

ORDER RODENTIA

ISIS NUMBER: 530141000000000000.

Family Aplodontidae

REVIEWED BY: H. Levenson (HL).

ISIS NUMBER: 5301410001000000000.

Aplodontia Richardson, 1829. Zool. J., 4:334.

COMMENT: Revised by Taylor, 1918, Univ. Calif. Publ. Zool., 17:455.

ISIS NUMBER: 5301410001001000000.

Aplodontia rufa (Rafinesque, 1817). Am. Mon. Mag., 2:45.

TYPE LOCALITY: U.S.A., Oregon, neighborhood Columbia River.

DISTRIBUTION: S.W. British Columbia (Canada) to C. California (U.S.A.).

COMMENT: Specimens from U.S.A., Oregon, Clackamas Co., Marmot, regarded as typical; see Taylor, 1918, Univ. Calif. Publ. Zool., 17:455.

ISIS NUMBER: 5301410001001001001.

Family Sciuridae

REVIEWED BY: L. R. Heaney (LRH)(Asia); R. S. Hoffmann (RSH); S. L. Lindsay (SLL); G. McGrath (GM); T. J. McIntyre (TJM)(Asia); T. Pearson (TP); J. Ramirez-Pulido (JRP)(Mexico); O. L. Rossolimo (OLR)(U.S.S.R.); S. Wang (SW)(China).

COMMENT: Reviewed by Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:153-206, except flying squirrels.

ISIS NUMBER: 5301410002000000000.

Aeretes G. M. Allen, 1940. Nat. Hist. Cent. Asia, II, 2:745.

ISIS NUMBER: 5301410002039000000.

Aeretes melanopterus (Milne-Edwards, 1867). Ann. Sci. Nat. Zool., 8:375.

TYPE LOCALITY: China, Hopei.

DISTRIBUTION: Hopei and Szechwan (China).

ISIS NUMBER: 5301410002039001001.

Aeromys Robinson and Kloss, 1915. J. Fed. Malay St. Mus., 6:23.

ISIS NUMBER: 5301410002040000000.

Aeromys tephromelas (Gunther, 1873). Proc. Zool. Soc. Lond., 1873:413.

TYPE LOCALITY: Malaysia, Penang Isl., Wellesley.

DISTRIBUTION: Malaysian subregion, except Java and S.W. Philippines.

COMMENT: Includes *phaemelas*; see Medway, 1977:101.

ISIS NUMBER: 5301410002040001001.

Aeromys thomasi (Hose, 1900). Ann. Mag. Nat. Hist., 5:215.

TYPE LOCALITY: Malaysia, Sarawak, Baram, Silat River.

DISTRIBUTION: Borneo, except S.E.

Ammospermophilus Merriam, 1892. Proc. Biol. Soc. Wash., 7:27.

REVIEWED BY: D. J. Hafner (DJH).

COMMENT: Formerly included in *Spermophilus* (= *Citellus*) by Hershkovitz, 1949, J. Mammal., 30:296. Bryant, 1945, Am. Midl. Nat., 33:374-375, considered *Ammospermophilus* a distinct genus. Recent biochemical and chromosomal data support Bryant's recognition of generic status; currently being revised by DJH.

ISIS NUMBER: 5301410002001000000.

Ammospermophilus harrisi (Audubon and Bachman, 1854). The Viviparous Quadrupeds of North America, 3:267.

TYPE LOCALITY: U.S.A., Arizona, Santa Cruz Co., Santa Cruz Valley at the Mexican boundary.

DISTRIBUTION: Arizona to S.W. New Mexico (U.S.A.) and adjoining Sonora (Mexico).

ISIS NUMBER: 5301410002001001001.

Ammospermophilus insularis Nelson and Goldman, 1909. Proc. Biol. Soc. Wash., 22:24.

TYPE LOCALITY: Mexico, Baja California Sur, Isla Espiritu Santo.

DISTRIBUTION: Known only from the type locality.

- COMMENT: Considered a distinct species by Hall, 1981:381. Specific validity unclear, due to conflicting chromosomal, allozymic, morphological and zoogeographic data (DJH).
 ISIS NUMBER: 5301410002001002001.
- Ammospermophilus interpres* (Merriam, 1890). N. Am. Fauna, 4:21.
 TYPE LOCALITY: U.S.A., Texas, El Paso Co., El Paso.
 DISTRIBUTION: New Mexico and W. Texas (U.S.A.) to Coahuila, Chihuahua, and Durango (Mexico).
 ISIS NUMBER: 5301410002001003001.
- Ammospermophilus leucurus* (Merriam, 1889). N. Am. Fauna, 2:20.
 TYPE LOCALITY: U.S.A., California, Riverside Co., San Gorgonio Pass.
 DISTRIBUTION: E. California and S.E. Oregon to Colorado and New Mexico (U.S.A.), south to Baja California Sur (Mexico).
 COMMENT: Ongoing investigation indicates that populations south of approx. 29° 30' N. lat. on the Baja California peninsula may constitute a separate species (oldest available name: *A. canfieldae* Huey) (DJH).
 ISIS NUMBER: 5301410002001004001.
- Ammospermophilus nelsoni* (Merriam, 1893). Proc. Biol. Soc. Wash., 8:129.
 TYPE LOCALITY: U.S.A., California, Tulare Co., Tipton.
 DISTRIBUTION: San Joaquin Valley (S. California, U.S.A.).
 COMMENT: May now be restricted to southern half of its former range (DJH).
 ISIS NUMBER: 5301410002001005001.
- Atlantoxerus* Forsyth Major, 1893. Proc. Zool. Soc. Lond., 1893:189.
 COMMENT: Closely related to *Xerus*; see Corbet, 1978:79.
 ISIS NUMBER: 5301410002002000000.
- Atlantoxerus getulus* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:64.
 TYPE LOCALITY: Morocco, Agadir.
 DISTRIBUTION: Morocco, Algeria.
 COMMENT: Includes *trivittatus*; see Corbet, 1978:79.
 ISIS NUMBER: 5301410002002001001.
- Belomys* Thomas, 1908. Ann. Mag. Nat. Hist., ser. 8, 1:2.
 ISIS NUMBER: 5301410002041000000.
- Belomys pearsoni* (Gray, 1842). Ann. Mag. Nat. Hist., 10:263.
 TYPE LOCALITY: India, Assam, Darjeeling.
 DISTRIBUTION: Sikkim and Assam (India) to S. China, Hainan, Taiwan, and Indochina.
 ISIS NUMBER: 5301410002041001001.
- Callosciurus* Gray, 1867. Ann. Mag. Nat. Hist., 20:277.
 COMMENT: Formerly included *Sundasciurus* and *Prosciurillus* (in part; see Moore, 1958, Am. Mus. Novit., 1890:1-5) and *Tamiops* (see Moore and Tate, 1965, Fieldiana Zool., 48:1-351).
 ISIS NUMBER: 5301410002003000000.
- Callosciurus adamsi* (Kloss, 1921). J. Str. Br. Roy. Asiatic Soc., 83:151.
 TYPE LOCALITY: Malaysia, Sarawak, Baram, Long Mujan, 150 mi. (241 km) up Baram River, 700-900 ft. (213-274 m).
 DISTRIBUTION: N. Borneo.
 COMMENT: Distinct from *albescens*; see Medway, 1977:93.
- Callosciurus albescens* (Bonhote, 1901). Ann. Mag. Nat. Hist., ser. 7, 7:446.
 TYPE LOCALITY: Indonesia, Sumatra, Acheen (=Atjeh).
 DISTRIBUTION: Sumatra.
 COMMENT: Considered a distinct species by Medway, 1977:93.
- Callosciurus baluensis* (Bonhote, 1901). Ann. Mag. Nat. Hist., ser. 7, 7:174.
 TYPE LOCALITY: Malaysia, Sabah, Mt. Kinabalu.
 DISTRIBUTION: Higher elevations on Mt. Kinabalu (Sabah, Malaysia).
 COMMENT: Often considered a subspecies of *prevosti*; see Medway, 1977:86.

- Callosciurus caniceps* (Gray, 1842). Ann. Mag. Nat. Hist., ser. 1, 10:263.
TYPE LOCALITY: Burma, Tenasserim.
DISTRIBUTION: Thailand, peninsular Burma, peninsular Malaysia, and adjacent islands.
COMMENT: Revised by Moore and Tate, 1965, Fieldiana Zool., 48:1-351. Closely related to *erythraeus*, *inornatus*, and *phayrei* (LRH).
ISIS NUMBER: 5301410002003001001.
- Callosciurus erythraeus* (Pallas, 1778). Nova Spec. Quad. Glir. Ord., p. 377.
TYPE LOCALITY: India, Assam, Garo Hills.
DISTRIBUTION: West of Irrawaddy River in India; Burma; S.E. China.
COMMENT: Includes *sladeni*; see Moore and Tate, 1965, Fieldiana Zool., 48:113. May include *flavimanus* (LRH).
ISIS NUMBER: 5301410002003002001 as *C. erythraeus*.
5301410002003013001 as *C. sladeni*.
- Callosciurus ferrugineus* (F. Cuvier, 1829). Tabl. Meth. Mamm., 3:238.
TYPE LOCALITY: "India."
DISTRIBUTION: S.C. Burma.
COMMENT: Often considered conspecific with *finlaysoni*, but see Moore and Tate, 1965, Fieldiana Zool., 48:158, who considered *ferrugineus* a distinct species.
ISIS NUMBER: 5301410002003003001.
- Callosciurus finlaysoni* (Horsfield, 1824). Zool. Res. Java, 7:7.
TYPE LOCALITY: Thailand, Si Chang Isl. (N. Gulf of Thailand).
DISTRIBUTION: Thailand; Kampuchea; Laos; Vietnam.
COMMENT: Revised by Moore and Tate, 1965, Fieldiana Zool., 48:161.
ISIS NUMBER: 5301410002003004001.
- Callosciurus flavimanus* (I. Geoffroy, 1831). In Zool. Voy. de Belanger Indes Orient., 1:148.
TYPE LOCALITY: Vietnam, Quang Nam Prov., Da Nang (=Tourane).
DISTRIBUTION: East of Irrawaddy River in Burma, Thailand, Malaya, Indochina, S. China, and Taiwan.
COMMENT: May be conspecific with *erythraeus* (LRH).
ISIS NUMBER: 5301410002003005001.
- Callosciurus inornatus* (Gray, 1867). Ann. Mag. Nat. Hist., ser. 3, 20:282.
TYPE LOCALITY: "Mountains in Laos."
DISTRIBUTION: Laos; N. Vietnam.
COMMENT: Revised by Moore and Tate, 1965, Fieldiana Zool., 48:209.
ISIS NUMBER: 5301410002003006001.
- Callosciurus melanogaster* (Thomas, 1896). Ann. Mus. Civ. Stor. Nat. Genova, 14:668.
TYPE LOCALITY: Indonesia, Mentawi Isls., Sipora Isl.
DISTRIBUTION: Mentawi Isls. (Indonesia).
COMMENT: Member of the *notatus* species group (LRH).
ISIS NUMBER: 5301410002003007001.
- Callosciurus nigrovittatus* (Horsfield, 1823). Zool. Res. Java, 7:149.
TYPE LOCALITY: Indonesia, West Java.
DISTRIBUTION: Malay Peninsula; Sumatra; Borneo; Java; adjacent small islands.
COMMENT: Member of the *notatus* species group (LRH).
ISIS NUMBER: 5301410002003008001.
- Callosciurus notatus* (Boddaert, 1785). Elench. Anim., p. 119.
TYPE LOCALITY: Indonesia, West Java.
DISTRIBUTION: Widespread on islands from Malaya to Java, Bali, and Borneo; Salayer Isl. (south of Sulawesi).
ISIS NUMBER: 5301410002003009001.
- Callosciurus phayrei* (Blyth, 1855). J. Asiat. Soc. Bengal, 24:472.
TYPE LOCALITY: Burma, Martaban.
DISTRIBUTION: S. Burma.
COMMENT: Considered a distinct species by Moore and Tate, 1965, Fieldiana Zool., 48:201. Closely related to *caniceps* (LRH).

