality: Scalopus aquaticus texanus.

Lloyd Ranch, 35 miles south of Marfa: Thomomys bottae pervarius.

Travis.—Austin, 15 miles west of: Canis niger rufus.

Upton.—Rankin, 10 miles south of: Canis lupus monstabilis.

Val Verde.—Devils River: Scirius niger limitis.

Walker.—Huntsville: Peromyscus leucopus brevicaudus.

Webb.—Bruni Ranch, near Bruni: Felis concolor stanleyana.

Oilton, 4 miles southeast of: Geomys personatus megapothamus.

Wheeler.—Mobetiee, near: Perognathus flavescens copei.

Utah

Wasatch Mountains bordering Great Salt Lake: Vulpes fulva macroura.

Utah or Nevada, no exact locality; Simpson’s route between Camp Floyd, a few miles west of Utah Lake, Utah, and Carson City, Nevada: Neotoma lepida lepida.

County:

Beaver.—Beaver River, mouth of canyon of, about 3 miles from Beaver: Sorex merriami leucogenys.

Beaver Valley: Eutamias lectus.

Brig’s Meadows, 5 miles west of Puffer Lake: Ochotona princeps cinnamomea; Marmota flaviventris engelhardti; Eutamias quadriovittatus adsitus.

Desert Range Experiment Station, 50 miles west of Milford: Onychomys leucogaster aldousi.

Wah Wah Springs, 30 miles west of Milford: Thomomys bottae wawahensis.

Box Elder.—Dolphin Island, Great Salt Lake: Dipodomys ordii cineraceus; Dipodomys microps russeolus.

Fehlman Ranch, 3 miles north of Kelton: Thomomys bottae aureiventeris.

Gunnison Island, Great Salt Lake: Dipodomys microps alfredi; Peromyscus maniculatus gunnisoni.

Kelton: Eutamias minimus pictus; Perognathus parus olivaceus; Dipodomys microps bonnevillei.

Lynn Canyon: Castor canadensis pallidus.

Pine Canyon, 17 miles northwest of Kelton, Raft River Mountains: Thomomys talpoides gracilis; Zapus princeps cinereus.

Carbon.—Price, 1 1/2 miles north of: Dipodomys ordii sanrafaeli.

Daggett.—Manila, 19 miles south of: Zapus princeps utahensis.

Davis.—Antelope Island, Great Salt Lake: Thomomys bottae nesophilus.

Duchesne.—Antelope Canyon, 20 miles southeast of Duchesne: Peromyscus crinitus dotti.

Duchesne River, 10 miles northwest of Duchesne: Castor canadensis duchesnei.

Red Creek, 2 miles north of Fruitland: Dipodomys ordii uintensis.

Garfield.—Deer Lake, 2 miles west of: Ochotona princeps utahensis.

Mount Ellen, east slope, of, Henry Mountains: Thomomys bottae dissimilis.

Panguitch, 1 mile south of: Dipodomys ordii panguitchensis.
UNITED STATES—Continued

Utah—Continued

Grand.—Castle Valley, about 15 miles northeast of Moab: *Neotoma albignula brevicauda*.
Rock Canyon Corral, 5 miles southeast of Valley City; *Neotoma lepida sanrafaelii*.
Iron.—Brian Head, Parowan Mountains: *Ochotona princeps fusiceps; Thomomys talpoides parowanensis*.
Buckskin Valley: *Cynomys parvidens*.
Juab.—Fish Springs: *Thomomys bottae bonnevillian*.
Mount Nebo, Skyline Drive east of: *Tamiasciurus hudsonicus wasatchensis*.
Nephi: *Perognathus olivaceus amoenus*.
Trout Creek: *Dipodomys ordii celeripes*.
Kane.—Kanab: *Onychomys leucogaster melanophrys*.
Millard.—Clear Lake, east side of: *Thomomys bottae convexus*.
Oak Creek Canyon, 6 miles east of Oak City: *Thomomys bottae titius*.
Pine Valley: *Microdipodops megacephalus paulinus*.
Scipio: *Thomomys bottae contractus*.
Swasey Spring, House Mountains: *Thomomys bottae sevieri*.
Salt Lake.—Millcreek Canyon, ½ mile above lower power station: *Peromyscus boylii utahensis*.
Parleys Canyon, near Barclay, Wasatch Mountains: *Eutamias minimus consohrinus*.
Red Butte Canyon, Fort Douglas: *Castor canadensis rostralis*.
San Juan.—Bluff City (Bluff): *Thomomys bottae aureus; Peromyscus crinitus auripunctus*.
Hart’s Draw, north slope of Blue Mountains, 20 miles northwest of Monticello: *Canis lupus youngi*.
Johnson Creek, 14 miles north of Blanding: *Thomomys talpoides durrani*.
Kigalia Ranger Station, 1 mile east of: *Sciurus aberti navajo*.
Noland’s Ranch, on north side of San Juan River, 1½ miles above Four Corners: *Peromyscus boylii rowleyi; Canis latrans estor*.
Rainbow Bridge: *Perognathus longimembris arctus*.
Soldier Spring, Navajo Mountain: *Microtus mexicanus navaho*.
Sanpete.—Baldy Ranger Station, 1 mile northeast of, Manti National Forest: *Ochotona princeps moorei*.
Fairview, 1 mile south of: *Thomomys talpoides moorei*.
Manti: *Thomomys bottae levidensis*.
Salina Creek, north fork of, about 10 miles southeast of Mayfield: *Ursus utahensis*.
Sevier.—Richfield: *Thomomys bottae levis*.
Seven Mile Flat, 5 miles north of Fish Lake, Fish Lake Plateau: *Thomomys talpoides levis*.
Summit.—Bear River, near head of east fork, Uinta Mountains: *Ochotona princeps uinta*.
Black Fork, north base of Gilbert Peak, Uinta Mountains: *Eutamias quadripluatus umbrinus; Thomomys talpoides uinta*.
Kamas, 12 miles east of: *Glaucousmys sabinus lucifugus*.
Park City, Wasatch Mountains: *Citellus lateralis castanurus*.
Tooele.—Bird Island, Great Salt Lake: *Dipodomys ordii marshallii*.
Carrington Island, Great Salt Lake: *Dipodomys microps subtenuis; Neotoma lepida marshalli*.
Old Lincoln Highway, 18 miles southwest of Orr’s Ranch, Skull Valley: *Thomomys bottae robustus; Dipodomys ordii pallidus; Microdipodops megacephalus leucotis*.
Settlement Creek, Oquirrh Mountains: *Thomomys talpoides oquirrhensis*.
South Willow Creek, Stansbury Mountains: *Thomomys bottae stansburyi*.
Stansbury Island, Great Salt Lake: *Thomomys bottae minimus; Perognathus parvus plerus; Reithrodontomys megalotis ravanus; Peromyscus crinitus pergracilis; Onychomys leucogaster utahensis*.
Uintah.—Kennedy's Hole, Uncompahgre Indian Reservation, 20 miles northeast of Ouray: *Citellus tridecemlineatus parvus*.
Ouray, 1 mile southeast of, confluence of Green and White Rivers: *Neotoma cinerea macrodon*.
Paradise Park, 45 miles northwest of Vernon: *Clethrionomys gapperi uintaeensis*.
Vernal-Manila Highway, 19 miles north of Vernon: *Thomomys talpoides ravanus*.
Utah.—Camp Floyd, near Fairfield: *Citellus townsendii mollis*.
Provo: *Thomomys bottae albicaudatus; Spilogale gracilis saxatilis*. 
UNITED STATES—Continued

Utah—Continued

West Canyon, Oquirrh Range: Microtus montanus nexus.

Wasatch.—Midway: Thomomys talpoides wasatchensis.

Washington.—Beaver Dam Slope, west of Beaver Dam Mountains: Dipodomys microps woodburi.

Diamond Valley, 10 miles north of St. George: Dipodomys ordii cinderensis.

Further Water, near, Dixie National Forest, Pine Valley Mountains: Tamiasciurus hudsonicus dixiensis.

Pine Valley Mountains, 5 miles east of Pine Valley: Thomomys bottae birds-eye.

St. George: Perognathus longimembris virginis; Perognathus formosus formosus; Onychomys torridus longicaudus; Microtus montanus rivularis; Ondatra zibethicus goldmani.

Toquerville: Dipodomys merriami frematus.

Zion National Park: Thomomys bottae planirostris.

Wayne.—Hanksville: Thomomys bottae osgoodi.

Torrey: Dipodomys ordii fremonti; Microtus montanus amosus.

Weber.—Fremont Island, Great Salt Lake: Peromyscus maniculatus inclarius.

Ogden: Eutamias dorsalis utahensis; Dipodomys ordii utahensis.

Ogden, near, Wasatch Mountains: Citellus variegatus utah.

Vermont

COUNTY:

Caledonia.—Lyndon: Blarina brevicauda hooperi.

Chittenden.—Burlington: Microsorex hoyi thompsoni; Blarina angusticeps.

Virginia

No exact locality: Didelphis marsupialis virginiana; Glaucomys volans volans; Valpes fulva fulva; Odocoileus virginianus virginianus.

COUNTY:

Amelia.—Amelia: Reithrodonontmys humulis virginianus.

Amelia Court House: Peromyscus nutalli levisi.

Brunswick.—Triplet: Sigmodon hispidus virginianus.

Fairfax.—Potomac River, bank of, near Stubblefield Falls: Microsorex hoyi winnemana.

Norfolk.—Lake Drummond, Dismal Swamp: Sorex longirostris fisheri; Blarina telmolestes; Synaptomys cooperi helaeetes; Ondatra zibethicus macrodon.

Norfolk: Peromyscus nutalli nutalli.

Northampton.—Smith Island: Sylvilagus floridanus hitcheni.

Washington

Admiralty Inlet, Puget Sound: Balaenoptera davidsoni.

Puget Sound, vicinity of: Myotis volans longicrus; Phocoena vomerina.

COUNTY:

Asotin.—Rogersburg: Antrozous pallidus cantwelli.

Wickiup Spring, 23 miles west of Anatone: Eutamias amoenus albiventris.

Chelan.—Wenatchee: Thomomys talpoides badius.

Wenatchee National Forest, east slope of Cascade Mountains: Ursus chelan.

Clallam.—Boulder Lake, Olympic Mountains: Microtus morosus.

Happy Lake, Olympic Mountains: Sorex obscurus setosus; Glaucomys sabrinus olympicus; Microtus pumilus; Phenacomys olympicus.

Johnson’s Ranch, Elwha River, Olympic Mountains: Peromyscus akeleyi.

Lagune, near Port Angeles: Mephitis foetulenta.

Lake Crescent, Olympic Mountains: Euarctos americanus alitrofrontalis.

Lake Sutherland, Olympic Mountains: Spilogale olympica.

Sieg’s Ranch, Elwha River: Zapus imperator.

Soleduck (Sol Duc) River, near head of, Olympic Mountains: Marmota olympus; Eutamias amoenus caurinus; Thomomys talpoides melanops; Mustela erminea olympica.

Clark.—Vancouver, vicinity of: Scapanus townsendii; Eutamias hindei; Lupus gigas.

Columbia River, near mouth of, probably near Vancouver: Tamiasciurus douglasii douglasii; Thomomys talpoides douglasii.

Yacolt, 3½ miles east and 5 miles north of: Myotis evotis pacificus.
WASHINGTON—Continued

Columbia.—Dayton, 6 miles south-southeast of: Thomomys talpoides aequalidens.

Godman Springs, Blue Mountains: Microtus longicaudus halli.

Douglas.—Badger Mountains, 8 miles southwest of Waterville: Thomomys talpoides ericau.

Douglas: Citellus washingtoni loringi.

Farmer: Eutamias minimus griscens.

Franklin.—Pasco: Perognathus parvus columbianus.

Grant.—Neppel, 1 mile west-southwest of: Thomomys talpoides deexus.

The Potholes, 10 miles south of Moses (Neppel) Lake: Microtus pennsylvanicus kincaidi.

Grays Harbor.—Aberdeen: Clethrionomys occidentalis occidentalis.

Grays Harbor, near: Martes caurina caurina.

Quinault Lake: Aplodontia olympica.

Jefferson.—Destruction Island: Sorex trubridgiai destructioni.

King.—Renton, near Seattle: Aplodontia rufa grisea.

Seattle, University of Washington campus: Neurotrichus gibbsii minor.

Kittitas.—Blewett Pass, 2 miles south of: Clethrionomys gapperi cascadensis.

Cascade Mountains, near Martin Station: Glaucomys sabrinus fuliginosus.

Lake Keechelus, Cascade Mountains: Ochotona princeps brunnescens; Citellus saturatus; Castor canadensis pacificus; Microtus richardsoni arcticoides; Procyon lotor pacificus; Martes pennanti pacifica; Lutra canadensis pacifica.

Yakima River, near head of, Cascade Mountains: Sorex palustris navigator.

Klickitat.—Trout Lake: Mustela erinea gulosa.

Trout Lake, 5 miles south of: Thomomys talpoides immuns.

White Salmon, Gorge of Columbia River: Thomomys talpoides limosus.

Mason.—Lake Cushman, Olympic Mountains: Sorex benditii albiweller; Microtus longicaudus macrurus; Felis concolor olympus.

Mount Elaine, near Mount Olympus: Cervus canadensis roosevelti.

Mount Ellinor, northwest slope of, Olympic Mountains: Clethrionomys occidentalis nivarius.

Shelton, 4 miles north of: Thomomys talpoides couchi.

Okanogan.—Conocoully, Cascade Range: Thomomys myops; Microtus montanus canescens.

Pacific.—Shoalwater (Willapa) Bay: Sorex vagrans vagrans; Scapanus orarius orarius; Neotoma cinerea occidentalis.

Cape Disappointment: Odocoileus hemionus columbianus.

Pierce.—Fort Steilacoom, old: Peromyscus maniculatus australus.

Mount Rainier: Marmota caligata cascadensis; Microtus oregoni cantweli.

Ni昇ally River, mouth of: Clethrionomys pygmaeus.

Okanapescost River, Mount Rainier National Park: Felis concolor oregonensis.

Owyhigh Lake, Mount Rainier: Thomomys talpoides shawi.

Paradise Creek, south side of Mount Rainier: Aplodontia rufa rainieri.

Roy, prairie 2 miles south of: Thomomys talpoides glacialis.

Steilacoom, Puget Sound: Lepus americanus washingtonii.

Tacoma, 6 miles south of: Thomomys talpoides tacomensis.


San Juan.—San Juan Island, Friday Harbor: Peromyscus maniculatus hollisteri.

Shaw Island, Neck Point: Microtus townsendii pugeti.

Skagit.—Hamilton: Myotis yumanensis saturatus.

Mount Vernon, Skagit Valley: Mustela erinea streatori.

Skagit Valley: Synaptomys truci.

Skamania.—Klickitat Pass, Cascade Mountains: Eutamias townsendii cooperi.

Trout Lake, near, south base of Mount Adams: Vulpes fulva cascadensis; Mustela frenata washingtoni; Mephitis mephitis notata; Lynx rufus pallescens.

Spokane.—Spokane: Eutamias amoenus canicauclus.

Stevens.—Loon Lake: Microsorex hoyi washingtoni.

Thurston.—Olympia, 4 miles south of: Thomomys talpoides pugetensis.

Tenino, Yelm Prairie: Thomomys talpoides yelmensis.

Tenino, 7 miles north of: Thomomys talpoides tumuli.
UNITED STATES—Continued

Washington—Continued

Wahkiakum.—Cathlamet, 12 miles north-northeast of: Thomomys talpoides louiei.
Walla Walla.—Fort Walla Walla, near Wallula: Lepus townsendii townsendii; Lagurus curtatus pauperimus.
Touchet: Lepus californicus wallwalla; Citellus washingtoni washingtoni; Thomomys talpoides columbiaeus.
Walla Walla: Scapanus orarius schefferi. Wallula, near: Citellus townsendii townsendii.
Whitman National Monument, 6 miles north of Walla Walla: Thomomys talpoides whitmani.
Yakima.—Mabton: Citellus mollis yakimensis.

West Virginia

County:

Greenbrier.—Katis Mountain, near White Sulphur Springs: Glaucomys silus. White Sulphur Springs: Sciurus niger vicinus; Reithrodontomys leontii impiger.

Wisconsin

No exact locality: Odocoileus wisconsinensis. County:

Ashland.—Basswood Island, Apostle Islands: Canis latrans thamnos.
Clark.—With ee: Sorex palustris hydrobatis.
Worden Township: Pitymys pinetorum schmidti. Columbia.—Westpoint: Reithrodontomys megalotis pectoralis.

Oneida.—Crescent Lake: Eutamias minimus jacksoni; Napaeozapus insignis frutectanus.
Racine.—Racine: Microsorex hoyi hoyi; Articola austerus.
Rock.—Milton, 4 miles east of: Taxidea taxus jacksoni.

Wyoming

Black Hills (now Laramie Mountains): Phenacomys truei.

County:

Big Horn.—Shel, 12 miles east and 2 miles north of, Big Horn Mountains: Lepus americanus seclusus.
Spring Creek, Big Horn Basin: Sylvilagus audubonii boylei.
Trapper Creek, head of, Big Horn Mountains: Eutamias minimus confinis; Thomomys talpoides caryi.
Carbon.—Bridger Pass, 18 miles southwest of Rawlins: Thomomys talpoides clusius; Lynx rufus uinta.
Savery, 8 miles north and 191/2 miles east of: Thomomys talpoides meritus.
Crook.—Bear Lodge, Sundance National Forest, Black Hills: Ursus rogersi bisonophagus.
Bear Lodge Mountains: Zapus hudsonius campestris.
Jack Boyden’s Ranch, 5 miles above mouth of Sand Creek Canyon, Black Hills: Thomomys talpoides nebulosus.
Sundance, 3 miles northwest of: Eutamias minimus silvaticus.

Fremont.—Fremont Peak, Wind River Mountains: Ochotona princeps ventorum.
Fremont Peak, near, Wind River Mountains: Lepus americanus bairdii.
Fremont Peak, 7 miles south of, Wind River Mountains: Citellus lateralis caryi.
Milford: Microtus montanus caryi.
South Pass City, Wind River Mountains: Tamiasciurus hudsonicus ventorum.
Sun, Sweetwater Valley: Perognathus fasciatus litus.
Wind River Mountains, near head of Big Wind River: Felis concolor hippocrepes.
Goshen.—Fort Laramie: Mustela nigripes.
Wyoming—Continued

Laramie.—Horse Creek Post Office, 3½ miles west of: Thomomys talpoides attenuatus.
Lincoln.—Cumberland: Perognathus parvus clarus.
Natrona.—Casper: Dipodomys ordii lutecolus.
Park.—Shoshone River, north fork of, Absaroka Mountains, between Big Horn Basin and Yellowstone National Park: Ursus washake.
Whirlwind Peak, Absaroka Range: Thomomys talpoides tenellus.
Sweetwater.—Green River [city], near: Eutamias minimus minimus.
Kinney Ranch, Green River Basin: Myotis chrysonotus; Citellus lateralis wortmani; Perognathus callistus; Dipodomys ordii priscus; Neotoma cinerea cinnamonea.
Teton.—Snake River, 4 miles south of Yellowstone National Park: Alces alces shirasi.

United States—Continued

Uinta.—Fort Bridger: Cynomys leucurus; Citellus richardsonii elegans.
Harvey’s Ranch, now Mountainview, on Smiths Fork, 4 miles southeast of Fort Bridger: Thomomys talpoides bridgeri; Thomomys talpoides oculus.
Uinta Mountains, foothills of, near Fort Bridger: Citellus armatus.
Washakie.—Big Horn Mountains, near head of Kirby Creek: Tamiasciurus hudsonicus baileyi.
Canyon Creek, near head of, Big Horn Mountains: Citellus tridecemlineatus aleni.
Weston.—Newcastle, 23 miles southwest of: Perognathus flavus piperi.
Yellowstone National Park.—No exact locality: Ursus horribilis imperator; Cervus canadensis nelsoni.
Lake Hotel: Myotis lucifugus carissima.
Slough Creek: Ursus mirus.
Swan Lake Valley: Eutamias consobrinus clarus.

México

No exact locality: Chrotopterus auritus auritus; Cheroonycteris mexicana; Vampyrops helleri; Centurio mexicanus; Desmodus rotundus murinus; Eptesicus albipennis; Sciurus texianus; Heteromys longicaudatus; Procyon lotor castaneus; Felis bingoni; Felis griffithii; Felis mexicana; Bison bison bison.
Eastern México: Sciurus aureogaster aureogaster.
Mexican tableland, southern end: Lepus callois.
Mexican tableland, southwestern part: Lepus nigricepsdatus.
Mountains of México: Coendou mexicanus mexicanus.
Northern México: Didelphis marsupialis mesamericana.
Southern México: Mormoops megalophylla megalophylla; Anoura geoffroyi lasiotyga; Peromyscus boylii aztecus.
Southern México, probably Valley of México: Cratogeomys merriami merriami.
Valley of México, probably in or near: Oryzomys fulgens; Odocoileus virginianus mexicanus.
Veracruz, Puebla, or Oaxaca, probably somewhere in: Myotis californicus mexicanus; Atalapha mexicana.

Aguascalientes

Chicalote: Dipodomys spectabilis cratodon.

Baja California

No exact locality, 10 miles off Pacific Coast: Globicephala scammonti.
Aguaje de las Fresas, Sierra San Pedro Mártir: Sorex oreinus.
Aguaje de San Esteban, about 25 miles northwest of San Ignacio: Eutamias merriami merriami.
Aguaquito Spring, El Valle de la Trinidad: Dipodomys merriami trinidadensis.
Alamo, 10 miles southeast of: Sylvilagus bachmani howellii.
Ángel de la Guardia Island, Gulf of California: Peromyscus guardia guardia; Neotoma lepida insularis.
Ángel de la Guarda Island, Puerto Refugio: Perognathus spinatus guardiae.
Barril, lat. 28°20' N., long. 112°50' W., Gulf of California: Dipodomys merriami annulus.
Boca la Playa, 16 miles west of Santo Tomás: Thomomys bottae proximarinus.
Buena Vista, lat. 24°50' N., long. 111°50' W., Magdalena Plain: Dipodomys merriami llanoensis.
Baja California—Continued

Cajón de Tecomaja, Sierra de la Giganta:
*Ovis canadensis weemsi.*

Calmallí: *Dipodomys merriami platycephalus; Felis concolor improcer.*

Calmallí, 45 miles south of: *Antilocapra americana peninsularis.*

Cape (Cabo de) San Lucas: *Myotis volans volans; Spilogale gracilis lacasana.*

Carmen Island, Gulf of California: *Lepus californicus sheltoni; Perognathus spinatus occultus; Peromyscus eremicus carmen; Neotoma lepida nudicauda.*

Catavina: *Citellus beecheyi rupinarum; Thomomys bottae cataviniensis.*

Ceralbo (Ceralvo) [Cerralvo] Island, Gulf of California: *Perognathus arenarius siccus; Peromyscus eremicus avius.*

Cerro (Cedros) Island: *Sylvilagus bachmani cerroensis; Perognathus anthonyi; Peromyscus eremicus cedroensis; Neotoma brevicaudata; Odocoileus hemionus cerroensis.*

Chapala Dry Lake, 2 miles north of, lat. 29°30' N., long. 114°35' W., on Llano de Santa Ana: *Dipodomys peninsularis pedionomus.*

Comondú: *Myotis micronyx; Antrozous minor; Citellus atricapillus; Neotoma lepida ravid; Bassariscus astutus palmarius; Spilogale gracilis microdon.*

Coronados Island, Gulf of California: *Perognathus spinatus pullus; Peromyscus pseudocrinitus; Peromyscus maniculatus assimilis; Neotoma bunkeri.*

Danzante Island, Gulf of California: *Perognathus spinatus seorsus; Neotoma lepida latirostra.*

Diabrito Spring, near, summit of San Matías Pass, between Sierra Juárez and Sierra San Pedro Mártir: *Thomomys bottae xerophilus.*

El Cañón Cañón, Sierra San Pedro Mártir: *Thomomys bottae siccovalis*.