- Callosciurus prevosti* (Desmarest, 1822). *Encyclop. Method. Mamm.*, p. 335.
 TYPE LOCALITY: Malaysia, Malacca Prov., Malacca.
 DISTRIBUTION: Malaysian subregion except Java; Sulawesi.
 COMMENT: May include *baluensis*; see Medway, 1977:86. Reviewed by Heaney, 1978, *Evolution*, 32:29-44.
 ISIS NUMBER: 5301410002003010001.
- Callosciurus pygerythrus* (I. Geoffroy, 1832). *Mag. Zool. Paris*, p. 5, pl. 4-6.
 TYPE LOCALITY: Burma, Syriam, near Pegu.
 DISTRIBUTION: Nepal to Burma and Yunnan (China).
 COMMENT: Revised by Moore and Tate, 1965, *Fieldiana Zool.*, 48:209.
 ISIS NUMBER: 5301410002003011001.
- Callosciurus quinquestriatus* (Anderson, 1871). *Proc. Zool. Soc. Lond.*, 1871:142.
 TYPE LOCALITY: Burma, Kakhven Hills, Ponsee (East of Bhamo).
 DISTRIBUTION: N.E. Burma; Yunnan (China).
 COMMENT: Included in *flavimanus* by Moore and Tate, 1965, *Fieldiana Zool.*, 48:209, but see Corbet and Hill, 1980:132. LRH considers *quinquestriatus* a distinct species.
 ISIS NUMBER: 5301410002003012001.
- Cynomys Rafinesque*, 1817. *Am. Mon. Mag.*, 2:43.
 REVIEWED BY: S. D. Shalaway (SDS).
 COMMENT: Revised by Pizzimenti, 1975, *Occas. Pap. Mus. Nat. Hist. Univ. Kans.*, 39:1-73. Clark *et al.*, 1971, *Mamm. Species*, 7:1-4, published a key to the genus.
 ISIS NUMBER: 5301410002004000000.
- Cynomys gunnisoni* (Baird, 1855). *Proc. Acad. Nat. Sci. Phila.*, 7:334.
 TYPE LOCALITY: U.S.A., Colorado, Saguache Co., Cochetopa Pass.
 DISTRIBUTION: S.E. Utah, S.W. Colorado, N.E. Arizona, and N.W. New Mexico (U.S.A.).
 COMMENT: Subgenus *Leucocrossuromys*; see Hall, 1981. Reviewed by Pizzimenti and Hoffmann, 1973, *Mamm. Species*, 25:1-4.
 ISIS NUMBER: 5301410002004001001.
- Cynomys leucurus* Merriam, 1890. *N. Am. Fauna*, 3:59.
 TYPE LOCALITY: U.S.A., Wyoming, Uinta Co., Fort Bridger.
 DISTRIBUTION: S.C. Montana, W. and C. Wyoming, N.E. Utah, and N.W. Colorado (U.S.A.)
 COMMENT: Subgenus *Leucocrossuromys*; see Hall, 1981. Reviewed by Clark *et al.*, 1971, *Mamm. Species*, 7:1-4.
 ISIS NUMBER: 5301410002004002001.
- Cynomys ludovicianus* (Ord, 1815). *In Guthrie, A New Geogr., Hist. Coml. Grammar, Phila.*, 2nd ed., 2:292.
 TYPE LOCALITY: U.S.A., "Upper Missouri River."
 DISTRIBUTION: Saskatchewan (Canada); Montana to E. Nebraska, W. Texas, New Mexico, and S.E. Arizona (U.S.A.); N.E. Sonora, and N. Chihuahua (Mexico).
 COMMENT: Subgenus *Cynomys*; see Hall, 1981:411.
 ISIS NUMBER: 5301410002004003001.
- Cynomys mexicanus* Merriam, 1892. *Proc. Biol. Soc. Wash.*, 7:157.
 TYPE LOCALITY: Mexico, Coahuila, La Ventura.
 DISTRIBUTION: Coahuila, and San Luis Potosi; perhaps Nuevo Leon, and Zacatecas (N.C. Mexico).
 COMMENT: Subgenus *Cynomys*; see Hall, 1981:412.
 PROTECTED STATUS: CITES - Appendix I and U.S. ESA - Endangered.
 ISIS NUMBER: 5301410002004004001.
- Cynomys parvidens* J. A. Allen, 1905. *Mus. Brooklyn Inst. Arts and Sci., Sci. Bull.*, 1:119.
 TYPE LOCALITY: U.S.A., Utah, Iron Co., Buckskin Valley.
 DISTRIBUTION: S.C. Utah (U.S.A.).
 COMMENT: Subgenus *Leucocrossuromys*; see Hall, 1981. Reviewed by Pizzimenti and Collier, 1975, *Mamm. Species*, 52:1-3.

PROTECTED STATUS: U.S. ESA - Endangered.
ISIS NUMBER: 5301410002004005001.

Dremomys Heude, 1898. Mem. Hist. Nat. Emp. Chin., 4(2):54.
ISIS NUMBER: 5301410002005000000.

Dremomys everetti (Thomas, 1890). Ann. Mag. Nat. Hist., ser. 6, 6:171.
TYPE LOCALITY: Malaysia, Sarawak, Mt. Penrisen.
DISTRIBUTION: Mountains of Borneo.
ISIS NUMBER: 5301410002005001001.

Dremomys lokriah (Hodgson, 1836). J. Asiat. Soc. Bengal, 5:232.
TYPE LOCALITY: Nepal.
DISTRIBUTION: C. Nepal east to Salween River; Tibet (China); N. Burma; mountains in E. India.
COMMENT: Revised by Moore and Tate, 1965, Fieldiana Zool., 48:263.
ISIS NUMBER: 5301410002005002001.

Dremomys pernyi (Milne-Edwards, 1867). Rev. Mag. Zool. Paris, ser. 2, 19:19.
TYPE LOCALITY: China, Szechwan, mountains near Moupin.
DISTRIBUTION: Burma and Tibet to C. and S.E. China; Taiwan.
ISIS NUMBER: 5301410002005003001.

Dremomys pyrrhomerus (Thomas, 1895). Ann. Mag. Nat. Hist., ser. 6, 16:242.
TYPE LOCALITY: China, Hupei, Ichang.
DISTRIBUTION: C. and S. China; N. Indochina.
COMMENT: May be conspecific with *rufigenis*; see Moore and Tate, 1965, Fieldiana Zool., 48:284, who treated them as separate species.
ISIS NUMBER: 5301410002005004001.

Dremomys rufigenis (Blanford, 1878). J. Asiat. Soc. Bengal, 47(2):156.
TYPE LOCALITY: Burma, Tenasserim, Mt. Moolevit.
DISTRIBUTION: N. Burma to Vietnam and peninsular Malaysia.
COMMENT: May include *pyrrhomerus*; see Moore and Tate, 1965, Fieldiana Zool., 48:284, who treated them as separate species.
ISIS NUMBER: 5301410002005005001.

Epixerus Thomas, 1909. Ann. Mag. Nat. Hist., 8(3):472.
ISIS NUMBER: 5301410002006000000.

Epixerus ebii (Temminck, 1853). Esquisses Zool. sur la Cote de Guine, p. 129.
TYPE LOCALITY: Ghana.
DISTRIBUTION: Sierra Leone to Ghana.
COMMENT: Includes *jonesi*; formerly included *wilsoni*; see Robbins and Schlitter, 1977, Säugetierk. Mitt., 25:22-23.
PROTECTED STATUS: CITES - Appendix III (Ghana).
ISIS NUMBER: 5301410002006001001.

Epixerus wilsoni du Chaillu, 1860. Proc. Boston Soc. Nat. Hist., 7:364.
TYPE LOCALITY: Gabon.
DISTRIBUTION: Cameroun to Gabon.
COMMENT: Amtmann, 1975, Part 6.1:6-7, included *wilsoni* with *ebii*, but Robbins and Schlitter, 1977, Säugetierk. Mitt., 25:22-23, recognized *wilsoni* as a distinct species.
ISIS NUMBER: 5301410002006002001.

Eupetaurus Thomas, 1888. J. Asiat. Soc. Bengal, 57:256.
ISIS NUMBER: 5301410002042000000.

Eupetaurus cinereus Thomas, 1888. J. Asiat. Soc. Bengal, 57:258.
TYPE LOCALITY: Pakistan, Gilgit Valley.
DISTRIBUTION: High elevations in N. Pakistan and Kashmir.
COMMENT: Reviewed by McKenna, 1962, Am. Mus. Novit., 2104:1-38.
ISIS NUMBER: 5301410002042001001.

Exilisciurus Moore, 1958. Am. Mus. Novit., 1914:4.

COMMENT: The species included in *Exilisciurus* were formerly included in *Nannosciurus*; see Moore, 1958, Am. Mus. Novit., 1914:1-10, and Moore, 1959, Bull. Am. Mus. Nat. Hist., 118(4):203.

ISIS NUMBER: 5301410002008000000.

Exilisciurus concinnus (Thomas, 1888). Ann. Mag. Nat. Hist., ser. 6, 2:407.

TYPE LOCALITY: Philippines, Zamboanga Prov., Basilan Isl.

DISTRIBUTION: Basilan Isl. (Philippines).

COMMENT: Possibly conspecific with *luncefordi*, *samaricus*, and *surrutilus* (LRH).

ISIS NUMBER: 5301410002008001001.

Exilisciurus exilis (Muller, 1838). Tijdschr. Nat. Gesch. Physiol., 5:138.

TYPE LOCALITY: Indonesia, Kalimantan, Kapuas River Basin.

DISTRIBUTION: Borneo.

ISIS NUMBER: 5301410002008002001.

Exilisciurus luncefordi (Taylor, 1934). Monogr. Bur. Sci. Manila, 30:373.

TYPE LOCALITY: Philippines, Mindanao, Cotabato Dist., Saub.

DISTRIBUTION: S. Mindanao (Philippines).

COMMENT: See comment under *concinnus*.

ISIS NUMBER: 5301410002020001001 as *Nannosciurus luncefordi*.

Exilisciurus samaricus (Thomas, 1897). Trans. Zool. Soc. Lond., 14(6):389.

TYPE LOCALITY: Philippines, Samar Isl.

DISTRIBUTION: Samar, Leyte, and adjacent islands (Philippines).

COMMENT: See comment under *concinnus*.

ISIS NUMBER: 5301410002020003001 as *Nannosciurus samaricus*.

Exilisciurus surrutilus (Hollister, 1913). Proc. U.S. Nat. Mus., 46:313.

TYPE LOCALITY: Philippines, Zamboanga Prov., Mindanao Isl., Mt. Bliss.

DISTRIBUTION: Mindanao, except southern portion.

COMMENT: See comment under *concinnus*.

ISIS NUMBER: 5301410002020004001 as *Nannosciurus surrutilus*.

Exilisciurus whiteheadi (Thomas, 1887). Ann. Mag. Nat. Hist., ser. 5, 20:127.

TYPE LOCALITY: Malaysia, Sabah, Mt. Kinabalu.

DISTRIBUTION: Mountains of Sabah and Sarawak (Malaysia), above 1000 m.

ISIS NUMBER: 5301410002008003001.

Funambulus Lesson, 1835. Illustr. de Zool., pl. 43.

COMMENT: Reviewed by Moore, 1960, Syst. Zool., 9:1-17.

ISIS NUMBER: 5301410002009000000.

Funambulus layardi (Blyth, 1849). J. Asiat. Soc. Bengal, 18:602.

TYPE LOCALITY: Sri Lanka (=Ceylon), "uplands."

DISTRIBUTION: S. and C. Sri Lanka, and mountains of S. India.

ISIS NUMBER: 5301410002009001001.

Funambulus palmarum (Linnaeus, 1766). Syst. Nat., 12th ed., 1:86.

TYPE LOCALITY: India, Madras.

DISTRIBUTION: C. and S. India; Sri Lanka.

ISIS NUMBER: 5301410002009002001.

Funambulus pennanti Wroughton, 1905. J. Bombay Nat. Hist. Soc., 16:411.

TYPE LOCALITY: India, Surat Dist., Bundha, Mandvi Taluka.

DISTRIBUTION: E. Iran to Nepal and C. India.

ISIS NUMBER: 5301410002009003001.

Funambulus sublineatus (Waterhouse, 1838). Proc. Zool. Soc. Lond., 1838:19.

TYPE LOCALITY: India, Madras, Nilgiri Hills.

DISTRIBUTION: S. India; C. Sri Lanka.

ISIS NUMBER: 5301410002009004001.

Funambulus tristriatus (Waterhouse, 1837). Mag. Nat. Hist., n.s., 1:499.

TYPE LOCALITY: India, Western Ghats, south of 12° N.

DISTRIBUTION: West coast of India, from 20° N. to S. tip.

ISIS NUMBER: 5301410002009005001.

- Funisciurus Trouessart*, 1880. *Le Naturaliste*, 2(37):293.
ISIS NUMBER: 5301410002010000000.
- Funisciurus anerythrus* (Thomas, 1890). *Proc. Zool. Soc. Lond.*, 1890:47.
TYPE LOCALITY: Uganda, Buquera, S. of Lake Albert.
DISTRIBUTION: S.W. Nigeria to Central African Republic, N.E. Zaire and Uganda, south to S.W. Zaire and N. Shaba Prov. (Zaire).
COMMENT: Includes *mystax* and *raptorum*; see Amtmann, 1975, Part 6.1:9.
ISIS NUMBER: 5301410002010001001 as *F. anerythrus*.
5301410002010010001 as *F. mystax*.
5301410002010012001 as *F. raptorum*.
- Funisciurus bayonii* (Bocage, 1890). *J. Sci. Math. Phys. Nat. Lisboa*, 2:3.
TYPE LOCALITY: N. Angola, Duque de Braganca.
DISTRIBUTION: N.E. Angola; S.W. Zaire.
ISIS NUMBER: 5301410002010003001.
- Funisciurus carruthersi* Thomas, 1906. *Ann. Mag. Nat. Hist.*, ser. 7, 18:140.
TYPE LOCALITY: Uganda, E. Ruwenzori.
DISTRIBUTION: Ruwenzori (S. Uganda) to Burundi.
ISIS NUMBER: 5301410002010004001.
- Funisciurus congicus* (Kuhl, 1820). *Beitr. Zool. Vergl. Anat. Abt.*, 2:66.
TYPE LOCALITY: Congo.
DISTRIBUTION: Zaire to Namibia.
ISIS NUMBER: 5301410002010005001.
- Funisciurus isabella* (Gray, 1862). *Proc. Zool. Soc. Lond.*, 1862:180.
TYPE LOCALITY: Cameroun, Cameroun Mtn.
DISTRIBUTION: Cameroun to Congo Republic and Central African Republic.
ISIS NUMBER: 5301410002010006001.
- Funisciurus lemniscatus* (Le Conte, 1857). *Proc. Acad. Nat. Sci. Phila.*, p. 11.
TYPE LOCALITY: Equatorial Guinea, Rio Muni.
DISTRIBUTION: S. of Sanaga River (Cameroun) to Zaire and Central African Republic.
ISIS NUMBER: 5301410002010007001.
- Funisciurus leucogenys* (Waterhouse, 1842). *Ann. Mag. Nat. Hist.*, ser. 1, 10:202.
TYPE LOCALITY: Equatorial Guinea, Bioko (=Fernando Po).
DISTRIBUTION: Ghana to Central African Republic to Rio Muni; Bioko.
COMMENT: Includes *auriculatus*; see Amtmann, 1975, Part 6.1:8.
ISIS NUMBER: 5301410002010002001 as *F. auriculatus*.
- Funisciurus pyrrhopus* (F. Cuvier, 1833). *In E. Geoffroy and F. Cuvier, Hist. Nat. Mamm.*, 4:Tab. Gen. 4.
TYPE LOCALITY: Gabon.
DISTRIBUTION: Gambia to Uganda to Angola.
COMMENT: Includes *leucostigma* and *mandingo*; see Amtmann, 1975, Part 6.1:8.
ISIS NUMBER: 5301410002010011001 as *F. pyrrhopus*.
5301410002010008001 as *F. leugostigma (sic)*.
5301410002010009001 as *F. mandingo*.
- Funisciurus substriatus* De Winton, 1899. *Ann. Mag. Nat. Hist.*, ser. 7, 4:357.
TYPE LOCALITY: Ghana, Kintampo.
DISTRIBUTION: Ivory Coast to Nigeria.
ISIS NUMBER: 5301410002010013001.
- Glaucomys* Thomas, 1908. *Ann. Mag. Nat. Hist.*, ser. 8, 1:5.
REVIEWED BY: D. W. Linzey (DWL).
COMMENT: Revised by Howell, 1918, *N. Am. Fauna*, 44:1-60.
ISIS NUMBER: 5301410002043000000.
- Glaucomys sabrinus* (Shaw, 1801). *Gen. Zool.*, 2:157.
TYPE LOCALITY: Canada, Ontario, mouth of Severn River.
DISTRIBUTION: Alaska and Canada, N.W. U.S.A. to S. California and W. South Dakota (Black Hills), N.E. U.S.A. to S. Appalachian Mtns. (U.S.A.).
ISIS NUMBER: 5301410002043001001.

- Glaucomys volans* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:63.
 TYPE LOCALITY: U.S.A., Virginia.
 DISTRIBUTION: Texas, Kansas, and Minnesota (U.S.A.) to Nova Scotia (Canada) and E. U.S.A.; montane populations scattered from N.W. Mexico to Honduras.
 COMMENT: Reviewed by Dolan and Carter, 1973, Mamm. Species, 78:1-6.
 ISIS NUMBER: 5301410002043002001.
- Glyphotes* Thomas, 1898. Ann. Mag. Nat. Hist., ser. 6, 2:251.
 ISIS NUMBER: 5301410002011000000.
- Glyphotes canalvus* Moore, 1959. Am. Mus. Novit., 1944:5.
 TYPE LOCALITY: Malaysia, Sabah, Mt. Dulit.
 DISTRIBUTION: Known only from the type locality.
 ISIS NUMBER: 5301410002011001001.
- Glyphotes simus* Thomas, 1898. Ann. Mag. Nat. Hist., ser. 6, 2:251.
 TYPE LOCALITY: Malaysia, Sabah, Mt. Kinabalu.
 DISTRIBUTION: Mountains of Sabah and Sarawak (Malaysia), above 1000 m.
 ISIS NUMBER: 5301410002011002001.
- Heliosciurus* Trouessart, 1880. Le Naturaliste, 2nd year, 1:292.
 COMMENT: Includes *Aethosciurus ruwenzorii*; see Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:153-206.
 ISIS NUMBER: 5301410002013000000.
- Heliosciurus gambianus* (Ogilby, 1835). Proc. Zool. Soc. Lond., 1835:103.
 TYPE LOCALITY: Gambia, probably near Fort St. Mary.
 DISTRIBUTION: Senegal to Ethiopia and Zambia.
 COMMENT: Includes *punctatus* and *rhodesiae*; see Amtmann, 1975, Part 6.1:4.
 ISIS NUMBER: 5301410002013001001 as *H. gambianus*.
 5301410002013004001 as *H. punctatus*.
 5301410002013005001 as *H. rhodesiae*.
- Heliosciurus rufobrachium* (Waterhouse, 1842). Ann. Mag. Nat. Hist., ser. 1, 10:202.
 TYPE LOCALITY: Equatorial Guinea, Bioko (Fernando Po).
 DISTRIBUTION: Senegal to S.E. Sudan and Kenya, south to Mozambique and S.E. Zimbabwe.
 COMMENT: Includes *mutabilis* and *undulatus*; see Amtmann, 1975, Part 6.1:5.
 ISIS NUMBER: 5301410002013006001 as *H. rufobrachium*.
 5301410002013003001 as *H. mutabilis*.
 5301410002013007001 as *H. undulatus*.
- Heliosciurus ruwenzorii* (Schwann, 1904). Ann. Mag. Nat. Hist., ser. 7, 13:71.
 TYPE LOCALITY: Uganda, Ruwenzori Mtns.
 DISTRIBUTION: E. Zaire; Rwanda; Burundi; W. Uganda.
 COMMENT: Formerly included in *Aethosciurus*, which is here included in *Paraxerus*; see Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:153-206.
- Hylopetes* Thomas, 1908. Ann. Mag. Nat. Hist., 1:6.
 COMMENT: Includes *Eoglaucomys*; see McLaughlin, 1967, in Anderson and Jones, p. 215, but also see McKenna, 1962, Am. Mus. Novit., 2104:1-38.
 ISIS NUMBER: 5301410002044000000.
- Hylopetes alboniger* (Hodgson, 1836). J. Asiat. Soc. Bengal, 5:231.
 TYPE LOCALITY: Nepal.
 DISTRIBUTION: Nepal to Szechwan, Yunnan, and Hainan (China) and Indochina.
 ISIS NUMBER: 5301410002044001001.
- Hylopetes electilis* (G. M. Allen, 1925). Am. Mus. Novit., 163:16.
 TYPE LOCALITY: China, Hainan Isl., Namfong.
 DISTRIBUTION: Hainan Isl. and Fukien (China).
 COMMENT: Included in *Petinomys* by most authors, but see McKenna, 1962, Am. Mus. Novit., 2104:35.
 ISIS NUMBER: 5301410002048002001.

Hylopetes fimbriatus (Gray, 1837). Ann. Mag. Nat. Hist., 1:584.

TYPE LOCALITY: India, Punjab, Simla.

DISTRIBUTION: Afghanistan to Kashmir and Punjab (India).

COMMENT: Placed in monotypic genus *Eoglaucmys* by McKenna, 1962, Am. Mus.

Novit., 2104:1-38, and others, but included in *Hylopetes* by McLaughlin, 1967, in Anderson and Jones, p. 215.

ISIS NUMBER: 5301410002044002001.

Hylopetes lepidus (Horsfield, 1822). Zool. Res. Java, 5.

TYPE LOCALITY: Indonesia, Java.

DISTRIBUTION: Thailand to Java; Borneo.

COMMENT: New name for the species formerly called *sagitta*; see Medway, 1977:104.

Includes *platyurus*; see Hill, 1961, Ann. Mag. Nat. Hist., ser. 13, 4:730, and Medway, 1977:104. Corbet and Hill, 1980:131, listed *platyurus* as a distinct species, without comment.

ISIS NUMBER: 5301410002044004001 as *H. lepidus*.

5301410002044007001 as *H. sagitta*.

Hylopetes mindanensis (Rabor, 1939). Philipp. J. Sci., 69:389.

TYPE LOCALITY: Philippines, Mindanao Prov., Misamis Oriental, Gingoog, Badiangan.

DISTRIBUTION: Known only from the type locality.

COMMENT: Holotype destroyed during World War II; status uncertain, possibly allied to *Petinomys crinitus* (LRH).

Hylopetes nigripes Thomas, 1893. Ann. Mag. Nat. Hist., ser. 6, 12:30.

TYPE LOCALITY: Philippines, Palawan, Puerta Princesa.

DISTRIBUTION: Palawan (Philippines).

ISIS NUMBER: 5301410002044005001.

Hylopetes phayrei (Blyth, 1859). J. Asiat. Soc. Bengal, 28:278.

TYPE LOCALITY: Burma, Rangoon.

DISTRIBUTION: Burma; Thailand; Laos.

ISIS NUMBER: 5301410002044006001.

Hylopetes sipora Chasen, 1940. Bull. Raffles Mus., 15:117.

TYPE LOCALITY: Indonesia, Sumatra, Mentawi Isls., Sipora Isl.

DISTRIBUTION: Known only from the type locality.

COMMENT: Formerly included in *spadiceus*; see Hill, 1961, Ann. Mag. Nat. Hist., ser.

13, 4:731-733, who noted that an adult specimen is needed to clarify the status of this form.

Hylopetes spadiceus (Blyth, 1847). J. Asiat. Soc. Bengal, 16:867.

TYPE LOCALITY: Burma, Arakan.

DISTRIBUTION: Burma, Thailand, Indochina and Malaysia.

COMMENT: Includes *harrisoni*; see Medway, 1977:105. Formerly included *sipora*; see

Hill, 1961, Ann. Mag. Nat. Hist., ser. 13, 4:731-733. Corbet and Hill, 1980:137, listed *spadiceus* in *lepidus*, without comment.

ISIS NUMBER: 5301410002044008001 as *H. spadiceus*.

5301410002044003001 as *H. harrisoni*.

Hyosciurus Tate and Archbold, 1935. Am. Mus. Novit., 801:2.

ISIS NUMBER: 5301410002014000000.

Hyosciurus heinrichi Tate and Archbold, 1935. Am. Mus. Novit., 801:2.

TYPE LOCALITY: Indonesia, S. Sulawesi, Latimodjong Mtns.

DISTRIBUTION: Mountains of Sulawesi.

ISIS NUMBER: 5301410002014001001.