El Rosario, 1 mile east of: *Thomomys bottae abbotti; Neotoma lepida egressa.*

Espíritu Santo Island, Gulf of California: *Lepus insularis; Lepus edwardsi; Citellus insularis; Perognathus spinatus lambii; Peromyscus eremicus insulicola; Neotoma lepida vicina; Bassariscus astutus sxicola.*

Gonzaga Bay, small island in: *Peromyscus crinitus pallidissimus; Peromyscus maniculatus hueyi.*

Guadalupe Island: *Arctocephalus townsendi.*

Islet of Cardonal or Islo, Archipelago of Salsipuedes, Gulf of California: *Pionyx vives.*

Jacumba Valley, opposite Jacumba, San Diego County, Calif.: *Perognathus longimembritus internationalis.*

La Grulla, Sierra San Pedro Mártir: *Myotis milleri; Myotis orinomus; Thomomys bottae martirensis; Dipodomys agilis martirensis; Microtus californicus perplexabilis; Microtus californicus hyperthrus.*

Laguna Hanson, Sierra Juárez: *Citellus beecheyi nudipes; Thomomys bottae juarezensis.*

La Laguna, Sierra de la Laguna: *Sorex ornatus lagunae; Peromyscus truei lagunae.*

La Laguna, Sierra de la Victoria: *Neotoma lepida notia.*

La Paz: *Thomomys bottae imitabilis; Perognathus arenarius sublucidus; Procyon lotor grinnelli.*

Las Palmas Cañón, 2 miles east of Gaskill’s Tanks: *Thomomys bottae lucidus.*

Llano de San Bruno: *Dipodomys merriami brunensis.*

Llano de Yrais, opposite Magdalena Island: *Vulpes macrotis devia.*

Las Flores, 7 miles south of Bahía de Los Ángeles: *Thomomys bottae rhizophagus.*

Los Muertos Cañón fan, Gaskill’s Tanks, near Laguna Salada: *Perognathus arenarius mexicalis.*

Los Palmitos, Pattie Basin, Sierra Juárez: *Thomomys bottae cunicularis.*

Magdalena Island: *Lepus californicus magdalena; Thomomys bottae magdalenae; Perognathus arenarius albus; Perognathus spinatus magdalenae; Peromyscus maniculatus magdalenae.*

Matancita (Soledad), 50 miles north of Magdalena Bay: *Neotoma lepida pretiosa.*

Mattomi, Sierra San Pedro Mártir: *Ovis canadensis crennobatis.*

Mejía Island, near Ángel de la Guarda Island, Gulf of California: *Perognathus spinatus evermanni; Peromyscus guardia mejiae.*

Monseñor Island, Gulf of California: *Perognathus baileyi fornicanus; Peromyscus caniceps.*

Nachogüero Valley: *Peromyscus texanus medius.*
MÉXICO—Continued

Baja California—Continued

Natividad Island: Peromyscus maniculatus dorsalis.
Piñón, Sierra San Pedro Mártir: Perognathus californicus mesopolis.
Playa María: Sylvilagus audubonii confinis.
Punta Prieta: Citellus leucurus canfieldae; Thomomys bottae cactophilus.
Punta Prieta, 25 miles north of: Perognathus spinatus prieteae.
Rancho Lagunitas, 1 mile east of: Thomomys bottae honorus.
Rosarito, Sierra San Pedro Mártir: Perognathus knexus.
Rosarito Divide, Sierra San Pedro Mártir: Peromyscus hemionitis.
Saccaton, 15 miles north of Cape San Lucas: Citellus leucurus extimus.
San Agustín: Perognathus longimembris venustus.
San Ángel, 16 miles west-southwest of San Ignacio: Thomomys bottae russeolus.
San Antonio River, head of, Sierra San Pedro Mártir: Onychomys torridus macrotis.
San Antonio, Sierra San Pedro Mártir: Peromyscus gaurus.
San Bartolomé Bay: Mirounga angustirostris.
San Borjas Mountains: Thomomys bottae borjasensis.
San Esteban Island, Gulf of California: Peromyscus stephani.
San Felipe: Citellus tereticaudus vociferans; Perognathus formosus cinerascens; Perognathus baileyi hueyi; Perognathus arenarius albescens; Dipodomys merriami arenivagus; Neotoma lepida felipensis.
San Francisco Island, Gulf of California: Perognathus spinatus latijugularis; Neotoma lepida abbreviata.
San Francisquito Bay, 7 miles west of, lat. 29°30’ N., Gulf of California: Dipodomys peninsularis eremoeus.
San Gerónimo Island: Peromyscus maniculatus geronimensis; Phoca vitulina geronimensis.
San Ignacio, Cape region: Myotis ruminensis lambi; Urocyon cinereorargenteus peninsularis.
San Isidro Ranch, within 2 miles of United States boundary and 19 miles east from Pacific seacoast: Mephitis mephitis holzheimeri.
San Jorge, west of Pozo Grande, and 25 miles southwest of Comondú: Myotis capitanus; Thomomys bottae incomptus; Perognathus arenarius arenarius.

San José del Cabo: Myotis velifer peninsularis; Perognathus spinatus peninsulare; Dipodomys merriami melanurus; Peromyscus eremicus eva; Neotoma lepida arenacea.
San José Island, Gulf of California: Sylvilagus mansuetus; Perognathus spinatus bryanti; Dipodomys insularis; Peromyscus eremicus cinereus; Neotoma lepida perpallida; Bassariscus astutus insulicola.
San Juan de Dios, mouth of canyon of, lat. 30°7’ N.: Dipodomys agilis plectilis.
San Marcos Island, Gulf of California: Perognathus spinatus marcosensis; Neotoma lepida marcosensis.
San Martín Island: Peromyscus maniculatus martinensis; Peromyscus maniculatus exiguis; Neotoma martensis.
San Pablo Point: Peromyscus eremicus propinquus.
San Quintín: Perognathus baileyi rufinoris; Perognathus arenarius helleri; Reithrodontomys megalotis peninsularis; Peromyscus homochroia; Microtus californicus aequovactus.
San Quintín, 5 miles east of: Dipodomys merriami quintinensis.
San Roque Island: Peromyscus maniculatus cineritius.
San Telmo: Citellus leucurus peninsulariae.
San (Santo) Tomás, 18 miles south of Ensenada: Thomomys bottae aplvthus.
Sangre de Cristo, Valle San Rafael, Sierra Juárez: Thonmomy s bottae jojobae; Perognathus longimembris aestivalis; Microtus californicus grinnelli.
Santa Anita, near San José del Cabo, Cape San Lucas: Natalus mexicanus mexicanus; Lepus californicus xanti; Sylvilagus bachmani peninsularis; Thomomys bottae anitae; Oryzomys peninsulare; Peromyscus maniculatus coolidgei; Taxidea taxus infuscus; Canis latrans peninsularis; Lynx rufus peninsularis.

Santa Catalina Island, 17 miles northeast of Punta San Marcial: Peromyscus elevinus.
Santa Catarina, 7 miles north of: Dipodomys merriami semipallidus.
Santa Catarina Landing, lat. 29°31’ N.: Dipodomys paralidus.
Santa Catarina Landing, 4 miles north of: Thomomys bottae ruricola.
Santa Cruz Island, Gulf of California: Peromyscus sejugis.
MÉXICO—Continued

Baja California—Continued

Santa Margarita Island: Perognathus arnarius amphioidis; Perognathus spinatus margaritae; Dipodomys margaritae; Peromyscus eremicus polypolius; Peromyscus manipulatus margaritae.

Santo Domingo, Magdalena Plain: Dipodomys peninsularis australis.

Santo Domingo Landing: Dipodomys agilis peninsularis; Neotoma lepida mola-granis.

Santo Domingo Mission, 2 miles west of: Sylvilagus bachmani rosaphagus; Dipodomys gravipes; Dipodomys agilis latinaxillaris.

Sierra Laguna, between La Laguna and Victoria Mountain: Eptesicus fuscus peninsulare; Dasypterus ega xanthinus; Thomomys bottae alticolus; Odocoileus hemionus peninsulare.

Sierra San Pedro Mártir: Scapanus latimanus anthonyi; Lepus californicus martirensis; Eutamias merriami obscurus; Tamiascitus douglasii variegatoides; Sitomys americanus thurberi; Peromyscus truei martirensis.

Socorro, 15 miles south of San Quintín: Sorex juncensis.

South San Lorenzo Island, Gulf of California: Peromyscus guardia interparcialis.

Stearns Point, west side of Magdalena Bay: Thomomys bottae litoris.

Todos Santos Island: Peromyscus mancuus dubius; Neotoma anthonyi.

Tortuga Island, Gulf of California: Peromyscus dickeyi.

Tres Pachitas, 36 miles south of La Paz: Perognathus baileyi extimus.

Trinidad Valley, northwest base of Sierra San Pedro Mártir: Vulpes macrotis tenuirostris.

Turtle (San Bartolomé) Bay: Perognathus fallax inopinatus.

Valladares, Sierra San Pedro Mártir: Neotoma fuscipes martirensis.

Valle de la Trinidad: Citellus tereticaudus apricus.

Vallecitos, Sierra San Pedro Mártir: Peromyscus oresterus; Spilogale gracilis martirensis; Canis latrans cleticus.

Yubay, 30 miles southeast of Calamhue (Calamajue): Sylvilagus bachmani exiguus; Perognathus arenarius ambiguus.

Campeche

Apazote, near Yohaltún: Sciurus deppei vivax; Sciurus yucatanensis baliolus; Oryzomys fulvescens mayensis; Ototylopus phylloides phaeus; Peromyscus yucatanicus baliolus; Dasyprocta punctata yucatanica; Jentinkia sumichrasti campechensis; Tayassu pecari ringens.

Campeche [city]: Heterogeomys hispidus yucatanensis.

La Tuxpeña, Champotón: Procyon lotor shufeldti; Potos flavus campechensis.

Yohaltún: Peromyscus leucopus castaneus; Felis onca goldmani.

Chiapas

Canjob: Reithrodontomys fulvuncens chiapensis.

Chicharras: Heteromys goldmani; Orzomys alfaroi hylcotes.

Comitán, valley of: Talarida intermedia; Baniomys musculus nigriscens.

Fina Esperanza, 45 kilometers northwest of Huixtla: Orthogeomys grandis soconuscoensis.

Finae Lubeca, 12 kilometers northeast of Huixtla: Orthogeomys grandis huitlae.

Huexetán: Myotis nigricans extremus; Sciurus variegatoides goldmani; Peromyscus allophylus; Liomys crisper setosus; Dasyprocta punctata chiapensis; Pecari tajacu nelsoni; Odocoileus virginianus thomasi.

La Esperanza coffee plantation, southeast of, 45 kilometers northeast of Huixtla: Potos flavus dugesii.

Mapastepec: Orzomys fulvuncens pacaicus. Ocuilapa, 10 miles northwest of Ocozocautla [de Espinosal]: Scotinomys teguina subnubilus.

Pinabete: Heteromys nelsoni; Mustela fre-nata goldmani.

Prusia: Rheomys thomasi chiapensis.

San Bartolomé: Spilogale angustifrons elata.

San Cristóbal: Sorex siudod; Sorex verae-pacis chiapensis; Sorex saussurei cris-tobalensis; Cryptotis griseovenitriss. Sylvilagus floridanus chiapensis; Sciurus griseoflavus chiapensis; Peromyscus zarhynchus cristobalensis; Neotoma ferruginea chanula; Odocoileus virginianus nelsoni.

San Vicente: Canis latrans goldmani.
MÉXICO—Continued

Chiapas—Continued

Tenejapa, about 16 miles northeast of San Cristóbal: *Heterogeomys hispidus chiapaensis.*

Teopisca, 20 miles southeast of: *Glaucomyys volans goldmani.*

Tonalá: *Heteromys desmarestianus griseus; Liomys crispus crispus; Sigmodon hispidus tonalensis.*

Tumbalá: *Sorex scitleti; Oryzomys alfaroii saturatior; Tylomys tumbalensis; Peromyscus zarhynchus.*

Tuxtla Gutierrez: *Orthogomys grandis annexus; Tylomys bullaris.*

Villa Flores: *Reithrodontomys mexicanus scutator.*

Chihuahua

Altamirano, 8 miles west of, Sierra Madre: *Thomomys umbrinus caliginosus.*

Batopilas: *Perognathus artus.*

Carimechi, Río Mayo: *Urocyon cinereor- genteus madrensis.*

Casas Grandes, Sierra Madre: *Perognathus apache melanotis; Euarctos americ anus machetes.*

Chihuahua [city], 5 miles southeast of: *Reithrodontomys fulvescens canus.*

Chihuahua [city], mountains near: *Neotoma mexicana mexicana.*

Colonia García, about 60 miles southwest of Casas Grandes: *Scirurus aberti barberi; Peromyscus melanotis zamelas; Peromyscus polius; Canis lupus baileyi; Ursus nelsoni; Felis concolor azteca.*

Colonia Juárez: *Thomomys bottae toltecus.*


Escalón: *Peromyscus maniculatus blando.*

Gallego: *Cratogeomys castanops consitus.*

Hidalgo del Parral: *Thomomys baileyi nelsoni.*


Lago de Santa María: *Ovis canadensis mexi- cana.*

Pacheco, near: *Corynorhinus rafinesquii mexicanus.*

Parral: *Dipodomys spectabilis zygomaticus; Liomys irratus canus.*

Pilares Cañón, 10 miles northeast of Colonia García: *Thomomys umbrinus madrensis.*

Presidio del Norte, Río Grande, near Ojinaga: *Cratogeomys castanops clarkii.*

Providencia Mines: *Peromyscus metallicola.*

Río Gavilán, 5 miles west of Colonia García: *Microtus mexicanus madrensis.*

Samalayuca: *Dipodomys ordii extractus; Onychomys leucogaster albescens.*

Sierra en Medio: *Odocoileus hemionus canus; Antilocapra americana mexicana.*

Sierra Madre, no exact locality: *Glaucomyys volans madrensis.*

Sierra Madre, about 65 miles east of Batopilas: *Thomomys umbrinus chihuahueae.*

Sierra Madre, foothills of, about 30 miles northwest of Parral: *Sigmodon ochrognathus madrensis.*