Iomys Thomas, 1908. Ann. Mag. Nat. Hist., ser. 8, 1:1.

ISIS NUMBER: 5301410002045000000.

Iomys horsfieldii (Waterhouse, 1838). Proc. Zool. Soc. Lond., 1837:87.

TYPE LOCALITY: Indonesia, Java.

DISTRIBUTION: Malay Peninsula to Java; Mentawi Isls.; Borneo.

ISIS NUMBER: 5301410002045001001.

Lariscus Thomas and Wroughton, 1909. Proc. Zool. Soc. Lond., 1909:389.
 ISIS NUMBER: 5301410002015000000.

Lariscus hosei (Thomas, 1892). Ann. Mag. Nat. Hist., ser. 6, 10:215.

TYPE LOCALITY: Malaysia, Sarawak, Baram Dist., Mt. Batu Song.

DISTRIBUTION: Mountains of Sarawak and Sabah (Malaysia).

COMMENT: Sometimes put in the genus *Paralariscus*; see Ellerman, 1947, J. Mammal., 28:249-278; but also see Medway, 1977:97.

PROTECTED STATUS: CITES - Appendix II.

ISIS NUMBER: 5301410002015001001.

Lariscus insignis (F. Cuvier, 1821). In E. Geoffroy St. Hilaire and F. Cuvier, Hist. Nat. Mamm., 2:2.

TYPE LOCALITY: Indonesia, Sumatra, "lowlands".

DISTRIBUTION: Malay Peninsula; Sumatra; Java; Borneo; adjacent Isls.

COMMENT: Includes *niobe* and *obscurus* from the Mentawi Isls.; see Chasen, 1940:145-146. Corbet and Hill, 1980:133, listed *niobe* as a distinct species, without comment; LRH considers *niobe* a distinct species.

ISIS NUMBER: 5301410002015002001 as *L. insignis*.

5301410002015003001 as *L. niobe*.

5301410002015004001 as *L. obscurus*.

Marmota Blumenbach, 1779. Hand. Hilfsb. Nat., 1:79.

COMMENT: North American species reviewed by Howell, 1915, N. Am. Fauna, 37:1-80; Eurasian species revised by Gromov *et al.*, 1965; amphiberian species reviewed by Hoffmann *et al.*, 1979, Occas. Pap. Mus. Nat. Hist. Univ. Kans., 83:1-56. Frase and Hoffmann, 1980, Mamm. Species, 135:1-8, provided a key to N. American species.

ISIS NUMBER: 5301410002016000000.

Marmota baibacina Kastschenko, 1899. Res. Altaisk. Exp., p. 63.

TYPE LOCALITY: U.S.S.R., R.S.F.S.R., Altaisk. Krai, Gorno-Altai. A.O., near Cherga, or, alternatively, Multa River, near Nizhne-Uimon.

DISTRIBUTION: Altai Mtns., S.E. Kazakhstan, Kirgizia, S.W. Siberia (U.S.S.R.); Mongolia; Sinkiang (China). Introduced into Caucasus Mtns. (U.S.S.R.).

COMMENT: Placed by Ellerman and Morrison-Scott, 1951:514, in *marmota*, and by Corbet, 1978:81, in *bobak*; Kapitonov, 1966, Trud. Inst. Zool. Kazakh. Akad. Nauk, 26:94-134, analyzed purported hybridization between *baibacina* and *bobak*. Most Soviet authors retain both as distinct species; see Gromov *et al.*, 1965:337-387, and Zimina, ed., 1978, [Marmots. Distribution and Ecology], "Nauka," Moscow, who included *centralis* in this species. Kapitonov, 1966, Trud. Inst. Zool. Kazakh. Akad. Nauk, 26:94-134, indicated that the population called *aphanasievi* is included in this species; but also see Corbet, 1978:81. Includes *lewisi*, a *nomen oblitum*; see Hoffmann, 1977, Proc. Biol. Soc. Wash., 90:291-301. See Bobrinskii *et al.*, 1965, [Key to the mammals of the U.S.S.R.], "Proveshchenie," Moscow, p. 259, and Ognev, 1947, [Mamm. U.S.S.R., Adjac. Count.], Acad. Sci., Moscow, p. 292, for discussion of alternative type localities.

Marmota bobak (Muller, 1776). Natursyst. Suppl., p. 40.

TYPE LOCALITY: U.S.S.R., Ukrain. S.S.R., right (W) bank of Dnepr River, (originally "Poland").

DISTRIBUTION: Steppes of E. Europe, east to N. and C. Kazakhstan (U.S.S.R.).

COMMENT: See comments under *baibacina*, *himalayana*, and *sibirica*. Includes *kozlovi*; see Fokanov, 1966, Zool. Zh., 45:1864; and *tshaganensis*; see Gromov *et al.*, 1965:337-387.

ISIS NUMBER: 5301410002016001001.

Marmota broweri Hall and Gilmore, 1934. Can. Field Nat., 48:57.

TYPE LOCALITY: U.S.A., Alaska, head of Kukpowruk River, "Point Lay."

DISTRIBUTION: Brooks Range of N. Alaska (U.S.A.) from near coast of Chukchi Sea to Alaska-Yukon border; perhaps also N. Yukon (Canada).

COMMENT: Regarded by Hall and Kelson, 1959, and Hall, 1981, as a synonym of

- caligata*, but Rausch and Rausch, 1971, *Mammalia*, 35:85-101, and Hoffmann *et al.*, 1979, *Occas. Pap. Mus. Nat. Hist. Univ. Kans.*, 83:1-56, considered *broweri* a distinct species. Type locality restricted by Rausch, 1953, *Arctic*, 6:117.
- Marmota caligata* (Eschscholtz, 1829). *Zool. Atlas*, Part 2, p. 1, pl. 6.
TYPE LOCALITY: U.S.A., Alaska, near Bristol Bay.
DISTRIBUTION: C. Alaska (U.S.A.), Yukon and Northwest Territories (Canada) south to W. and N.E. Washington, C. Idaho, and W. Montana (U.S.A.).
ISIS NUMBER: 5301410002016002001.
- Marmota camtschatica* (Pallas, 1811). *Zoogr. Rosso-Asiat.*, p. 156.
TYPE LOCALITY: U.S.S.R., R.S.F.S.R., Kamchatsk. Obl.
DISTRIBUTION: E. Siberia from Transbaikalia to Chukotka and Kamchatka (U.S.S.R.).
COMMENT: Hoffmann *et al.*, 1979, *Occas. Pap. Mus. Nat. Hist. Univ. Kans.*, 83:1-56, reviewed this species. Regarded by Ellerman and Morrison-Scott, 1951, and Rausch, 1953, *Arctic*, 6:91-148, as a synonym of *marmota*.
- Marmota caudata* (Geoffroy, 1842-1843). *In Jacquemont, Voy. dans l'Inde*, 4, *Zool.*, p. 66.
TYPE LOCALITY: India, Kashmir, upper Indus River, Ghombur.
DISTRIBUTION: W. Tien Shan through the Pamirs to Hindu Kush and Kashmir.
COMMENT: Includes *dichrous*; see Corbet, 1978:82; but also see Gromov *et al.*, 1965:440.
ISIS NUMBER: 5301410002016003001.
- Marmota flaviventris* (Audubon and Bachman, 1841). *Proc. Acad. Nat. Sci. Phila.*, 1:99.
TYPE LOCALITY: U.S.A., Oregon, Mt. Hood, "mountains between Texas and California."
DISTRIBUTION: S.C. British Columbia and S. Alberta (Canada) south to N. New Mexico, S. Utah, Nevada, and California (U.S.A.).
COMMENT: Reviewed by Frase and Hoffmann, 1980, *Mamm. Species*, 135:1-8.
ISIS NUMBER: 5301410002016004001.
- Marmota himalayana* (Hodgson, 1841). *J. Asiat. Soc. Bengal*, 10:777.
TYPE LOCALITY: Nepal.
DISTRIBUTION: Montane regions of W. China, Nepal, and N. India to Ladak.
COMMENT: Placed by Ellerman and Morrison-Scott, 1951:515, and Corbet, 1978:81, in *bobak*, but geographically separated from that species; evidence for specific status in Gromov *et al.*, 1965:332-356; see comment under *baibacina*.
- Marmota marmota* (Linnaeus, 1758). *Syst. Nat.*, 10th ed., 1:60.
TYPE LOCALITY: "Alps".
DISTRIBUTION: Swiss, Italian, and French Alps; Austria, S. Germany; Carpathian and Tatra Mtns.; introduced into Pyrennes.
ISIS NUMBER: 5301410002016005001.
- Marmota menzbieri* (Kashkarov, 1925). *Trans. Turk. Sci. Soc.*, 2:47.
TYPE LOCALITY: U.S.S.R., Kazakh. S.S.R., Yuzhno-Kazakhstansk. Obl., Talassk. Alatau Mtns., Chigyr-Tash, on upper Ugama River.
DISTRIBUTION: W. Tien Shan Mtns., in S. Kazakhstan and N.W. Kirgizia (U.S.S.R.).
COMMENT: Regarded by Ellerman and Morrison-Scott, 1951:514, as a synonym of *marmota*, but see Corbet, 1978:81.
- Marmota monax* (Linnaeus, 1758). *Syst. Nat.*, 10th ed., 1:60.
TYPE LOCALITY: U.S.A., Maryland.
DISTRIBUTION: Alaska (U.S.A.) through S. Canada to S. Labrador to N.E. and S.C. U.S.A.; south in Rocky Mtns., possibly to N. Idaho.
ISIS NUMBER: 5301410002016006001.
- Marmota olympus* (Merriam, 1898). *Proc. Acad. Nat. Sci. Phila.*, 50:352.
TYPE LOCALITY: U.S.A., Washington, timberline at head of Soleduc River, Olympic Mtns.
DISTRIBUTION: Olympic Mtns. of W. Washington (U.S.A.).
COMMENT: Reviewed by Hoffmann *et al.*, 1979, *Occas. Pap. Mus. Nat. Hist. Univ. Kans.*, 83:1-56.
ISIS NUMBER: 5301410002016007001.

- Marmota sibirica* (Radde, 1862). Reise Sud. Ost. Sibir., p. 159.
 TYPE LOCALITY: U.S.S.R., R.S.F.S.R., Chitinsk Obl., near Tarei-Nor (Lake).
 DISTRIBUTION: S.W. Siberia, Tuva, Transbaikalia (U.S.S.R.); N. and W. Mongolia; Heilungkiang and Inner Mongolia; formerly Manchuria (China).
 COMMENT: Placed (with *baibacina* and *himalayana*) by Ellerman and Morrison-Scott, 1951:515, and Corbet, 1978:81, in *bobak*. Gromov *et al.*, 1965:337-415, and Zimina, ed., 1978, [Marmots. Distribution and Ecology], "Nauka," Moscow, provided evidence of specific distinctness and included *caliginosus* in this species; see comment under *baibacina*. Nikol'skii, 1974, Zool. Zh., 53:436-444, analyzed contact between *baibacina* and *sibirica* in Tuva; Sokolov and Orlov, 1980:329, also indicated sympatry in N.W. Mongolia.
- Marmota vancouverensis* Swarth, 1911. Univ. Calif. Publ. Zool., 7:201.
 TYPE LOCALITY: Canada, British Columbia, Vancouver Isl., Mt. Douglas.
 DISTRIBUTION: Mountains of Vancouver Isl. (British Columbia, Canada).
 COMMENT: Reviewed by Hoffmann *et al.*, 1979, Occas. Pap. Mus. Nat. Hist. Univ. Kans., 83:1-56.
 ISIS NUMBER: 5301410002016008001.
- Menetes* Thomas, 1908. J. Bombay Nat. Hist. Soc., 18:244.
 ISIS NUMBER: 5301410002017000000.
- Menetes berdmorei* (Blyth, 1849). J. Asiat. Soc. Bengal, 18(30):600-603.
 TYPE LOCALITY: Burma, Tenasserim, Thougyeen Dist.
 DISTRIBUTION: Indochina; Thailand; Burma; Yunnan (China).
 ISIS NUMBER: 5301410002017001001.
- Microsciurus* J. A. Allen, 1895. Bull. Am. Mus. Nat. Hist., 7:332.
 ISIS NUMBER: 5301410002018000000.
- Microsciurus alfari* (J. A. Allen, 1895). Bull. Am. Mus. Nat. Hist., 7:333.
 TYPE LOCALITY: Costa Rica, Jimenez.
 DISTRIBUTION: S. Central America; perhaps in N. South America.
 COMMENT: Apparently included in *flaviventer* by Cabrera, 1961:355; but see Hall, 1981:439-440.
 ISIS NUMBER: 5301410002018001001.
- Microsciurus flaviventer* (Gray, 1867). Ann. Mag. Nat. Hist., ser. 20, 3:432.
 TYPE LOCALITY: Brazil.
 DISTRIBUTION: Upper Amazon River Basin, from the Rio Negro to Peru, the Andes of Peru, Ecuador and Colombia.
 COMMENT: Formerly included *alfari* and *mimulus*; see comments under those species.
 ISIS NUMBER: 5301410002018003001.
- Microsciurus mimulus* (Thomas, 1898). Ann. Mag. Nat. Hist., ser. 7, 2:266.
 TYPE LOCALITY: Ecuador, Esmeraldas, Cachavi, 665 ft. (203 m).
 DISTRIBUTION: N.W. Ecuador, W. Colombia, and Panama.
 COMMENT: Includes *boquetensis* and *isthmus*; see Handley, 1966, in Wenzel and Tipton, Ectoparasites of Panama, p. 777. Cabrera, 1961:356, included *mimulus* in *flaviventer*; but see Hall, 1981:440.
 ISIS NUMBER: 5301410002018002001 as *M. boquetensis*.
 5301410002018004001 as *M. isthmus*.
- Microsciurus santanderensis* (Hernandez-Camacho, 1957). An. Soc. Biol. Bogota, 7:219.
 TYPE LOCALITY: Colombia, Santander Dept., Meseta de los Caballeros, N.E. of La Albania.
 DISTRIBUTION: Colombia, between the Magdalena River and the Cordillera Oriental.
 COMMENT: Originally described as a subspecies of *Sciurus pucheranii*; see Hernandez-Camacho, 1960, Caldasia, 8:359-368.
- Myosciurus* Thomas, 1909. Ann. Mag. Nat. Hist., ser. 8, 3:474.
 ISIS NUMBER: 5301410002019000000.

Myosciurus pumilio (Le Conte, 1857). Proc. Acad. Nat. Sci. Phila., 9:11.

TYPE LOCALITY: Gabon.

DISTRIBUTION: S.E. Nigeria; Cameroun; Gabon; Bioko.

ISIS NUMBER: 5301410002019001001.

Nannosciurus Trouessart, 1880. Le Naturaliste, p. 292.

COMMENT: Formerly included the species now placed in *Exilisciurus*; see Moore, 1958, Am. Mus. Novit., 1914:1-5.

ISIS NUMBER: 5301410002020000000.

Nannosciurus melanotis (Muller, 1844). In Temminck, Verhandl. Nat. Gesch. Nederland Overz. Bezitt., Zool., pp. 87, 98.

TYPE LOCALITY: Indonesia, Java.

DISTRIBUTION: Sumatra; Java; Borneo; adjacent small islands.

ISIS NUMBER: 5301410002020002001.

Paraxerus Forsyth Major, 1893. Proc. Zool. Soc. Lond., 1893:189.

COMMENT: Includes *Aethosciurus* (with the exception of *ruwenzorii*, here included in *Heliosciurus*) and *Tamiscus*; see Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:153-206.

ISIS NUMBER: 5301410002021000000.

Paraxerus alexandri (Thomas and Wroughton, 1907). Ann. Mag. Nat. Hist., ser. 7, 19:376.

TYPE LOCALITY: Zaire, Gudima, River Iri, Upper Welle.

DISTRIBUTION: N.E. Zaire, Uganda.

ISIS NUMBER: 5301410002021001001.

Paraxerus boehmi (Reichenow, 1886). Zool. Anz., 9:315.

TYPE LOCALITY: S. Zaire, Marungu.

DISTRIBUTION: E. and C. Africa.

COMMENT: Includes *antoniae*, *emini*, and *vulcanorum*; see Amtmann, 1975, Part 6.1:10.

ISIS NUMBER: 5301410002021003001 as *P. boehmi*.

5301410002021002001 as *P. antoniae*.

5301410002021006001 as *P. emini*.

5301410002021012001 as *P. vulcanorum*.

Paraxerus cepapi (A. Smith, 1836). Rept. Exped. Expl. C. Afr., p. 43.

TYPE LOCALITY: South Africa, W. Transvaal, Rustenberg Dist., Marico River.

DISTRIBUTION: S. Angola to S. Tanzania to Transvaal (South Africa).

ISIS NUMBER: 5301410002021005001.

Paraxerus cooperi Hayman, 1950. Ann. Mag. Nat. Hist., ser. 12, 3:262.

TYPE LOCALITY: Cameroun, Kumba Div., Rumpi Hills, 5° N., 9° 15' E.

DISTRIBUTION: Cameroun.

COMMENT: Eisentraut, 1976, Bonn. Zool. Monogr., 8, put *cooperi* in a separate genus, *Montisciurus*; but see Corbet and Hill, 1980:131.

Paraxerus flavivittis (Peters, 1852). Monatsb. Preuss. Akad. Wiss. Berlin, p. 274.

TYPE LOCALITY: N.E. Mozambique, Mocambo (=Mossimboa), 11° S., on the coast.

DISTRIBUTION: N. Mozambique to S. Kenya.

ISIS NUMBER: 5301410002021007001.

Paraxerus lucifer (Thomas, 1897). Proc. Zool. Soc. Lond., 1897:430.

TYPE LOCALITY: Malawi, Kombe Forest, Misuku Mtns., 9° 43' S., 33° 31' E.

DISTRIBUTION: N. Malawi; S.W. Tanzania; E. Zambia.

ISIS NUMBER: 5301410002013002001 as *Heliosciurus lucifer*.

Paraxerus ochraceus (Huet, 1880). Nouv. Arch. Mus. Hist. Nat. Paris, p. 154.

TYPE LOCALITY: Tanzania, Bagamoyo, near Dar-es-Salaam.

DISTRIBUTION: Tanzania to S. Sudan and Ethiopia.

ISIS NUMBER: 5301410002021008001.

Paraxerus palliatus (Peters, 1852). Monatsb. Preuss. Akad. Wiss. Berlin, p. 273.

TYPE LOCALITY: Mozambique, "Quintangonha," mainland near Mocambique Isl.

DISTRIBUTION: Natal (South Africa) to Somalia.

- COMMENT: Includes *sponsus*; see Amtmann, 1975, Part 6.1:10.
 ISIS NUMBER: 5301410002021009001 as *P. palliatus*.
 5301410002021010001 as *P. sponsus*.
- Paraxerus poensis* (A. Smith, 1830). S. Afr. Quart. J., 2:128.
 TYPE LOCALITY: Equatorial Guinea, Bioko (=Fernando Po).
 DISTRIBUTION: Sierra Leone to Zaire.
- Paraxerus vexillarius* (Kershaw, 1923). Ann. Mag. Nat. Hist., ser. 9, 11:591.
 TYPE LOCALITY: Tanzania, Usambara.
 DISTRIBUTION: C. and E. Tanzania.
 COMMENT: Includes *byatti*; see Amtmann, 1975, Part 6.1:10.
 ISIS NUMBER: 5301410002021004001 as *P. byatti*.
- Paraxerus vincenti* Hayman, 1950. Ann. Mag. Nat. Hist., 3:263.
 TYPE LOCALITY: Mozambique, Namuli Mtn., north of the Zambezi, 15° 21' S., 37° 4' E.
 DISTRIBUTION: N. Mozambique.
 COMMENT: Perhaps a race of *vexillarius*; see Corbet and Hill, 1980:131.
 ISIS NUMBER: 5301410002021011001 as *P. vincenti* (*sic*).
- Petaurillus* Thomas, 1908. Ann. Mag. Nat. Hist., ser. 8, 1:3.
 ISIS NUMBER: 5301410002046000000.
- Petaurillus emiliae* Thomas, 1908. Ann. Mag. Nat. Hist., ser. 8, 1:8.
 TYPE LOCALITY: Malaysia, Sarawak, Baram.
 DISTRIBUTION: Sarawak (Malaysia).
 ISIS NUMBER: 5301410002046001001.
- Petaurillus hosei* (Thomas, 1900). Ann. Mag. Nat. Hist., ser. 7, 5:275.
 TYPE LOCALITY: Malaysia, Sarawak, Baram, Toyul River.
 DISTRIBUTION: Sarawak (Malaysia).
 ISIS NUMBER: 5301410002046002001.
- Petaurillus kinlochii* (Robinson and Kloss, 1911). J. Fed. Malay St. Mus., 4:171.
 TYPE LOCALITY: Malaysia, Selangor, Kapar.
 DISTRIBUTION: Selangor (Malay Peninsula).
 ISIS NUMBER: 5301410002046003001.
- Petaurista* Link, 1795. Zool. Beytr., 1(2):52, 78.
 ISIS NUMBER: 5301410002047000000.
- Petaurista alborufus* (Milne-Edwards, 1870). C. R. Acad. Sci. Paris, 70:342.
 TYPE LOCALITY: China, Szechwan, Moupin.
 DISTRIBUTION: Taiwan; S. and C. China to Thailand and N.E. India.
 COMMENT: Includes *lena* which was treated as a separate species by Kuntz and Ming, 1970, Quart. J. Taiwan Mus., 23; see Jones, 1975, Quart. J. Taiwan Mus., 28:192, 207. Provisionally includes *pectoralis*; see Ellerman and Morrison-Scott, 1966:465.
 ISIS NUMBER: 5301410002047001001.
- Petaurista elegans* (Muller, 1839). In Temminck, Verhandl. Nat. Gesch. Nederland. Overz. Bezitt., Zool., pp. 107, 112.
 TYPE LOCALITY: Indonesia, Nusa Kambangan Isl., off S. Java.
 DISTRIBUTION: Nepal to Szechwan and Yunnan (China) and Java; Borneo.
 COMMENT: Includes *clarkei* and *marica*; see Ellerman and Morrison-Scott, 1966:460-461.
 ISIS NUMBER: 5301410002047002001.
- Petaurista leucogenys* (Temminck, 1827). Monogr. Mamm., 1:27.
 TYPE LOCALITY: Japan, Kyushu, Higo.
 DISTRIBUTION: Japan, except Hokkaido; Kansu to Yunnan (China).
 COMMENT: Includes *xanthotis*, which was considered a separate species by McKenna, 1962, Am. Mus. Novit., 2104:1-38; see Corbet, 1978:86.
 ISIS NUMBER: 5301410002047003001.

Petaurista magnificus (Hodgson, 1836). J. Asiat. Soc. Bengal, 5:231.

TYPE LOCALITY: Nepal.

DISTRIBUTION: Tibet (China); Nepal; Sikkim (India).

COMMENT: Includes *nobilis*, see Ellerman and Morrison-Scott, 1966:464; but also see Ghose and Saha, 1981, J. Bombay Nat. Hist. Soc., 78:95.

ISIS NUMBER: 5301410002047004001.

Petaurista petaurista (Pallas, 1766). Misc. Zool., p. 54.

TYPE LOCALITY: Indonesia, W. Java.

DISTRIBUTION: Kashmir (India) to Sri Lanka; C. and S.E. China; Taiwan and Java.

COMMENT: Includes *hainana* and *yunanensis*; see Ellerman and Morrison-Scott, 1966:462.

Includes *grandis* which was treated as a separate species by Kuntz and Ming, 1970, Quart. J. Taiwan Mus., 23; see Jones, 1975, Quart. J. Taiwan Mus., 28:193, 207.

ISIS NUMBER: 5301410002047005001.

Petinomys Thomas, 1908. Ann. Mag. Nat. Hist., 1:6.

COMMENT: Formerly included *electilis*, here included in *Hylopetes*; see McKenna, 1962, Am. Mus. Novit., 2104:35.

ISIS NUMBER: 5301410002048000000.

Petinomys bartelsi Chasen, 1939. Treubia, 17:185.

TYPE LOCALITY: Indonesia, Java, Mt. Pangrango.

DISTRIBUTION: Java.

Petinomys crinitus Hollister, 1911. Proc. Biol. Soc. Wash., 24:185.

TYPE LOCALITY: Philippines, Basilan Isl.

DISTRIBUTION: Basilan and Mindanao Isls. (Philippines).

ISIS NUMBER: 5301410002048001001.

Petinomys fuscocapillus (Jerdon, 1847). J. Asiat. Soc. Bengal, 16:867.