Sierra Madre, near Guadalupe y Calvo: *Citellus madrensis; Reithrodontomys megalotis obscurus; Neotoma mexicana madrensis; Nasua narica pallida.*

Coahuila

Botellas Cañon, Sierra del Carmen: *Odo- coileus virginianus carminis.*

Carneros: *Cratogeomys castanops subnubilus.*

Club Sierra del Carmen, 2 miles north and about 6 miles west of Piedra Blanca: *Sceloporus montanus.*

Gómez Farías, 7 miles south and 1 mile east of: *Peromyscus melanophrys coahu- liensis.*

Jalal: *Cratogeomys castanops subsimus; Perognathus nelsoni canescens.*

Las Vacas, 7 miles east of, Río Grande Valley: *Cratogeomys castanops convexus.*

La Ventura: *Cynomys mexicanus; Citellus spilosoma pallescens; Dipodomys nelsoni.*

Madera Camp, Sierra del Carmen: *Sorex milleri.*

Río Nazas: *Sigmodon hispidus berlandieri.*

Saltillo: *Neotoma goldmani.*

San Antonio de Jalal: *Vulpes macrotis zinseri.*

San Pedro, 10 miles west of Laguna de Mayrán: *Cratogeomys castanops ex- celsus.*

Sierra del Carmen: *Eutamias dorsalis car- minis; Thomomys sturgisi; Neotoma mexicana inornata.*

Sierra Guadalupe: *Eutamias bulleri soli- vagus; Neotoma nacu; Microtus mexi- canus subsimus; Euarctos americanus eremicus; Conepatus mesoleucus pediculus.*

Sierra Guadalupe, 12 or 15 miles south of General Cepeda: *Thomomys umbrinus analogus.*
Colima
Armería, near Manzanillo: Oryzomys melanotis colimensis; Conopeus mesoleucus nelsoni; Pector al-tajacu humeralis.
Colima: Cratogeomys fumosus; Reithrodontomys fulvescens nelsoni; Peromyscus allex; Baiomys musculus musculus; Sigmodon colliae; Urocyon cinereogentus colimensis.
Hacienda Magdalena, between Colima [city] and Manzanillo: Sciurus poliopus colimensis; Xenomys nelsoni.
Manzanillo: Celtillus annulatus annulatus; Sciurus coliae chachalis; Neotoma alleni alleni; Nasua narica molaris; Canis latrans vigilis; Felis pardalis nelsoni.

Distrito Federal
Colonia del Valle, México [city]: Cratogeomys tylorhinus arvalis.
México [city], mountains northwest of: Mephitis macoura macoura.
Tlacubaya: Nyctinomus depressus.

Tlalpan, 10 miles south of México [city]: Cryptotis soricina; Perognathus flavus mexicanus; Lionys irrotatus pullus; Oryzomys couesi crinitus; Reithro-
dontomys fulvescens toltecs; Peromyscus truei gratus; Procyon lotor hernandezii; Spilogale angustifrons angustifrons.
Valley of México, near México [city]: Celtillus variegatus variegatus; Mustela frenata frenata.

Durango
Arroyo de Buoy: Eutamias bulleri durangae.
Chacala: Thomomys simulius parviceps.
Ciudad Ranch, 100 miles west of Durango [city]: Sciurus aberti durangi.
Coyotes: Eutamias nexus.
Durango [city]: Celtillus spilosoma spilosoma; Thomomys umbrinus durangi; Peromyscus melanophrys xenuros.
Durango [city], 8 miles northeast of: Peromyscus truei erasmus.
El Salto: Sorex durangae.
Guaracevi: Eutamias canescens.
La Cienaga: Sciurus aberti phaseurus.
La Cienaga de las Vacas: Sigmodon hispidus baileyi.
Mapimi: Thomomys umbrinus; Peromyscus pectoralis eremicoides.

Mount San Gabriel, vicinity of Rosario, 10 miles northwest of Villa Ocampo, Río Florida: Thomomys umbrinus evexus.
 Rancho Bailon: Sylvilagus durangae.
 Rancho Santuario: Lepus gaillardi battyi; Odocoileus battyi.
 Río de las Bocas: Lepus texianus micropus; Canis latrans impavidus.
 Río Sestín: Myotis californicus durangae; Citellus variegatus rupestris; Dipodomys ordii obscurus; Reithrodontomys megalotis sestinensis; Peromyscus texanusflaccidus; Baiomys taylori paulus.
San Gabriel: Neotoma albigula durangae.
San Juan, 12 miles west of Lerdo: Dipodomys ordii idoneus.

Guanajuato
Guanajuato [city], near: Cryptotis pergra-cilis macra.
Santa Rosa, about 7 miles northeast of Guanajuato [city]: Thomomys umbrinus supernus.

Guerreero
Acapulco: Sylvilagus cunicularius pacificus; Sciurus socialis cocos; Orthogeomys grandis alleni; Neotoma alleni guerr-erensis; Spilogale pygmaea australis; Odocoileus virginianus acapulcensis.
Acapulco, off beach 20 miles north of: Stenella graffmani.
Chilpancingo: Bassariscus astutus bolei.
Chilpancingo, mountains near: Cryptotis mexicana goldmani; Sciurus poliopus elfugius; Peromyscus comuptus; Perom-
yscus thomast; Neotoma ferruginea pica.
Cuapan, near Chilpancingo: Neotoma alleni elaturo.
El Limón, Valley of Río de las Balsas, about 20 miles southwest of La Unión: Or-thogeomys grandis guerrerensis.
El Limón Ranch, 4 kilometers south of Ar-
celia, Aldama District: Citellus adoce-
tus arceliae.
Ometepec: Lionys pictus rostratus; Potos flavus guerrerensis.
Omalteme.—Cryptotis guerrerensis; Sylvila-
gus insonus; Lionys guerrerensis; Oryzomal guerrerensis; Sigmodon guerrerensis.
[El] Papayo, about 25 miles northeast of Acapulco: Noctilio leporinus mexicanus; Sturnira lilium parvidens.
MÉXICO—Continued

Guerrero—Continued
Tierra Colorada, Sierra Madre del Sur: Artibeus nanus.
Yerba Buena: Leptonycteris nivalis yerba-buena.

Hidalgo
Apam: Sylvilagus audubonii parvulus.
El Chico, Sierra de Pachuca: Thomomys umbrinus albifurcatus; Conepatus mesoleucus mesoleucus.
Irolo: Lepsus californicus festinus; Cratogeomys merriami irolonis.
Real del Monte, near, Valley of México: Dipodonyx phillipsii phillipsii.
Tula: Cratogeomys tylorhinus tylorhinus.
Tulancingo: Cryptotis obscura.
Zimapán.—Neotoma montezumae.

Jalisco
Ameca: Pappogeomys bulleri anecensis; Oryzomys couesi albiverter; Reithrodontomys fulvescens griseoflavus; Reithrodontomys hirsutus.
Atemajac, near Guadalajara: Pappogeomys bulleri abbincusus; Neotoma fereugine ochracea.
Barranca Ibarra: Pipistrellus hesperus australis.
Beltran: Felis wiedii glauca.
Bolaños: Macrotes mexicanus bulleri; Neotoma palatina.
Colima, plains of: Sylvilagus cunicularius insolitus.
Guadalajara, 3 miles north of: Peromyscus melanophrys micropus.
Hacienda San Marcos, Tonila: Sciurus poliopus cervicalis; Oryzomys couesi mexicanus.
Lagos: Cratogeomys zinseri; Peromyscus truei gentilis.
La Laguna, Sierra de Juanaclatlán: Pappogeomys bulleri lagunensis; Liomys bulleri.
Lake Zacoalco: Myotis californicus juliscensis.
Las Canoas, about 20 miles west of Zapotlán: Liomys irroratus juliscensis.
Las Peñas: Pteronotus davyi julius.
Milpillas, mountains at, near San Sebastián: Megasorex gigas; Pappogeomys bulleri flammeus.
Mineral San Sebastián: Liomys pictus pictus; Oryzomys melanotis melanotis.

Mineral San Sebastián, Mascota: Peromyscus boylii spicilegus; Sigmodon hispidus mascotensis.
Nevado de Colima: Reithrodontomys coliae.
Nevado de Colima, foothill region: Reithrodontomys sumichrasti nerterus; Reithrodontomys levipes otus.
Nevado de Colima, north slope of: Sorex saussurei saussurei; Sorex oreopolus; Cratogeomys gymnurus incclusar; Neotoma fereuginae tenuicauda; Microtus mexicanus phaeus.
Ocotlán, north of Lake Chapala: Cryptotis pergracilis pergracilis; Oryzomys molestus; Peromyscus maniculatus labecula; Sigmodon hispidus inezoratus.
Plantanar: Micronycteris megalotis mexicana; Liomys pictus plantinarenis.
San Sebastián: Reithrodontomys levipes.
San Sebastián, Mascota: Sigmodon alleni.
Santa Rosalía, near Atlan: Baeodcn alleni.
Santa Cruz del Valle, near Guadalajara: Myotis velifer velifer.
Sierra de Mascota, west slope of: Pappogeomys bulleri bulleri.
Sierra Madre, near Bolaños: Sorex emarginatus.
Tenacatita Bay: Pappogeomys bulleri burti.
Volcán de Fuego: Sigmodon vulcani.
Zapotlán: Sylvilagus floridanus restrictus; Pappogeomys bulleri nelsoni; Cratogeomys gymnurus gymnurus.

México
Amecameca: Molossus aztecs.
México [city], near.—Bassariscus astutus astutus.
Salazar: Thomomys umbrinus peregrinus.
Toluca: Citellus mexicanus mexicanus.
Toluca Valley: Neotoma juliventer.
Volcán de Ixtaccihuatl: Cratogeomys merriami peregrinus.
Volcán de Popocatépetl: Cryptotis alticola; Romerolagus nelsoni; Thomomys umbrinus vulcanus; Cratogeomys merriami oreocetes; Reithrodontomys chrysops chrysops.
Volcán de Toluca, north slope of: Sciurus ocolatus tolucae; Thomomys umbrinus tolucae; Cratogeomys tylorhinus planiceps; Reithrodontomys chrysops tolucae.
Zacualpan: Sylvilagus cunicularius cunicularius.
MÉXICO—Continued

Michoacán

Apatzingán, 10 kilometers west of: Peromyscus perulus.

Cerro de San Andrés, about 10 miles north-west of Ciudad Hidalgo: Reithrodonotomys microdon wagneri.

La Palma: Peromyscus sagax.

La Salada, 40 miles south of Uruapan: Artibeus hirsutus; Citellus adocetus adocetus; Sciurops poliolus senex; Liomys pictus particeps; Peromyscus bandeanus vicinior; Bassariscus astutus consitus.

Los Reyes: Oryzomys couesi regillus; Oryzomys fulvescens lenis.

Mount (Cerro) Patambán: Cratogeomys angustirostris.

Mount (Cerro) Tancitaro: Reithrodonotomys chrysopsis seclusus; Nelsonia goldmani; Microtus mexicanus salvus.

Nahuatzen: Zygogeomys trichops trichopus; Neotomodon alstoni alstoni.

Negrete, near, Hacienda El Molino: Sylvilagus floridanus subcinctus.

Pátzcuaro: Myotis yumanensis lutosus; Sciurops poliolus nemoralis; Thomomys umbrinus pullus; Cratogeomys gymnurus imparialis; Zygogeomys trichopus tarascensis; Liomys irroratus acutus; Reithrodonotomys inexpectatus; Peromyscus hylotenes; Peromyscus pavidus; Sigmodon melanotis; Microtus mexicanus fundatus; Mustela frenata leucoparia.

Queréndaro: Peromyscus zelotes; Neotoma latifrons.

Uruapan: Cratogeomys varius.

Zamora: Peromyscus melanophrys zamora; Baiomyxus taylori alstonus.

Zamora, 6½ miles west of: Sigmodon hispidus atratus.

Morelos

Alpuyeca, 5 miles south of: Sigmodon hispidus obreatus.

Axochiapan, 12 kilometers northwest of: Baiomyxus musculus pullidus.

Cuautla [Cuautla Morelos]: Balantiopteryx ochotenaria.

Huitzilac: Sciurops nelsoni nelsoni.

Puente de Ixtla: Heteromys exiguus.

Tetela del Volcán (south slope of Volcán de Popocatépetl): Artibeus aztecs.

Tetela del Volcán and Zacualpan, abandoned mine between: Neotoma torquata.

Xiutepac: Glossophaga morenoi.

Yautepec, near Cuautla: Macrotus mexicanus mexicanus; Oryzomys couesi aztecs.

Nayarit

Acaponeta: Molossus nigricans.

Colomo, near Río de Ameca: Thomomys umbrinus extimus.

Compostela: Heteromys hispidus.