TYPE LOCALITY: S. India, Travancore.

DISTRIBUTION: S. India; Sri Lanka.

ISIS NUMBER: 5301410002048003001.

Petinomys genibarbis (Horsfield, 1824). Zool. Res. Java, (descrip. and plate).

TYPE LOCALITY: Indonesia, E. Java.

DISTRIBUTION: Malaya to Sumatra, Java, and Borneo.

COMMENT: Probably conspecific with *sagitta*; see Medway, 1977:102.

ISIS NUMBER: 5301410002048004001.

Petinomys hageni (Jentink, 1888). Notes Leyden Mus., 11:26.

TYPE LOCALITY: Indonesia, Sumatra, Deli.

DISTRIBUTION: Borneo; Sumatra; Mentawi Isls.

ISIS NUMBER: 5301410002048005001.

Petinomys sagitta (Linnaeus, 1766). Syst. Nat., 12th ed., 1:88.

TYPE LOCALITY: Indonesia, Java.

DISTRIBUTION: Java.

COMMENT: Formerly included in *Hylopetes*; see Medway, 1977:102. May be conspecific with *genibarbis*; see Ellerman and Morrison-Scott, 1955, Suppl. to Chasen, (1940), Handlist of Malaysian Mamm., p. 31. Medway, 1977:102, considered it inadvisable to synonymize *sagitta* and *genibarbis* until the relationship has been certainly established.

Petinomys setosus (Temminck, 1845). Fauna Japonica, 1(Mamm.), p. 49.

TYPE LOCALITY: Indonesia, W. Sumatra, Padang.

DISTRIBUTION: Burma; Malaya; Sumatra; Borneo.

COMMENT: Includes *morrissi*; see Muul and Thonglongya, 1971, J. Mammal., 52:362-369, and Corbet and Hill, 1980:137. McKenna, 1962, Am. Mus. Novit., 2104:1-38, considered *morrissi* assignable to a distinct genus, *Olisthomys*.

ISIS NUMBER: 5301410002048006001.

- Petinomys vordermanni* (Jentink, 1890). Notes Leyden Mus., 12:150.
 TYPE LOCALITY: Indonesia, Belitung (=Billiton) Isl.
 DISTRIBUTION: S. Burma; Malaya; Borneo.
 COMMENT: McKenna, 1962, Am. Mus. Novit., 2104:1-38, considered *vordermanni* representative of an undescribed genus, but Muul and Thonglongya, 1971, J. Mammal., 52:362, and Hill, 1961, Ann. Mag. Nat. Hist., ser. 13, 4:733-735, retained it in *Petinomys*.
 ISIS NUMBER: 5301410002048007001.
- Prosciurillus Ellerman*, 1947. Proc. Zool. Soc. Lond., 1947-1948:259.
 COMMENT: Reviewed by Moore, 1958, Am. Mus. Novit., 1890:1-5, who transferred *leucomus* from *Callosciurus* to this genus.
 ISIS NUMBER: 5301410002022000000.
- Prosciurillus abstrusus* Moore, 1958. Am. Mus. Novit., 1890:3.
 TYPE LOCALITY: Indonesia, S.E. Sulawesi, Gunong Tanke Salokko, 3° 40' S., 121° 13' E.
 DISTRIBUTION: Known only from the type locality.
 COMMENT: Includes *obscurus*; see Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:203. *P. obscurus* is probably a *nomen nudum* (RSH).
 ISIS NUMBER: 5301410002022003001 as *P. obscurus*.
- Prosciurillus leucomus* (Forsten, 1839). In Temminck, Verhandl. Nat. Gesch. Nederland Overz. Bezitt., Zool., 1:87.
 TYPE LOCALITY: Indonesia, N.E. Sulawesi, Minahassa.
 DISTRIBUTION: Sulawesi; Sangihe (=Sanghir) Isls.
 COMMENT: Includes *mowewensis* and *serassinorum*, which were formerly included in *Callosciurus*; see Moore, 1958, Am. Mus. Novit., 1890:2. Includes *elbertae* (LRH); Moore, 1958, Am. Mus. Novit., 1890:1-5, did not specifically mention *elbertae*, but probably intended to include it in *leucomus*.
 ISIS NUMBER: 5301410002022001001.
- Prosciurillus murinus* (Forsten, 1844). In Temminck, Verhandl. Nat. Gesch. Nederland Overz. Bezitt., Zool., 1:87.
 TYPE LOCALITY: Indonesia, N.E. Sulawesi.
 DISTRIBUTION: N.E. and C. Sulawesi.
 ISIS NUMBER: 5301410002022002001.
- Protoxerus* Forsyth Major, 1893. Proc. Zool. Soc. Lond., 1893:189.
 ISIS NUMBER: 5301410002023000000.
- Protoxerus aubinnii* (Gray, 1873). Ann. Mag. Nat. Hist., ser. 4, 12:65.
 TYPE LOCALITY: Ghana, Ashanti, Fantree.
 DISTRIBUTION: Liberia to Ghana.
 COMMENT: Subgenus *Allosciurus*; see Amtmann, 1975, Part 6.1:6.
- Protoxerus stangeri* (Waterhouse, 1843). Proc. Zool. Soc. Lond., 1842:127.
 TYPE LOCALITY: Equatorial Guinea, Bioko (=Fernando Po).
 DISTRIBUTION: Sierra Leone to Kenya and Angola; Bioko.
 COMMENT: Subgenus *Protoxerus*; see Amtmann, 1975, Part 6.1:6.
 ISIS NUMBER: 5301410002023001001.
- Pteromys* G. Cuvier, 1800. Lecon's Anat. Comp., I, tab. 1.
 ISIS NUMBER: 5301410002049000000.
- Pteromys momonga* Temminck, 1845. Fauna Japonica, 1(Mamm.), p. 47.
 TYPE LOCALITY: Japan, Kyushu.
 DISTRIBUTION: Kyushu and Honshu (Japan).
 ISIS NUMBER: 5301410002049001001.
- Pteromys volans* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:64.
 TYPE LOCALITY: Sweden, middle part.
 DISTRIBUTION: Palearctic taiga, from Scandinavia east to Chukotka; south to E. Baltic, S. Ural Mtns., Altai Mtns., Mongolia, N. China, Korea, Sakhalin Isl. (U.S.S.R.), and Hokkaido (Japan); perhaps mountains of W. China.
 ISIS NUMBER: 5301410002049002001.

- Pteromyscus* Thomas, 1908. Ann. Mag. Nat. Hist., ser. 8, 1:3.
 ISIS NUMBER: 5301410002050000000.
- Pteromyscus pulverulentus* (Gunther, 1873). Proc. Zool. Soc. Lond., 1873:413.
 TYPE LOCALITY: Malaysia, Penang.
 DISTRIBUTION: S. Thailand to Sumatra; Borneo.
 ISIS NUMBER: 5301410002050001001.
- Ratufa* Gray, 1867. Ann. Mag. Nat. Hist., ser. 3, 20:273.
 ISIS NUMBER: 5301410002024000000.
 PROTECTED STATUS: CITES - Appendix II.
- Ratufa affinis* (Raffles, 1821). Trans. Linn. Soc. Lond., 13:259.
 TYPE LOCALITY: Malaysia, Singapore.
 DISTRIBUTION: Malaysian subregion (except S.W. Philippines).
 PROTECTED STATUS: CITES - Appendix II as *Ratufa* spp.
 ISIS NUMBER: 5301410002024001001.
- Ratufa bicolor* (Sparrman, 1778). Samhelle Hand. (Wet. Afd.), 1:70.
 TYPE LOCALITY: Indonesia, W. Java, Anjer.
 DISTRIBUTION: E. Nepal and Tibet to Hainan (China), south through the Malay Peninsula to Java and Bali.
 PROTECTED STATUS: CITES - Appendix II as *Ratufa* spp.
 ISIS NUMBER: 5301410002024002001.
- Ratufa indica* (Erxleben, 1777). Syst. Regn. Anim., 1:420.
 TYPE LOCALITY: India, near Bombay.
 DISTRIBUTION: S. and C. India, excluding the central lowlands.
 PROTECTED STATUS: CITES - Appendix II as *Ratufa* spp.
 ISIS NUMBER: 5301410002024003001.
- Ratufa macroura* (Pennant, 1769). Indian Zool., 1, pl. 1.
 TYPE LOCALITY: Sri Lanka, highlands of Central and Uva Provs.
 DISTRIBUTION: Sri Lanka and S. India.
 PROTECTED STATUS: CITES - Appendix II as *Ratufa* spp.
 ISIS NUMBER: 5301410002024004001.
- Rheithrosciurus* Gray, 1867. Ann. Mag. Nat. Hist., ser. 3, 20:273.
 ISIS NUMBER: 5301410002025000000.
- Rheithrosciurus macrotis* (Gray, 1857). Proc. Zool. Soc. Lond., 1856:341.
 TYPE LOCALITY: Malaysia, Sarawak.
 DISTRIBUTION: Borneo.
 ISIS NUMBER: 5301410002025001001.
- Rhinosciurus* Blyth, 1855. J. Asiat. Soc. Bengal, 14:477.
 ISIS NUMBER: 5301410002026000000.
- Rhinosciurus laticaudatus* (Muller and Schlegel, 1844). In Temminck, Verhandl. Nat. Gesch. Nederland Overz. Bezitt., Zool., 1:100.
 TYPE LOCALITY: Indonesia, W. Kalimantan, Pontianak.
 DISTRIBUTION: Malaysian subregion except Java and S.W. Philippines.
 ISIS NUMBER: 5301410002026001001.
- Rubrisciurus* Ellerman, 1954. In Laurie and Hill, 1954, Land Mammals of New Guinea, Celebes, and Adjacent Islands, p. 94.
 COMMENT: Sometimes considered a subgenus of *Callosciurus*; see Laurie and Hill, 1954:93; but see also Moore, 1959, Bull. Am. Mus. Nat. Hist., 118(4):176, Moore, 1961, Bull. Am. Mus. Nat. Hist., 122(1):8, and McLaughlin, 1967, in Anderson and Jones, p. 214, who considered it a distinct genus.
 ISIS NUMBER: 5301410002027000000.
- Rubrisciurus rubriventer* (Forsten, 1839). In Temminck, Verhandl. Nat. Gesch. Nederland Overz. Bezitt., Zool., 1:86.
 TYPE LOCALITY: Indonesia, N.E. Sulawesi, Minahassa.
 DISTRIBUTION: N. and C. Sulawesi.
 ISIS NUMBER: 5301410002027001001.

Sciurillus Thomas, 1914. Proc. Zool. Soc. Lond., 1914:416.

ISIS NUMBER: 5301410002028000000.

Sciurillus pusillus (Desmarest, 1817). Nouv. Dict. Hist. Nat., 10:109.

TYPE LOCALITY: French Guiana, Cayenne.

DISTRIBUTION: South America, north of the Amazon, and south of the Amazon in the Tapajoz river basin.

ISIS NUMBER: 5301410002028001001.

Sciurotamias Miller, 1901. Proc. Biol. Soc. Wash., 14:23.

REVIEWED BY: J. R. Callahan (JRCL).

COMMENT: Includes *Rupestes*; reviewed by Moore and Tate, 1965, Fieldiana Zool., 48:1-351. *S. davidianus* has a penile duct and Cowper's glands, and its glans and baculum are similar to those of *Ratufa*; therefore, Callahan and Davis, 1982, J. Mammal., 63:42-47, removed this taxon from the *Tamiasciurini* where it had been placed by Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:182, and tentatively referred it to the *Ratufini* (JRCL). Gromov *et al.*, 1965, placed this genus in the tribe *Tamiini* with the genus *Tamias*.

ISIS NUMBER: 5301410002029000000.

Sciurotamias davidianus (Milne-Edwards, 1867). Rev. Mag. Zool. Paris, ser. 2, 19:196.

TYPE LOCALITY: China, Hopei, "Mountains of Pekin."

DISTRIBUTION: Hopei to Szechwan and Hupei; Kweichow (China).

ISIS NUMBER: 5301410002029001001.

Sciurotamias forresti (Thomas, 1922). Ann. Mag. Nat. Hist., ser. 9, 10:399.

TYPE LOCALITY: China, Yunnan Prov., Mekong-Yangtze Divide, 27° 20' N.

DISTRIBUTION: Yunnan and Szechwan Provs. (China).

COMMENT: Subgenus *Rupestes*; see Moore and Tate, 1965, Fieldiana Zool., 48:309.

ISIS NUMBER: 5301410002029002001.

Sciurus Linnaeus, 1758. Syst. Nat., 10th ed., 1:63.

COMMENT: Includes *Guerlinguetus*, *Hesperosciurus*, *Otosciurus*, *Sciurus* (see Hall, 1981:417-436), *Tenes* (see Corbet, 1978:76), and, *Hadrosociurus* (see Cabrera, 1961:374) as subgenera. Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:153-206, considered *Guerlinguetus* a distinct genus, which included *Hadrosociurus* and *Urosociurus* as subgenera.

ISIS NUMBER: 5301410002030000000 as *Sciurus*.

5301410002012000000 as *Guerlinguetus*.

Sciurus aberti Woodhouse, 1853. Proc. Acad. Nat. Sci. Phila., (1852), 6:110, 220.

TYPE LOCALITY: U.S.A., Arizona, Coconino Co., San Francisco Mtn.

DISTRIBUTION: S.E. Utah, W. Colorado, extreme S.E. Wyoming, W. and C. New Mexico, and Arizona (U.S.A.); Chihuahua, Durango, and Sonora (N.W. Mexico).

COMMENT: Subgenus *Otosciurus*; see Hall, 1981:434. Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:153-206, included *Otosciurus* in subgenus *Sciurus*. Includes *kaibabensis*; see Hoffmeister and Diersing, 1978, J. Mammal., 59:402. Reviewed by Nash and Seaman, 1977, Mamm. Species, 80:1-5.

ISIS NUMBER: 5301410002030001001 as *S. aberti*.

5301410002030013001 as *S. kaibabensis*.

Sciurus aestuans Linnaeus, 1766. Syst. Nat., 12th ed., 1:88.

TYPE LOCALITY: Surinam.

DISTRIBUTION: Venezuela to N. Argentina.

COMMENT: Subgenus *Guerlinguetus*; see Cabrera, 1961:359. Formerly included *gilvularis*; see Avila Pires, 1964, Bol. Mus. Para. Emilio Goeldi, n. s., Zool., 42:1-23.

ISIS NUMBER: 5301410002012001001 as *Guerlinguetus aestuans*.

Sciurus alleni Nelson, 1898. Proc. Biol. Soc. Wash., 12:147.

TYPE LOCALITY: Mexico, Nuevo Leon, Monterrey.

DISTRIBUTION: S.E. Coahuila through C. Nuevo Leon, south through W. Tamaulipas to extreme N. San Luis Potosi (Mexico).

COMMENT: Subgenus *Sciurus*; see Hall, 1981:430.

ISIS NUMBER: 5301410002030002001.

Sciurus anomalus Gmelin, 1778. Syst. Nat., 13th ed., 1:148.

TYPE LOCALITY: U.S.S.R., Georgia, 25 km S.W. of Kutaisi, Sabeka.

DISTRIBUTION: Turkey; Soviet Transcaucasia; N. and W. Iran; Syria; Israel.

COMMENT: Subgenus *Tenes*; see Corbet, 1978:76.

ISIS NUMBER: 5301410002030003001.

Sciurus arizonensis Coues, 1867. Am. Nat., 1:357.

TYPE LOCALITY: U.S.A., Arizona, Yavapai Co., Fort Whipple.

DISTRIBUTION: C. and S.E. Arizona and W.C. New Mexico (U.S.A.); N.E. Sonora (Mexico).

COMMENT: Subgenus *Sciurus*; see Hall, 1981:432.

ISIS NUMBER: 5301410002030005001.

Sciurus aureogaster F. Cuvier, 1829. In E. Geoffroy and F. Cuvier, Hist. Nat. Mamm., 6, livr. 59.

TYPE LOCALITY: Mexico, Tamaulipas, Altamira.

DISTRIBUTION: S.W. and C. Guatemala to Guanajuato to Nayarit and Nuevo Leon (Mexico).

COMMENT: Subgenus *Sciurus*; see Hall, 1981:418. Includes *griseoflavus*, *nelsoni*, *poliopus*, and *socialis*; see Musser, 1968, Misc. Publ. Mus. Zool. Univ. Mich., 137:1-112.

Introduced to Elliot Key, Dade County, Florida (U.S.A.); see Brown and McGuire, 1975, J. Mammal., 56:405-419.

ISIS NUMBER: 5301410002030006001 as *S. aureogaster*.
5301410002030011001 as *S. griseoflavus*.
5301410002030015001 as *S. nelsoni*.
5301410002030018001 as *S. poliopus*.
5301410002030021001 as *S. socialis*.

Sciurus carolinensis Gmelin, 1788. Syst. Nat., 13th ed., 1:148.

TYPE LOCALITY: U.S.A., "Carolina."

DISTRIBUTION: E. Texas (U.S.A.) to Saskatchewan (Canada) and east to Atlantic Coast. Introduced into Britain and various localities in W. North America.

COMMENT: Subgenus *Sciurus*; see Hall, 1981:417.

ISIS NUMBER: 5301410002030007001.

Sciurus colliaei Richardson, 1839. In Beechey, The Zool. of Capt. Beechey's Voy., p. 8.

TYPE LOCALITY: Mexico, Nayarit, San Blas.

DISTRIBUTION: Mexico, W.C. coast including Sonora, Chihuahua, Sinaloa, Durango, Nayarit, Jalisco, and Colima.

COMMENT: Subgenus *Sciurus*; see Hall, 1981:421. Includes *sinaloensis* and *truei*; see Anderson, 1962, Am. Mus. Novit., 2093:9-12.

ISIS NUMBER: 5301410002030009001 as *S. colliaei*.
5301410002030020001 as *S. sinaloensis*.
5301410002030022001 as *S. truei*.

Sciurus deppei Peters, 1863. Monatsb. Preuss. Akad. Wiss. Berlin, p. 654.

TYPE LOCALITY: Mexico, Veracruz, Papantla.

DISTRIBUTION: Tamaulipas (Mexico) to Costa Rica.

COMMENT: Subgenus *Sciurus*; see Hall, 1981:426.

PROTECTED STATUS: CITES - Appendix III (Costa Rica).

ISIS NUMBER: 5301410002030010001.

- Sciurus flammifer* Thomas, 1904. Ann. Mag. Nat. Hist., ser. 7, 14:33.
 TYPE LOCALITY: Venezuela, Bolivar, Caura Valley, La Union.
 DISTRIBUTION: Venezuela along the Orinoco River from the Colombian border to Ciudad Bolivar; perhaps adjacent Colombia.
 COMMENT: Subgenus *Hadrosociurus*; see Cabrera, 1961:374. Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:153-206, considered *flammifer* to be in the subgenus *Hadrosociurus* of genus *Guerlinguetus*.
 ISIS NUMBER: 5301410002012003001 as *Guerlinguetus flammifer*.
- Sciurus gilvicularis* Wagner, 1842. Arch. Naturg., 2:43.
 TYPE LOCALITY: Brazil, Borba, Rio Madeira.
 DISTRIBUTION: N. Brazil.
 COMMENT: Subgenus *Guerlinguetus*; includes *paraensis*; see Avila Pires, 1964, Bol. Mus. Para. Emilio Goeldi, n. s., Zool., 42:1-23. Cabrera, 1961:359, included *gilvicularis* in *aestuans*.
- Sciurus granatensis* Humboldt, 1811. Rec. Observ. Zool., 1(1805):8.
 TYPE LOCALITY: Colombia, Dept. Bolivar, Cartagena.
 DISTRIBUTION: Costa Rica to Colombia, Ecuador, and N. and C. Venezuela; Margarita Isl.; Trinidad; Tobago.
 COMMENT: Subgenus *Guerlinguetus*; see Hall, 1981:436. Includes *saltuensis*; see Cabrera, 1961:368.
 ISIS NUMBER: 5301410002018007001 as *Microsciurus saleutenisi* (*sic*).
- Sciurus griseus* Ord, 1818. J. Phys. Chim. Hist. Nat. Arts Paris, 87:152.
 TYPE LOCALITY: U.S.A., Oregon, Wasco Co., The Dalles, Columbia River.
 DISTRIBUTION: C. Washington, W. Oregon, and California (U.S.A.) to Baja California Norte (Mexico).
 COMMENT: Subgenus *Hesperosciurus*; see Hall, 1981:433. Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:153-206, included *Hesperosciurus* in subgenus *Sciurus*.
 ISIS NUMBER: 5301410002030012001.
- Sciurus ignitus* (Gray, 1867). Ann. Mag. Nat. Hist., ser. 3, 20:429.
 TYPE LOCALITY: Bolivia, near Yungas, upper Rio Beni.
 DISTRIBUTION: Andes of Bolivia and S.E. Peru; Ucayali Valley (E. Peru); N.E. Mato Grosso (Brazil); extreme N.W. Argentina.
 COMMENT: Subgenus *Guerlinguetus*; includes *cuscinus*; see Cabrera, 1961:370-371.
 ISIS NUMBER: 5301410002012004001 as *Guerlinguetus ignitus*.
 5301410002012002001 as *Guerlinguetus cuscinus*.
- Sciurus igniventris* Wagner, 1842. Wiegmann's Arch. Naturg., 1:360.
 TYPE LOCALITY: Brazil, Amazonas, north of the Rio Negro, Marabitanos.
 DISTRIBUTION: N.W. Brazil; S.E. Colombia; S. Venezuela.
 COMMENT: Subgenus *Hadrosociurus*; see Cabrera, 1961:375. Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:153-206, placed *igniventris* in the subgenus *Hadrosociurus* of genus *Guerlinguetus*. Formerly included *tricolor*; see Hershkovitz, 1959, J. Mammal., 40:346; Cabrera, 1961:376, and footnote, listed *tricolor* in *igniventris* but Hershkovitz, 1959, was not incorporated. See comment under *spadiceus*.
 ISIS NUMBER: 5301410002012005001 as *Guerlinguetus igniventris*.
- Sciurus lis* Temminck, 1844. Fauna Japonica, 1(Mamm.), p. 45.
 TYPE LOCALITY: Japan, Honshu.
 DISTRIBUTION: Honshu, Shikoku, and Kyushu (Japan).
 COMMENT: Subgenus *Sciurus*; see Corbet, 1978:77.
- Sciurus nayaritensis* J. A. Allen, 1890. Bull. Am. Mus. Nat. Hist., 2:7, footnote.
 TYPE LOCALITY: Mexico, Zacatecas, Sierra Valparaiso.
 DISTRIBUTION: Jalisco (Mexico) north to S.E. Arizona (U.S.A.).
 COMMENT: Subgenus *Sciurus*; see Hall, 1981:431. Includes *chiricahuae* and *apache*; see Lee and Hoffmeister, 1963, Proc. Biol. Soc. Wash., 76:188-189, and Hall, 1981:431.
 ISIS NUMBER: 5301410002030014001 as *S. nayaritensis*.
 5301410002030004001 as *S. apache*.
 5301410002030008001 as *S. chiricahuae*.