Jalisco, about 10 miles south of Tepic: Pappogeomys bulleri nayaritensis.

Pedro Pablo, about 14 miles east-southeast of Acaponeta, Sierra de Tequihuautla: Thomomys umbrinus musculus.

San Blas: Chilonycteris rubiginosa mexicana; Sciurops colliaeae colliaeae; Peromyscus boylii simulus.

Santa Teresa, 40 miles east of Acaponeta: Thomomys umbrinus sheldoni.

Santiago: Citellus annulatus goldmani; Oryzomys rufus.

Tepic: Cryptotis pergracilis nayaritensis.

Tres Marias Islands, no definite locality.—Rhogeessa parvula parvula.

María Madre Island: Marmosa canescens insularis; Glossophaga soricina mutica; Oryzomys nelsoni; Peromyscus boylii madrensis; Procyon insularis insularis.

María Madre Island, probably: Sylvilagus graysonii.

María Magdalena Island: Procyon insularis vicinus.

Valle de Banderas: Oryzomys bulleri; Peromyscus bandaranus bandaranus.

Nuevo León

Cerro de la Silla, near Monterrey: Nasua narica tamaulipensis.

Lamapas de Naranjo: Thomomys umbrinus perditus.

Monterrey: Sciurops alieni.

Río de Ramos, 20 kilometers northwest of Montemorelos: Nycticeius humeralis mexicanus.

Santa Catarina, a few miles west of Monterrey: Citellus variegatus couchii.

Oaxaca


Cerro San Felipe, near Oaxaca: Sorex ventralis; Sciurops poliolus poliolus; Orthogeomys grandis felipensis; Reithrodonotomys megalotis alticolus;
Oaxaca—Continued

Reithrodontomys microdon albilabris; Peromyscus oaxacensis; Peromyscus difficilis felipensis; Sigmodon alitica alitica; Microtus fulviventer; Conepatus mesoleucus filipensis; Felis wiedii oaxacensis.

Coixtlahuaca: Peromyscus difficilis amplus.

Comaltepec: Oryzomys alfaroi caudatus.

Cuicatlán: Liomys irratus torridus; Peromyscus musculus.

Hacienda Santa Efigenia, 8 miles north of Tapanatepec: Ateles tricolor.

Hualuapán: Liomys irratus minor.

Huilotepac, 8 miles south of Tehuantepec: Neotoma ferruginea isthmica.

Juquila: Marmosa mexicana mexicana; Reithrodontomys rufescens luteolus; Peromyscus boylii evides; Sigmodon planifrons; Neotoma parvidens.

La Parada: Heteromys albimbatus.

Llano Grande: Reithrodontomys fulvescens mustelinus.

Mount (Cerro) Zempoaltepec: Cryptotis fessor; Orthogeomys grandis nelsoni; Peromyscus lepturus; Peromyscus melanocarpus; Orthisomus umbrosus.

Nitepec: Phyllostomus discolor verrucosus.

Oaxaca [city]: Marmosa canescens oaxacae; Liomys irratus torridus; Reithrodontomys fulvescens helvulus; Peromyscus manitulcus fulvus.

Oaxaca [city], mountains 15 miles west of: Cryptotis mexicana peregrina; Sciurus poliopus hernandezii; Peromyscus megalops auritus; Odocoileus virginianus oaxacensis.

Ozolotepec, mountains near: Sorex saussurei oaxacae; Cryptotis mexicana machetes; Reithrodontomys allenii; Peromyscus megalops megalops.

Pinotepac: Liomys pictus phaeurus.

Pluma [Pluma Hidalgo]: Liomys annectens; Peromyscus megalops melanurus.

Puerto Ángel: Sciurus socialis litoralis; Peromyscus benderanus angelensis.

Reforma: Reithrodontomys fulvescens amoenus.

Reyes (near Cuicatlán): Sorex veraepacis mutabilis.

San Antonio—Myotis thysanodes aztecs.

San Carlos Yautepac: Peromyscus leucurus gadovii.

San Mateo del Mar: Spilogale angustifrons tropicalis; Mephitis macoura littata.

Santa Efigenia, about 8 miles northwest of Tapanatepec: Carollia subrufa; Peromyscus melanophrys melanophrys; Nasua narica isthmica.

Santo Domingo, mountains near, a few miles west of Guichicovi: Heteromys lepturn.

Santo Domingo, mountains 12 miles northwest of, and about 60 miles north of Tehuantepec [city]: Heterogeomys hispidus tehuatepecus.

Santo Domingo, 8 miles west of Lagunas, Isthmus of Tehuantepec: Nyctomys samichrastii pallidulus.

Santo Domingo de Guzmán, Isthmus of Tehuantepec: Marmosa canescens canescens.

Tehuantepec [city]: Cryptotis frontalis; Lepus flavigularis; Sylvilagus floridanus aztecs; Cynips didactylus mexicanus; Sciurus socialis socialis; Orthogeomys grandis scalopus; Liomys pietus isthmius; Peromyscus leucurus; Peromyscus tehuatepecus.

Teotitlán: Dipodomys phillipsii oaxacae; Reithrodontomys fulvescens infernalis; Batomys musculus infernalis.

Totontepec: Cryptotis magna; Peromyscus mexicanus totontepecus; Neotoma tropicalis.

Yautepac (Zanatepec), about 65 miles east of Tehuantepec: Orthogeomys candidus.

Puebla

Atlilico: Cratogeomys merriami saccharalis.

Chalchicomula (San Andrés Chalchicomula): Cratogeomys fulvescens fulvescens; Reithrodontomys satureus cinereus; Peromyscus mexistatus.

Huauchinate: Cryptotis pergracilis pueblosis; Oryzomys alfaro dilitor.

Metlatoyuca: Liomys irratus pretiosus; Oryzomys rostratus rostratus; Reithrodontomys goldmani; Peromyscus leucopus incensus; Pecari tajacu crassus.

Mount (Volcán de) Iztaccihuatl [Ixtacihuatl], eastern slope of: Romerolagus diazi.

Mount (Fico de, or Volcán de) Orizaba: Sorex vagrans orizaba; Sylvilagus floridanus orizaba; Thomomys umbrinus orizaba; Reithrodontomys orizaba; Peromyscus cecillii; Neotomodon orizaba; Neotoma orizaba; Microtus mexicanus mexicanus.

Piaxtla: Rhogeessa gracilis; Sciurus poliopus perigrinator.
MÉXICO—Continued

Puebla—Continued

Puebla [city]: Sylvilagus floridanus persulcator.

Río Frío, west slope Volcán de Ixtacihuatl [Ixtacihuatl], Valley of México: Canis latrans cagottis.

San Martín Texmelucan: Thomomys umbrinus martinensis.

Tehuacán: Neotoma alleni vetula.

Tochimilco: Sciurus nelsoni hirtus.

Querétaro

Cerro de la Calentura, about 8 miles north-west of Pinal de Amoles: Cratogeomys neglectus.

Jalpan: Peromyscus pectoralis pectoralis.

Pinal de Amoles: Heterogeomys hispidus concavus; Reithrodontomys megalotis amoles; Sigmodon alticola amoles.

Quintana Roo

Cozumel Island: Didelphis marsupialis co-zumelae; Minio n cozumelae; Oryzomys co-zumelae; Peromyscus leucopus co-zumelae; Procyon pygmaeus; Nasua nelsoni; Pecari tajacu nanus.

La Vega, on mainland coast opposite Isla Cancún: Conepatus semistriatus yucatanicus.

Puerto Morelos: Ateles geoffroyi yucatanensis.

Cancún: Rhynchus nelsoni priscus.

San Luis Potosí

Alvarez, about 3 miles north-northwest of San Luis Potosí [city]: Thomomys umbrinus atrodorsalis.

Apeteco, near Xilitla: Peromyscus latirostris.

Arriaga, 1 kilometer south of: Thomomys umbrinus arriagensis; Perognathus lineatus.

Hacienda La Parada, about 25 miles north-west of San Luis Potosí: Perognathus nelsoni nelsoni; Dipodomys merriani artonasus; Peromyscus eremicus phaeurus.

La Tinaja, about 20 miles northeast of San Luis Potosí [city]: Thomomys umbrinus potosinus.

Núñez, 10 kilometers north-northeast of: Citellus spilosoma cabrerai.

Palma, 7 kilometers northwest of, a village 12 kilometers northwest of Salinas: Thomomys umbrinus newmani.

Platanito, 10 kilometers east of: Oryzomys alfaroi huastecae.

Pres de Guadalupe: Pipistrellus hesperus potosinus.

Pres de Guadalupe, 7 kilometers west of: Perognathus penicillatus atrodorsalis.

Rancho San Francisco, 38 kilometers east-southeast of San Luis Potosí [city]: Scirius oculatus shawi.

Río Verde: Cratogeomys castanops perido-neus; Liomys irroratus alleni; Oryzomys couesi peragrus; Neotoma micropus planiceps.

San Luis Potosí [city]: Corynorhinus phylotis; Lepus californicus asellus; Dipodomys ordii palmeri; Neotoma albicododina.

Soledad, near San Luis Potosí [city]: Cratogeomys castanops rubellus.

Xilitla: Neotoma ferruginea griseoventer.

Sinaloa

Agua Caliente, about 40 miles southeast of Mazatlán: Lepus alleni paulus.

Altata: Thomomys bottae sinaloae.

Culiacán: Sylvilagus audubonii goldmani.

Escuinapa: Molossus rufus sinaloae; Liomys pictus escuinapae; Lynx rufus escuinapae; Odocoileus virginianus sinaloae.

Mazatlán: Notiosorex crawfordi exotis; Scirius sinaloensis; Felis onca hernandesi.

Mazatlán, off: Kogia floweri.

Rosario: Perognathus pernix pernix; Reithro-dontomys fulvescens tenuis; Spilogale pygmaea pygmaea.

Sierra de Choix, northeast of Choix: Tho-momys umbrinus eximius; Sigmodon hispidus major.

Sinaloa [city]: Perognathus goldmani.

Tatemeles, near Rosario: Marmosa canescens sinaloae; Thomomys umbrinus atrova-rius; Neotoma mexicana sinaloae; Felis yagouroundi tolteca.

Sonora

No definite locality: Didelphis californica.

Alamos: Thomomys similus simulus; Dipodomys merriani mayensis; Liomys pictus sonoranus; Peromyscus merriani goldmani.

Bahía de Kino: Ammospermophilus harrisi kinoensis; Perognathus longimembri kenoensis.
Sonora—Continued

Camoa, Río Mayo, about 15 miles above Navojoa: Sciurus truei; Thomomys bottae camoae; Perognathus pernix rostratus; Onychomys torridus yakien-sis; Teanopus phenax; Taxidea taxus sonoriensis; Conepatus mesoleucus sonoriensis; Felis pardinus sonoriensis.

Cerro La Cholla, 6 miles west-northwest of Punta Peñasca: Peromyscus crinitus scopulorum.

Chinapa, 10 miles west of, Río Sonora Valley: Thomomys umbrinus sonoriensis.

Cienega Well, 30 miles south of Mexican boundary monument No. 204, Colorado River: Sigmodon hispidus ertmics.

Costa Rica Ranch, delta Río Sonora, about 40 miles west-southwest of Hermosillo: Eunops underwoodi sonoriensis; Thomomys bottae convergens; Pero-gnathus flavus sonoriensis; Reithrodonto-mys burti; Antilocapra Americana sonoriensis.

Cráter Elegante, 2 miles south of, Sierra del Pinacate: Peromyscus crinitus delagadill.

El Rosario: Ovis sheldoni.

Hermosillo: Citellus sonoriensis; Thomomys bottae winthropi.

Huachinera, 4 miles west of, Río Bavispe: Thomomys bottae divergens.

La Estancia, 6 miles north of Nacori; Thomomys bottae estanciae.

La Libertad Ranch, 30 miles east of Sierra de Seri: Dipodomys deserti sonoriensis.

La Misión, 2 miles west of Magdalena: Thomomys bottae basilicae.

Los Nogales, mountains near: Ursus kennerleyi.

Magdalena: Perognathus baileyi baileyi.

Nacori, about 29 trail miles northeast of, western slope of Sierra Nacori, Sierra Madre: Scirurus apache.

Oposura: Perognathus penicillatus pricei; Reithrodontomys fulvescens fulvescens.

Ortiz: Neotoma albignula melanura.

Papago Tanks, Sierra Pinacate: Perognathus intermedius pinacate; Neotoma albigula sheldoni; Neotoma lepida bensonii.

Paso MacDougall, Sierra Hornaday: Peromsrsus crinitus ripiculus.

Providencia Mines: Pipistrellus hesperus apus.

Puerto Libertad: Perognathus intermedius lithophilus.

Punta Peñasco (Punta Peñasca): Thomomys bottae vanrossemi; Neotoma lepida aureotunica.

Río San Bernardino, near Mexican boundary monument No. 77: Pecari tajacu sonoriensis.

Río San Pedro, near Mexican boundary monument No. 98: Castor canadenisis fonda tor.

Río Sonoyta, Mexican boundary monument No. 172 (Near Quitobaquio, Ariz.): Procyon lotor ochraceus.

San Bernardo, Río Mayo: Balianipteryx plicata pallida.

San José de Guaymas: Oryzomys couesi lambi.

San Pedro Nolasco Island, Gulf of California: Peromyscus pembertoni; Peromyscus boylii glassellii.

Santa Cruz: Peromyscus maniculatus sonoriensis.

Sierra Pinacate: Peromyscus eremicus pa pagensis.

Sierra Seri, near Gulf of California: Odocoileus hemionus eremicus.

Sonoyta: Peromyscus merriami merriami.

Tiburón Island, Gulf of California: Lepus allenii tiburonensis; Perognathus baileyi insularis; Perognathus penicillatus seri; Dipodomys merriami mit chelli; Peromyscus eremicus tiburonensis; Neotoma albignula seri; Canis latrans janes; Odocoileus hemionus sheldoni.

Turners Island, Gulf of California: Perognathus penicillatus mimicus; Peromyscus collatus; Neotoma varia.

Tabasco

No exact locality: Tamaulipas tetradactyla mexicana.

Monte Cristo: Pipistrellus cinnamomeus.

Teapa: Didelphis marsupialis tabascensis; Saccopteryx bilineata centralis; Artibeus turpis; Myotis forti dens; Hetero geomyx hispidus teapennis; Oryzomys teapennis; Oryzomys rostratus maga don; Oryzomys alfaroi palatinus; Pero mys cus mexicanus teapennis; Sigmodon hispidus saturatus; Mustela frenata perda.

Tamaulipas

Altamira: Lepus californicus altamirae; Sciurus negilgens; Geomys personatus tropicalis; Neotoma microps litoralis.
MÉXICO—Continued

Tamaulipas—Continued

Brownsville, Texas, 45 miles from: Scalopus inflatus.

Charco Escondido: Perognathus hispidus hispidus; Neotoma micropus micropus.

Ciudad Victoria, 70 kilometers by highway south of, and 6 kilometers west of Pan-American Highway at El Carrizo: Peromyscus ochraventer; Neotoma angustapalata.

Hacienda Santa Engracia, northwest of Ciudad Victoria: Oryzomys fulvescens engraviae.

Island 88 miles south and 10 miles west of Matamoros: Lepus californicus curti; Dipodomys ordii parabullatus; Sigmodon hispidus solus. Jaumave: Dipodomys ordii fuscus; Dipodomys ordii durrantii.

Matamoros: Cryptotis parva berlandieri; Dasypterus intermedius; Dasyplus novemcinctus mexicanus; Cratogeomys castanops tamaulipensis; Felis apache; Felis yagouaroundi cacomitli.

Mier, on Río Grande: Canis latrans microdon. Miquihuana: Idionycteris mexicanus; Cratogeomys castanops planifrons; Onychomys torridus surrus.

Miquihuana, near, Sierra Madre Oriental: Odocoileus virginianus miquihuanaensis.

Rancho Santa Ana, Río Soto la Marina, about 8 miles southwest of Padilla: Oryzomys rostratus carrorum.

San José, 12 miles northwest of San Carlos, Sierra San Carlos: Peromyscus pectoralis collinus.

Tlaxcala

Mount (Cerro de) Malinche: Peromyscus boylii levipes.

Tlaxcala, 13 kilometers northeast of: Glossophaga soricina alticola.

Veracruz

No exact locality: Sciurus aureogaster hypopyrhus; Oryzomys fulvescens fulvescens; Dasyprotax mexicana; Felis pardalis pardalis.

Achotal: Dermanura jucundum; Mustela frenata macrophonius; Nasua narica narica.

Atoyac: Potos flavus azteucus.

Boca del Monte: Thomomys umbrinus umbrinus.

Boca del Río, 8 kilometers south of Veracruz [city]: Reithrodontomys fulvescens tropicalis.

Carrizal: Lomys puctos obscurus.

Catemaco: Lomys orbitalis; Oryzomys jala-pae rufinus; Cuniculus paca nelsoni.

Chichicaxtle: Sylvilagus floridanus connectens; Heteroegomys hispidus torridus.

Chijol: Odocolieus virginianus veraerucius.

Coatzacoalcos: Vampyrus spectrum nelsoni; Oryzomys goldmani.

Coatzacoalcos, 14 kilometers southwest of: Myotis argentatus.

Cofre de Perote: Myotis volans amotus; Tadarida mexicana; Cratogeomys perotensis perotensis; Reithrodontomys chrysopsis perotensis; Neotomodon alstoni perotensis; Mustela frenata perota.

Hacienda El Mirador; 20 leagues from Veracruz: Nasua solitaria mexicana.

Hacienda Tortugas, Jalapa: Tayra barbara senex.

Jalapa: Cryptotis mexicana mexicana; Heteroegomys hispidus hispidus; Oryzomys jala-pae; Oryzomys alfaroi chapmani; Reithrodontomys rufescens rufescens; Reithrodontomys costoricensis jalapae; Peromyscus furus; Baiomys musculus brunneus; Pitymys quasiaster; Mus musculus jalapae.

Jaltipan: Heteroegomys hispidus isthmicus.

Jico: Peromyscus simulatus; Peromyscus nelsoni; Mustela frenata tropicalis.

Las Vigas, Cerro de los Pájaros: Centurio minor; Pipistrellus subflavus verae-crucis; Sylvilagus verae-crucis; Sciurus aureogaster frumentor; Sciurus niger melanomatus; Sciurus oculatus oculatus; Cratogeomys perotensis estor; Reithrodontomys megalotis saturatus; Peromyscus melanotis.

Minatitlán: Alouatta palliata mexicana.

Mirador, about 15 miles northeast of Ilu-tuseo: Artibeus cinereus toltecus; Centurio mcmurtri; Eptesicus fuscus miradorensis; Rhogeæsa parula tumida; Ateles geoffroyi vellerosus; Ateles neglectus; Sylvilagus brasiliensis truei; Reithrodontomys sumichrasti sumichrasti; Reithrodontomys mexicanus mexicanus; Peromyscus mexicanus mexicanus; Jentinkia sumichrasti sumichrasti; Mazama sartorii; Mazama americana temana.
Northern Yucatán, no exact locality: Promops centralis.

Chichén-Itzá: Didelphis marsupialis yucatanensis; Cryptotis mayensis; Artibeus jamaicensis yucatanicus; Artibeus cinereus phaeotis; Tadarida yucatanica; Heteromys gaumeri; Oryzomys rostratus yucatanensis; Otonyctomys hatti; Reithrodontomys gracilis gracilis; Peromyscus yucatanicus yucatanicus; Nasua narica yucatanica; Spilogale angustifrons yucatanensis.

Izamal, east of Mérida: Marmosa mexicana mayensis; Macrota pygmaeus; Adelonycteris gaumeri; Coendou mexicanus yucataniae.

Mérida: Sylvilagus floridanus yucatanicus; Sciurus yucatanensis yucatanensis; Urocyon parvidens; Felis wiedii yucatanica; Felis yagourounidi jossata.

Puerto Morelos: Sigmodon hispidus microdon.

San Felipe: Urocyon cinereoargenteus fraterculus.

Tunkás: Ototylomys phyllostis phyllostis; Grison canaster; Pecari tajacu yucatanensis; Mazama gouazoubira pandora.

Yaxcabá, southwest of Chichén-Itzá: Marmosa gaumeri.

Zacatecas

Berriozábal: Thomomys umbrinus zacatecae; Dipodomys ornatus; Peromyscus melanocephalus consobrinus.

Cañitas: Cratogeomys castanops goldmani.

El Plateado: Neotoma albigna zacatecae.

El Plateado, mountains near: Nelsonia tamarodes.

San Juan Capistrano, Hacienda de: Onychomys torridus canus.

Sierra Moroni, near El Plateado: Thomomys umbrinus enixus.

Sierra de Valparaíso: Eutamias bulleri bulleri; Sciurus nayaritensis; Thomomys umbrinus crassidens; Reithrodontomys megalotis zacatecae; Peromyscus difficilis difficilis; Sigmodon leucotis.

Valparaíso: Perognathus hispidus zacatecae.

Zacatecas [city]: Sigmodon fulviventer.
CENTRAL AMERICA

No exact locality: Ateles melanochir.

British Honduras

Cayo

Mountain Cow: Alouatta palliata luctuosa.

Mountain Pine Ridge, 12 miles south of El Cayo: Heterogeomys hispidus cayoensis; Oryzomys conesi pinicola.

Costa Rica

No exact locality: Carollia castanea; Chiroderma salvini; Lasiusus borealis frantzi; Dasypus novemcinctus fenestratus; Lutra annectens mesopotes.

Alajuela

Cataratas San Carlos, Río San Carlos: Macrogomys cherriei carlosensis.

San Carlos: Oryzomys alfaroi alfaroi.

San Isidro: Spilogale angustifrons celeris.

Villa Quesada, 10 miles northwest of Volcán Poás: Microsciurus alfari alticola; Reithrodontomys brevirostris; Scotinomys teguina cacaabatus.

Volcán Poás: Sciurus pasiens.

Cartago

Angostura, Río Reveratón, opposite Turrialba: Heteromys desmarestianus subafinsis.

Angostura Valley: Proechimys semispinosus rubellus.

El Copey de Dota, 15 miles south of Cartago, Cordillera de Talamanca: Sylvilagus brasiliensis dieci; Heteromys oresterus.

El Muñeco, Río Navarro, 10 miles south of Cartago: Macrogomys cavator nigrescens.

El Sauce Peralta, a farm on Atlantic Railroad, less than halfway from San José to Limón: Sturnirops mordax; Peromyscus nudipes orientalis; Potos flavus arboresens.

Estrella de Cartago, near source of Río Estrella, 6 or 8 miles south of Cartago: Bassaricyon lasius.

La Carpinteria: Blarina castaricensis; Reithrodontomys castaricensis; Peromyscus nudipes nudipes.

Las Vueltas: Scotinomys harrisi.

Navarro, near Orosi: Marmosa mexicana zele-doni.

Orosi, south of Cartago: Cyclopes didactylus dorsalis.

Paso Ancho, between Cartago and Pacayas: Macrogomys heterodus cartagoensis.

Santa Teresa Peralta: Oryzomys fulvescens revventazoni.

Tres Rios: Marmosa alstoni alstoni; Rheomys underwoodi.

Tuis, about 20 miles east of Cartago: Oryzomys bombycinus aleni.

Volcá de Irazú: Cryptotis jacksoni; Cryptotis orophila; Oryzomys fulvescens creper; Reithrodontomys sumichrasti australis; Reithrodontomys rodiguezi; Scotinomys longipilosus; Scotinomys teguina irazu; Felis pardinoides oncilla.

Guanacaste

Culebra, Bahia de Culebra: Ateles Geoffroyi frontatus.

Hacienda Miravalles, near, Volcán de Miravalles: Miceronycteris sylvestris.

Hacienda Santa María, 18 miles northeast of Liberia: Sylvilagus floridanus costaricensis; Reithrodontomys gracilis harristi; Peromyscus nudipes hesperus.

Liberia: Sciurus variegatoides dorsalis.

Volcán de Miravalles, Cordillera del Guanacaste: Sciurus deppei miravallensis.

Limón

Cuabré, Talamanca region: Ateles Geoffroyi ornatus.

Jiménez, upper Río Jiménez: Microsciurus alfari alfari; Nectomys alfari alfari.

Río Lari, head of, near base of Pico Blanco: Cryptotis gracilis.

[Río] Pacuare: Myrmecophaga tridactyla centralis; Macrogomys cherriei costaricensis.

Río Sicasola (Sixaola), between Cuabre and mouth of Río Sixaola: Oryzomys talmancae carrikeri.

Santa Clara: Macrogomys cherriei cherriei.

Sipurio, Río Sixaola: Sylvilagus brasiliensis gabbit; Tayassu pecari spiradens; Mazama americana cerasina.
CENTRAL AMERICA—Continued

Costa Rica—Continued

Suerre, a finca near Jiménez: Oryzomys caliginosus chrysomelas.
Talamancia (probably near Sipurio, valley of Río Sixaola): Caluromys derbianus centralis; Sciurus variegatoides thomasi; Oryzomys talamancae talamancae; Procyon lotor crassidens; Bassaricyon gabbii gabbii; Felis onca centralis; Felis pardalis mearsi; Odocoileus costaricensis.

Puntarenas

Agua Buena, Sabanna de Potrero Grande: Reithrodonotus mexicanus portrerongrandeii; Scutinomys tectiuna endersii.
Boruca, near Río Diquís: Zagodontomys cherriei cherriei; Sigmodon hispidus borucae.
El General: Oryzomys fulvescens costaricensis.
Las Agujas: Sciurus variegatoides austini.
Point [Punta] Burica: Sciurus variegatoides melania.
Puntarenas [city]: Balantiopteryx plicata plicata.
Tambor, Nicoya Peninsula: Sciurus variegatoides atrirufus.

San José

Agua Caliente, probably: Sciurus granatensis hoffmanni.
Alto de Jabiló Pirris, between San Gerónimo and Pozo Azul: Macrogeomys underwoodii.
Escazú, about 7 miles southwest of San José: Didelurus virgo; Choloepus hoffmanni; Heteromys desmarestianus underwoodii; Liomys salvini nigrescens.
Escazú Heights: Macrogeomys heterodus.
Joquín de Dota (San Joaquín de Dota): Oryzomys aaphrastus.
Los Higuerañes, highlands above Escazú: Scutinomys teguina escazuenis.
Pozo Azul, 9 miles upstream from mouth of Río Pirris: Micronycteris hirsuta; Saimiri orstedii cristinellus; Nasua narica ballata; Felis carrikeri.
Rancho de Redondo: Hylonycteris underwoodii.
Sabanilla de Pirris, about 10 miles south of Puriscal: Liomys salvini aterrimus; Urocyon cinereoargenteus costaricensis.
San Gerónimo de Pirris, near Pozo Azul: Heteromys desmarestianus planifrons; Nyctomys sumichrasti costaricensis; Ototylomys phyllotis australis; Dasyprocta punctata underwoodii.
San Isidro: Cryptotis nigrescens.
San José [city]: Artibeus intermedium; Sciurus variegatoides rigidus; Reithrodonotus mexicanus cherriei; Mustela frenata costaricensis.
Zarcero or Palmira, probably: Macrogeomys heterodus dolichocephalus.

El Salvador

No exact locality: Vesperitilio concinnus; Sciurus variegatoides variegatoides.

Ahuachapán

Barra de Santiago: Sciurus variegatoides bangsi; Nyctomys sumichrasti florensei; Procyon lotor dickeyi.

Chalatenango

Los Esesmiles: Heteromys desmarestianus psakastus; Peromyscus mexicanus philombrius; Rheomys thomasi stirtoni.
San José del Sacare (San José del Sacario): Peromyscus boylii sacarensis.

La Libertad

Hacienda Zapotitán.—Chironectes argyrodytes.

La Unión

Cerro Mogote, near, 2 miles west of Río Goascorán.—Canis latrans dickeyi.
Río Goascorán.—Peromyscus stirtoni.

San Miguel

Finca San Felipe, Mount Cacaguatique.—Rheomys thomasi thomasi.
Mount Cacaguatique.—Orthogeomys pygacanthus; Peromyscus boylii cordillerae; Peromyscus mexicanus salvadorensis.

Sonsonate

Hacienda Chilata, about 12 miles southeast of Sonsonate, Balsam Range.—Reithrodonotus mexicanus orinus.

Guatemala

No exact locality: Caluromys derbianus fervidus; Choeorniscus godmani; Sciurus griseoflavus griseoflavus; Orthogeomys grandis latifrons; Peromyscus mexicanus gymnotis; Elasmognathus dowii.
Guatemala—Continued

ALTA VERAPAZ

Cobán: Sorex veraepacis veraepacis; Blarina tropicalis; Cryptotis micrura; Ateles Geoffroyi pan; Heteromys desmarestianus desmarestianus; Oryzomys couesi couesi; Ototylomys connectens; Scotinomys teguina teguina; Jentinkia sumichrasti variabilis.

Chimoxan, about 40 miles northeast of Cobán: Peromyscus guatemalensis tropicalis.

Finca Concepcion, 35 miles east of Cobán: Peromyscus grandis.

La Primavera, about 10 miles southwest of Cobán: Tylomys nudicaudus.

Rio Dolores, near Cobán: Balantiopteryx io.

Secanquim, about 50 miles east of Cobán: Sciurus yucatanensis phaeopus.

Tucuru, Rio Polochic, about 50 miles southeast of Cobán: Ototylomys phyllotis guatemalae.

El Quiché

Chichicastenango (Santo Tomás): Reithrodontomys mexicanus saxatilis.

Sacapulas: Liomys anthonyi; Reithrodontomys gracilis anthonyi.

IUEHUETENANGO

Jacaltenango: Peromyscus mexicanus sazatilis.

Nentón: Oryzomys couesi zygomaticus; Neotoma ferruginea solitaria; Urocyon cinereoargenteus guatemalae.

Todos Santos, southeast of Nentón: Reithrodontomys tenuirostris; Reithrodontomys microdon microdon; Peromyscus lophurus; Peromyscus guatemalensis guatemalensis; Peromyscus altilaneus; Herpetomys guatemalensis.

IZABAL

Bobos: Micronycteris schmidtorum.

Río Managua (Río Motagua, near Lake Izabal): Sciurus variegatoides managuensis.

PETEN

Guay: Trachops coffini.

Laguna de Zoz [Sotz]: Chilonycteris torrei continentis.

La Libertad: Felis concolor mayensis.

Santa Isabel: Eptesicus propinquus.

Uaxactún: Alouatta palliata pigra.

QUEZALTENANGO

Calel: Sorex saussurei salvini; Cryptotis goodwinii; Oryzomys alfaroi rhabdops; Reithrodontomys sumichrasti dorsalis; Reithrodontomys tenuirostris aureus.

Volcán de Santa María: Sorex saussurei godmani; Orthogeomys grandis vulcani; Oryzomys alfaroi angusticeps.

Zanjón: Sigmodon hispidus zanjonensis.

SACATEPEZQUE

Dueñas: Orthogeomys grandis grandis; Liomys salvini salvini; Nyctomys sumichrasti salvini; Neotoma ferruginea ferruginea.

SAN MARCOS

Hacienda California, 6 miles from Ocós: Reithrodontomys gracilis pacificus.

Volcán Tajumulco, south slope: Neotoma ferruginea vulcani.

VERAPAZ

No exact locality: Felis wieddi salvinia.

HONDURAS

No exact locality: Tamandua sellata; Sciurus boodhiou annulium.

ATLÁNTIDA

Ceiba (La Ceiba): Sigmodon hispidus furvus.

COPÁN

San Pedro, mountains west of: Scotinomys teguina rufoniger.

CORTES

Chamelecon: Cabassous centralis; Pecari tajacu nigrescens.

Puerto Caballos: Thyroptera discifera discifera.

Río de las Piedras: Nyctomys sumichrasti decolorus.

San Pedro Sula, Río Chamelecon: Sciurus variegatoides boodhiou; Liomys heterothrix.

FRANCISCO MORAZÁN

Cerro Cantoral, northwest of Tegucigalpa: Orthogeomys grandis pluto; Reithrodontomys mexicanus lucifrons.

Cerro Guifote, northeast of Archaga: Canis latrans hondurensis.
Honduras—Continued

Comayagüela, Río Grande, opposite Tegucigalpa: Reithrodontomys mexicanus minusculus; Baiomys musculus griseus.

Monte Redondo, about 30 miles northwest of Tegucigalpa: Sylvilagus floridanus hondurensis; Sciurus variegatoides underwoodi.

Zambrano, on main road to Lake Yojoa: Glaucomys volans underwoodi.

La Paz

El Pedrero, 6 kilometers north of Chincala: Eumops underwoodi underwoodi.

La Cruz Grande, near San José: Sturnira septentrionalis.

Las Pilas, 6 miles north of Marcala: Phylloderma septentrionalis.

Muya, 5 miles north of Chincala: Peromyscus hondurensis.

Ocotepeque

Monte Verde, 30 miles northwest of Ocotepeque.—Reithrodontomys australis underwoodi; Reithrodontomys mexicanus ocotepequensis.

Islas de la Bahía

Ruatán (Roatán) Island: Marmosa mitis ruatanica; Dasyprocta ruatanica.

Little Swan Island [Islas Santanilla, or Islas de El Cisne]: Geocapromys brownii thoracatus.

Nicaragua

No exact locality: Caluromys derbianus canus.

Lake Nicaragua: A louatta palliata palliata.

San Emilio, south end of Lake Nicaragua: Proechimys semispinosus centralis.

Boaco

Vijagua (Bijagua): Oryzomys fulvescens nicaraguensis.

Chontales

Lake Nicaragua, lowlands east of: Sigmodon hispidus griseus.

Javali gold mine: Bradypus griseus castaneiceps.

Río San Juan

Greytown (San Juan del Norte): Didelphis marsupialis richmond; Philander opossum fuscogriseus; Micronycteris megalotis microtis; Aotus rufipes; Ateles geoffroyi geoffroyi; Nyctomys sumichrasti venustulus.

Jinotega

Jinotega [city]: Reithrodontomys sumichrasti modestus.

San Rafael del Norte: Cryptotis olivacea; Sciurus deppei matagalpae; Conepatus mesoleucus nicaraguensis.

Managua

Managua [city]: Lichonycteris obscura.

Matagalpa

Lavala (Savala): A louatta palliata matagalpae; Hoplomys gymnurus truei; Lutra annectens latidens.

Matagalpa [city]: Pteronotus suapurensis centralis; Artibius jaicamensis richardsoni; Ototylomys phyllostis fumeus; Peromyscus nicaraguensis; Neoconocephalus olivaceus; Mustela frenata nicaraguensis.

Tuma: Sylvilagus gabbi tumacus; Heteromys desmarestianus fuscatus.

Uluse: Tayra barbara inserta.

Rivas

Peña Blanca: Macrogeomyx matagalpae; Oryzomys richardsoni.

Sábalos, on Río San Juan, at junction of Río Sábalos: Microsciurus affinis septentrionalis.

Zelaya

Bluefields: Marmosa alstoni nicaraguensis.

Cabo Gracias á Dios, Comarca de El Cabo, at mouth of Río Segovia (Wanks): Cebus capucinus limitaneus.

Kansaw Creek, near Cukra, north of Bluefields: Tonatia nicaraguensis.
Nicaragua—Continued

Río Escondido, 7 miles below Rama: Nec-tomys dimidiatus.
Río Escondido, 50 miles above Bluefields: Sciurus variegatoides belti; Sciurus richmondi; Oryzomys conesi richmondi; Dasyprocta punctata richmondi; Nasua narica richmondi.
Río Grande: Oryzomys alfaroii incertus; Oryzomys ochraceus; Bassaricyon gabbii richardsoni.
Río Segovia, Comarca de El Cabo: Ectophylla alba.
Río Segovia, about 50 miles from sea, Comarca de El Cabo: Odocoileus virginianus truei.

Panamá

No exact locality: Tylomys panamensis.
Isthmus: Tapirella bairdii.
San Pablo, in Chiriquí or Veraguas: Vampy-rodes major.

CANAL ZONE

No exact locality: Marikina geoffroyi.
Ancón: Procyon lotor purnulis.
Aspinwall (Colón): Vespertilio exigus.
Balboa, 3 miles west of: Urocyon cinerear genteus furvus.
Barro Colorado Island: Oecomys endersi.
Bas Obispo: Vampyrurus zarinus.
Colón: Dasyprocta punctata isthminca.
Corozal: Sciurus variegatoides helveolus; Oryzomys tectus frontalis.
Gatún: Metachirus nudicaudatus dentaneus; Aotus zonalis; Microsciu-rus alfarini venustus; Oryzomys gatunensis; Procyon cancrivorus panamensis; Mazama americana reperticia.
Loma del León, Gatún Lake: Sciurus grana- tensis morulus.
Río Indio, near Gatún: Marmosa mitis isthminca; Heteromys desmarestianus zonalis; Ictidomys gymnurus goethalsi; Mustela frena panamensis.
Tabernilla: Zygodontomys cherriei ventriosus.

CHIRIQUÍ

Bogavo (Bugaba), foothills of Volcán de Chiriquí: Caluromeys derbianus pal-lidus; Centronycteris maximiliani centralis; Artibeus cinereus watsoni; Dasypus ega panamensis; Eumops bonariensis nanus; Microsciu-rus alfarini browni; Macroleontomys calvus ponsa; Oryzomys tectus tectus; Tylomys watsoni; Proechimys centralis chiriquinus.
Boquerón: Marmosa mexicana savannarum; Phyllostomus hastatus panamensis; Myotis chiriquensis; Tamanuulaa tetradactyla chiriquensis; Sigmodon hispidus chiriquensis; Nasua narica panamensis; Potos flavus chiriquensis; Felis yagouaroundi panamensis; Odocoileus virginianus chiriquensis.
Bóquete, Volcán de Chiriquí: Diphylleia eau-da centralis; Eptesicus chiriquinus; Cebus capucinus imitator; Micro- sciurus boquetensis; SynthoeOCUS brochus; Macroleontomys cavator cavator; Heteromys desmarestianus repens; Oryzomys devius; Oryzomys fulvescens vegetus; Nyctomys sumichrasti nitellinus; Peromyscus cacabatus; Peromy scus flavids; Scinomys teguina apricus; Coendou mexicanus laenatus; Jeninkia sumichrasti notinns; Cone patus semistratius trichurus; Felis colorcostaricensis; Pecari tajacu cruniger.
Casita Alta, Finca Lerida, Bóquete: Scoto nomyx teguina leridensis.
Cerro Pando, between Río Chiriquí Viejo and Río Colorado, about 10 miles from El Volcán: Heteromys desmarestianus chiriquensis; Bassaricyon pauli.
Cerro Punta: Cryptotis zetekii.
Cylindro: Cryptotis endersi.
David, vicinity of: Saimiri orstedii örstedi.
Divalá: Sciurus granatensis chiriquensis; Cuniculus pacu virgatus; Dasyprocta punctata nuchalis.
Gutiérrez, in mountains about 25 miles inland from Chiriquisquito, on trail from Chiriquí Lagoon to Bóquete: Thyroptera tricolor albigula.
Río Coto, hot springs: Rheomyx hartmonni.
Río Gariché, 5 miles southwest of El Volcán Post Office: Reithrodontomys mexi canus garichensis; Scinomys teguina garichensis.
Sevilla Island: Coendou rothschildi.
Siolo, Río Colorado, tributary of Río Chiriquí Viejo, 10 miles west-northwest of El Volcán Post Office: Scinomys teguina episcopi.
Volcán de Chiriquí: Reithrodontomys sumichrasti vulcanius; Reithrodontomys creper; Scinomys xerampelinus; Sigmodon hispidus australus.
U. S. Sylvilagus Tylomys Oecomys Pecari Chironectes Didelphis Rhipidomys Hetero-
Bradypus Tayra

MUSEUM CENTRAL AMERICA—Continued

Panamá—Continued

Colón
Cerro Bruja, about 15 miles southeast of Portobello: Ateles geoffroyi panamensis.

Darién

Cana (Santa Cruz de Cana), upper Río Tuyra [Tuira]: Marmosa invicta; Monodelphis melanops; Chironectes panamensis; Lonchophylla concava; Sylvilagus brasilienis messorius; Sciurus granatensis choco; Microsciurus isthmius vivatus; Macrogomys darianensis; Heteromys australis conscius; Oryzomys aljari darianensis; Neacomys pictus; Nectomys alfari efficax; Reithrodonomys darianensis; Bassaricyon gabbii orinomus; Lutra annectens repanda; Felis wiedii pirrins.

Marraganti, near Real de Santa María, Río Tuyra [Tuira]: Bradypus griseus ignatus; Hydrochoerus isthmius; Diplomys darlingi.

Mount Pirri, near head of Río Limón: Cryptotis mera; Ateles darianensis; Heteromys desmarestianus crassirostris; Oryzomys bombycinus orinus; Oryzomys pirrins; Rhipidomys scandens; Peromyscus pirrins; Rheomys raptor; Dasyprocta punctata darianensis; Potos flavus isthmicus: Icticyon panamensis.

Río Jesuito [Jesueito]: Oecomys trabeatus. Río Tuyra [Tuira]: Ateles geoffroyi grisescens.

Tucarcana: Tylopus fulviventer.

Herrera
Capina: Alouatta palliata trabeata.

Panamá

Archipiélago de las Perlas, Golfo de Panamá.—Isla del Rey (San Miguel Is-

land): Didelphis marsupialis parti-

ceps; Marmosa mitis fulviventer; Sylvilagus brasilienis incitatus; Zygodontomys seorsus; Dasyprocta punctata callida; Proechimys semispinosus burrus; Diplomys labillus.

Isla San José: Dasyprocta punctata bellula; Proechimys semispinosus ignotus; Mazama gouazoubira perimira.

Cabin: Vampyressa minuta; Chiroderma isthmicum.

Chilibrillo River, cave on, near Alhajuela: Lonchophylla robusta.

Cerro Azul, near headwaters of Río Chagres: Alouatta palliata inconsiderans; Heteromys desmarestianus panamensis; Oryzomys bombycinus bombycinus; Oryzomys caliginosus idoneus.

Old Panamá, near Panamá [city]: Sylvilagus brasilienis consobrinus.

Panamá [city]: Liomsy adspersus; Oryzomys panamensis.

Panamá [city], near savanna of Panamá: Proechimys semispinosus panamensis.

Veracuas

Altos Cacao, on ridge between Río Mariato and Río Negro, Mariato-Suay Lands: Proechimys semispinosus goldmani.

Altos Negritos, 10 miles east of Montijo Bay, Mariato-Suay Lands, Azuero Peninsula: Ateles geoffroyi azuerensis.

Calovévora [Calovébora]: Tayra barbara biologiae.

Cordillera de Chucu: Bradypus griseus griseus.

Coiba (Quibo) Island: Didelphis marsupialis battyi; Molossus coibensis; Alouatta palliata coibensis; Dasyprocta coibae; Odocoileus virginianus rothschildi.

Gobernadora Island, off west coast: Caluromys derbianus nauticus.

Paracoté, 1½ miles south of mouth of Río Angulo, east side of Golfo de Montijo: Aotus bipunctatus; Oryzomys azu-

rensis; Dasyprocta punctata pallidiventre.

CARIBBEAN SEA

WEST INDIES

No exact locality: *Lonchorhina aurita*; *Coendou pallidus*; *Trichechus manatus manatus*.

Bahama Islands

Crooked Island: Gordon Hill Caves, Burial Cave No. 1: *Geocapromys ingrahami* irrectus.
Eleuthera Island: *Macrotus waterhousii compressus*; *Tadarida bahamensis*.
Great Abaco Island: Imperial Lighthouse Caves, Hole in the Wall: *Geocapromys ingrahami abaconis*.
Mariguana (Mayaguana) Island: Abrahams Hill: *Erophylla planifrons mariguanaensis*.
New Providence Island. no exact locality: *Procyon maynardi*.
Nassau: *Erophylla planifrons planifrons*; *Eptesicus fuscus bahamensis*.
Plana Keys, East Plana Key: *Geocapromys ingrahami ingrahami*.
Watling Island [San Salvador]: *Natalus tumidifrons*.

Cuba

No exact locality: *Chilonycteris macleayii macleayii*; *Phyllops falcatus*; *Erophylla szekorni szekorni*; *Phyllonycteris poeyi*; *Natalus lepidus*; *Eptesicus cubensis*; *Capromys pilorides pilorides*; *Capromys prehensilis pallidus*; *Capromys prehensilis poeyi*.
Southern Cuba, no exact locality: *Capromys prehensilis prehensilis*.
Western Cuba, no exact locality: *Macrotus waterhousii minor*.

Habana

Isle of Pines (Isla de Pinos).—Nueva Gerona: *Capromys prehensilis gundlachi*.
Nueva Gerona, Casas Mountains: *Capromys pilorides relictus*.

Matanzas

Cafetal San Antonio el Fundador: *Mormoops blainvillii cinnamomea*.
Cárdenas, near: *Nycticeius cubanus*.
Fundador: *Chilonycteris parnellii boothii*.
Sierra de Hato Nuevo: *Nesophontes micros*; *Capromys nana*; *Geocapromys cubanus*; *Boromys torrei*.

Oriente

Baracoa: *Monophyllus cubanus cubanus*; *Natalus macer*.
Baracoa, La Cueva de la Majana: *Chilonycteris torrei torrei*.
Bayamo, mountains near: *Atopogale cubana*.
Daiquirí, cave near: *Nesophontes longirostris*; *Phyllops vetus*.
Daiquirí, Cueva de los Indios: *Natalus primus*.
Maií: *Boromys offella*.
Manzanillo: *Capromys melanurus melanurus*; *Capromys melanurus rufescens*.
Nipe Bay, vicinity of: *Atopogale poeyana*.
Santiago de Cuba: *Artibeus jamaicensis parvipes*.

Pinar del Río

El Guaná: *Brachyphylla nana*.

SANTA CLARA [LAS VILLAS]

Mina Carlota, Barrio de Cumanayagua, Trinidad Mountains.—*Mus musculus perenonotus*.
Trinidad.—*Mormopterus minutus*; *Geocapromys columbianus*.

Hispaniola

No exact locality: *Solenodon paradoxus*.

República Dominicana

No exact locality: *Plagiodontia aedium*.
Arroyo Salado: *Chilonycteris parnellii pusillus*.
Caña Honda: *Phyllops haitiensis*.
Constanza: *Eptesicus fuscus hispaniolae*; *Tadarida constanzae*.
Guarabo, 10 miles east of Jovero, Seibo Province: *Plagiodontia hylaeum*.
Samaná, 2 kilometers east of, Samaná Province: *Plagiodontia ipnaeum*.
República Dominicana—Continued

Samaná: Molossus verrilli.
San Cristóbal: Erophylla santacristobalensis.
San Pedro de Macoris: Brotomys voratus.
Savaneta, near: Natalus major.

Haiti

No exact locality: Macrotus waterhousii waterhousii.
Atalaye Plantation, cave near, about 4 miles east of St. Michel [de l'Atalaye]: Nesophontes hypomicus; Nesophontes paramicus; Nesophontes zamericus; Phyllonycteris obtusa; Quemisia gravis; Plagiodontia speleum.
Jérémie, cave 8 miles west-southwest of Monophyllus cubanus ferreus.

Port-au-Prince: Chilonycteris fuliginosa fuliginosa.
Port-de-Paix: Brachyphylla pumila.
St. Michel, cave near: Acratocnus contes; Parocnus serus; Hexolobodon phenax; Isolobodon levir; Aphaetreus montanus; Brotomys contractus.
Voute l'Eglise, cave near Jacmel road a few kilometers north of Trouin: Lasiurus minor.

Jamaica

No exact locality: Chilonycteris parnelli parnelli; Mormoops blainvillii blainvillii; Monophyllus redmani; Artibeus jamaicensis jamaicensis; Reithonycteris aphylla; Tadarida murina; Molossus milleri; Orzyomys antillarum; Geocapromys brownii brownii; Capromys brachyrus; Monachus tropicalis.

Kingston: Natalus micropus.
Montego Bay: Erophylla sezekorni syops.
Montego Bay, cave 3 miles east of: Eptesicus lynnii.
Phoenix Park, St. Ann Parish: Chilonycteris macleayii grisea.
Port Antonio: Glossophaga soricina antillarum.
Spanish Town: Macrotus waterhousii jamaicensis; Nyctinomus orthotis.
Suttons, District of Vere: Lasiurus degelidus.

Puerto Rico

Bayamón, cave near: Monophyllus portoricicensis; Erophylla bombifrons.

Cueva Catedral, near Morovis: Nesophontes edithae.
Cueva de Fari, near Pueblo Viejo: Chilonycteris fuliginosa inflata; Chilonycteris parnelli portoricicensis.
Luquillo: Molossus fortis.
Maricao: Eptesicus fuscus wetmorei.
Morovis, cave near: Monophyllus frater; Phyllonycteris major.
Utuado: Heptaxodon bidens; Elasmontomyx obliquis; Heteropsomys insulans; Homopsomys antillensis.
Utuado, near, Cueva de la Ceiba, Hacienda Jobo: Isolobodon portoricicensis; Acratocnus odontirgonus.
Utuado, near, cave on property of Don Gervacio Torano: Acratocnus major.

Lesser Antilles

Barbados.—No exact locality: Procyon gloverielli.
St. Michael Parish: Monophyllus plethodon.
Coles Cave, St. Thomas Parish: Brachyphylla minor.
Barbuda Island, cave: Megalonyx audreyae.
Dominica Island: Ardops nichollsi; Natalus dominicensis; Myotis nigricans dominicensis; Tadarida antillarum.
Grenada Island.—No exact locality: Marmosa grenadina; Artibeus jamacensis grenadensis.
Gouyave, hills back of: Dasypus novemcinctus hoplites.
Point Saline: Peropyteryx macrotis phaea.
Westerhall Estate: Glossophaga longirostris rostrata.
Guadeloupe Island.—No exact locality: Artibeus lituratus praeceps; Ardops annecentes.

Gouyave: Dasyprocta nobilei.
Pointe-à-Pitre: Procyon minor.
Martinique Island: Molossus major; Megalomyx desmarestii.
Montserrat Island: Ardops montserratanensis.
St. Kitts Island: Artibeus insularis; Molossus debilis.
St. Lucia Island: Monophyllus luciae; Ardops luciae; Megalomyx luciae; Dasyprocta antillensis.
St. Martin Island: Dermanura eva.
St. Vincent Island: Brachyphylla cavernarum; Orzyomys victus; Dasyprocta albida.
Virgin Islands.—St. Croix: Noctilio leporinus mastivus.
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