- Sciurus niger* Linnaeus, 1758. Syst. Nat., 10th ed., 1:64.
TYPE LOCALITY: U.S.A., S. South Carolina (probably).
DISTRIBUTION: Texas (U.S.A.) and adjacent Mexico, north to Manitoba (Canada) east to the Atlantic Coast.
COMMENT: Subgenus *Sciurus*; see Hall, 1981:427.
PROTECTED STATUS: U.S. ESA - Endangered as *S. n. cinereus* subspecies only.
ISIS NUMBER: 5301410002030016001.
- Sciurus oculatus* Peters, 1863. Monatsb. Preuss. Akad. Wiss. Berlin, p. 653.
TYPE LOCALITY: Mexico, Veracruz, probably near Las Vigas.
DISTRIBUTION: San Luis Potosi, Hidalgo, Veracruz, Puebla, Mexico, Queretaro and Guanajuato (Mexico).
COMMENT: Subgenus *Sciurus*; see Hall, 1981:430.
ISIS NUMBER: 5301410002030017001.
- Sciurus pucheranii* (Fitzinger, 1867). Sitzb. Math. Naturw. Cl., 55, Abth., 1:487.
TYPE LOCALITY: Colombia, near Bogota.
DISTRIBUTION: Colombia in the W., C., and E. ranges of the Andes.
COMMENT: Subgenus *Guerlinguetus*; see Cabrera, 1961:372. Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:203, placed *pucheranii* in the genus *Microsciurus*. Includes *medellinensis*; see Cabrera, 1961:372.
ISIS NUMBER: 5301410002018006001 as *Microsciurus pucherani* (*sic*).
5301410002018005001 as *Microsciurus medellinensis* (*sic*).
- Sciurus pyrrhinus* Thomas, 1898. Ann. Mag. Nat. Hist., ser. 7, 2:265.
TYPE LOCALITY: Peru, Junin Dept., Vitoc, Garita del Sol.
DISTRIBUTION: Eastern slopes of the Andes of Peru.
COMMENT: Subgenus *Hadroskiurus*; see Cabrera, 1961:378. Allen, 1915, Bull. Am. Mus. Nat. Hist., 34:215, placed *pyrrhinus* in the genus *Mesoskiurus*, some members of which (not including *pyrrhinus*) Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:204, placed as a subgenus in the genus *Syntheskiurus*.
- Sciurus richmondi* Nelson, 1898. Proc. Biol. Soc. Wash., 12:146.
TYPE LOCALITY: Nicaragua, Escondido River, 50 mi. (80 km) above Bluefields.
DISTRIBUTION: Nicaragua.
COMMENT: Subgenus *Guerlinguetus*; see Hall, 1981:436. Reviewed by Jones and Genoways, 1975, Mamm. Species, 53:1-2.
ISIS NUMBER: 5301410002030019001.
- Sciurus sanborni* Osgood, 1944. Field Mus. Nat. Hist. Publ. Zool. Ser., 29:191.
TYPE LOCALITY: Peru, Madre de Dios Dept., La Pampa, between the Rio Inambari and Rio Tambopata, 33 km N. of Santo Domingo, 570 m.
DISTRIBUTION: Madre de Dios Dept. (Peru).
COMMENT: Subgenus *Guerlinguetus*; see Cabrera, 1961:373.
- Sciurus spadiceus* Olfers, 1818. In Eschwege, J. Bras., 15(2):208.
TYPE LOCALITY: Brazil, Mato Grosso, Cuyaba.
DISTRIBUTION: S.E. Colombia; Ecuador; N.E. Peru; Brazil; Bolivia.
COMMENT: Subgenus *Hadroskiurus*; see Cabrera, 1961:374-379. Includes *langsdorffi*, *pyrrhonotus*, and *tricolor*; see Hershkovitz, 1959, J. Mammal., 40:346-347. Cabrera, 1961:376, and footnote, listed *langsdorffi* and *pyrrhonotus* as distinct species and included *tricolor* in *igniventris*, but Hershkovitz, 1959, was not incorporated. Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:153-206, placed *langsdorffi* in *Guerlinguetus* (*Hadroskiurus*) *urucumus* (here included in *spadiceus*). Allen, 1915, Bull. Am. Mus. Nat. Hist., 34:269, included *pyrrhonotus* in *Uroskiurus*, which Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:153-206, placed as a subgenus in the genus *Guerlinguetus*.
- Sciurus stramineus* Eydoux and Souleyet, 1841. Voy. "La Bonite" Zool., 1:73.
TYPE LOCALITY: Peru, Piura Dept., Omatoc (=Anotape).
DISTRIBUTION: Extreme N.E. Peru and S.E. Ecuador in the area surrounding the Gulf of Guayaquil.
COMMENT: Subgenus *Guerlinguetus*; see Cabrera, 1961:373. Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:179, placed *stramineus* in the subgenus *Simoskiurus* of the genus *Microsciurus*.

Sciurus variegatoides Ogilby, 1839. Proc. Zool. Soc. Lond., 1839:117.

TYPE LOCALITY: El Salvador.

DISTRIBUTION: S. Chiapas (Mexico), through Central America to Panama.

COMMENT: Includes *goldmani*; subgenus *Sciurus*; see Hall, 1981:424. Revised by Harris, 1937, Misc. Publ. Mus. Zool. Univ. Mich., 38:7-39.

ISIS NUMBER: 5301410002030023001.

Sciurus vulgaris Linnaeus, 1758. Syst. Nat., 10th ed., 1:63.

TYPE LOCALITY: Sweden, Uppsala.

DISTRIBUTION: Forested regions of Palearctic, from Iberia and Great Britain east to Kamchatka Peninsula and Sakhalin Isl. (U.S.S.R.); south to Mediterranean and Black Seas, N. Mongolia and N.E. China.

COMMENT: Subgenus *Sciurus*; see Hall, 1981:417.

ISIS NUMBER: 5301410002030024001.

Sciurus yucatanensis J. A. Allen, 1877. In Coues and Allen, Mongr. N. Amer. Rodentia, p. 705.

TYPE LOCALITY: Mexico, Yucatan, Merida.

DISTRIBUTION: Yucatan Peninsula (Mexico); N. and S.W. Belize; N. Guatemala.

COMMENT: Subgenus *Sciurus*; see Hall, 1981:422.

ISIS NUMBER: 5301410002030025001.

Spermophilopsis Blasius, 1884. Tageblatt. Versamml. Deutsch. Naturf. Magdeburg, 57:325.

ISIS NUMBER: 5301410002031000000.

Spermophilopsis leptodactylus (Lichtenstein, 1823). Naturh. Abh. Eversmann's Reise, p. 119.

TYPE LOCALITY: U.S.S.R., Uzbekistan, 140 km N.W. of Bukhara, near Kara-Ata.

DISTRIBUTION: Turkmenistan and Uzbekistan (U.S.S.R.); N.E. Iran; N.W. Afghanistan.

COMMENT: Related to African xerine squirrels (*Atlantoxerus* and *Xerus*); see Nadler and Hoffmann, 1974, *Experientia*, 30:889-890.

ISIS NUMBER: 5301410002031001001.

Spermophilus F. Cuvier, 1825. Des Dentes des Mammiferes, p. 255.

REVIEWED BY: C. L. Elliott (CLE); D. J. Hafner (DJH); D. A. Sutton (DAS)(N. America, in part).

COMMENT: (= *Citellus*); see Corbet, 1978:82, and Hershkovitz, 1949, *J. Mammal.*, 30:82. Includes *Otospermophilus*, *Xerospermophilus*, *Poliocitellus*, *Ictidomys*, and *Callospermophilus* as subgenera; see Hall, 1981:382. North American species revised by Howell, 1938, *N. Am. Fauna*, 56:1-256. Eurasian species revised by Gromov *et al.*, 1965, who also recognized *Colobotis* and *Urocitellus* as subgenera; but see Hall, 1981:382.

ISIS NUMBER: 5301410002032000000.

Spermophilus adocetus (Merriam, 1903). Proc. Biol. Soc. Wash., 16:79.

TYPE LOCALITY: Mexico, Michoacan, La Salada, 40 mi. (64 km) S. Uruapan.

DISTRIBUTION: E. Jalisco, Michoacan, and N. Guerrero (W.C. Mexico).

COMMENT: Subgenus *Otospermophilus*; see Hall, 1981:399. Gromov *et al.*, 1965:145, considered *Otospermophilus* a distinct genus. Includes *infernatius*; see Alvarez and Ramirez-Pulido, 1968, *Rev. Soc. Mex. Hist. Nat.*, 29:181-190.

ISIS NUMBER: 5301410002032001001.

Spermophilus alashanicus Buchner, 1888. Wiss. Res. Przewalski Cent. Asien Zool. Th.

I: Saugeth., p. 11.

TYPE LOCALITY: N. China, S. Alashan Desert.

DISTRIBUTION: S.C. Mongolia; Alashan and E. Nan Shan (N. China).

COMMENT: Subgenus *Spermophilus*; see Gromov *et al.*, 1965:208. Placed by Corbet, 1978, in *dauricus*; Orlov and Davaa, 1975, pp. 8-9, in [Systematics and cytogenetics of mammals], Orlov, ed., "Nauka," Moscow, provided evidence of specific distinctness.

- Spermophilus annulatus* Audubon and Bachman, 1842. J. Acad. Nat. Sci. Phila., 8:319.
TYPE LOCALITY: Mexico, Colima, Manzanillo.
DISTRIBUTION: Nayarit to N. Guerrero (Mexico).
COMMENT: Subgenus *Otospermophilus*; see Hall, 1981:403. Gromov *et al.*, 1965:145, considered *Otospermophilus* a distinct genus. Type locality designated by Howell, 1938, N. Am. Fauna, 56:163.
ISIS NUMBER: 5301410002032002001.
- Spermophilus armatus* Kennicott, 1863. Proc. Acad. Nat. Sci. Phila., 15:158.
TYPE LOCALITY: U.S.A., Wyoming, Uinta Co., foothills of Uinta Mtns., near Fort Bridger.
DISTRIBUTION: S.C. Utah to S. Montana, S.E. Idaho to W. Wyoming (U.S.A.).
COMMENT: Subgenus *Spermophilus*; see Hall, 1981:386.
ISIS NUMBER: 5301410002032003001.
- Spermophilus atricapillus* W. E. Bryant, 1889. Proc. Calif. Acad. Sci., ser. 2, 2:26.
TYPE LOCALITY: Mexico, Baja California Sur, Comondu.
DISTRIBUTION: Baja California (Mexico).
COMMENT: Subgenus *Otospermophilus*; see Hall, 1981:402. Gromov *et al.*, 1965:145, considered *Otospermophilus* a distinct genus.
ISIS NUMBER: 5301410002032004001.
- Spermophilus beecheyi* (Richardson, 1829). Fauna Boreali-Americana, 1:170.
TYPE LOCALITY: U.S.A., California, Monterey Co., Monterey.
DISTRIBUTION: W. Washington (U.S.A.) to Baja California Norte (Mexico).
COMMENT: Subgenus *Otospermophilus*; see Hall, 1981:401. Gromov *et al.*, 1965:145, considered *Otospermophilus* a distinct genus. Type locality restricted by Grinnell, 1933, Univ. Calif. Publ. Zool., 40:120.
ISIS NUMBER: 5301410002032005001.
- Spermophilus beldingi* Merriam, 1888. Ann. N.Y. Acad. Sci., 4:317.
TYPE LOCALITY: U.S.A., California, Placer Co., Donner.
DISTRIBUTION: E. Oregon, S.W. Idaho, N.E. California, N. Nevada, and N.W. Utah (U.S.A.).
COMMENT: Subgenus *Spermophilus*; see Hall, 1981:387.
ISIS NUMBER: 5301410002032006001.
- Spermophilus brunneus* (A. H. Howell, 1928). Proc. Biol. Soc. Wash., 41:211.
TYPE LOCALITY: U.S.A., Idaho, Adams Co., New Meadows.
DISTRIBUTION: W.C. Idaho (U.S.A.).
COMMENT: Subgenus *Spermophilus*; see Hall, 1981:385.
ISIS NUMBER: 5301410002032007001.
- Spermophilus citellus* (Linnaeus, 1766). Syst. Nat., 12th ed., 1:80.
TYPE LOCALITY: Austria.
DISTRIBUTION: S.E. Germany and S.W. Poland to European Turkey, Rumania, and Ukraine (U.S.S.R.).
COMMENT: Subgenus *Spermophilus*; see Gromov *et al.*, 1965:232. Formerly included *dauricus* and *xanthopymnus* as in Ellerman and Morrison-Scott, 1951:506; but see Orlov and Davaa, 1975, pp. 8-9, in [Systematics and cytogenetics of mammals], Orlov, ed., "Nauka," Moscow, Gromov *et al.*, 1965:208, 237, and Vorontsov and Lyapunova, 1970, Byull. Mosk. Ova. Ispyt. Prir., Otd. Biol., 75:122-136.
ISIS NUMBER: 5301410002032008001.
- Spermophilus columbianus* (Ord, 1815). In Guthrie, A New Geogr., Hist., Coml. Grammar, Philadelphia, 2nd ed., 2:292.
TYPE LOCALITY: U.S.A., Idaho, Idaho Co., between the forks of the Clearwater and Kooskooskie Rivers.
DISTRIBUTION: S.E. British Columbia and W. Alberta (Canada) to N.E. Oregon, C. Idaho, and C. Montana (U.S.A.).
COMMENT: Subgenus *Urocitellus*; see Gromov *et al.*, 1965:196. Hall, 1981:381, included *Urocitellus* in subgenus *Spermophilus*.
ISIS NUMBER: 5301410002032009001.

- Spermophilus dauricus* Brandt, 1843. Bull. Phys. Math. Acad. Sci. St. Petersburg., 2:379.
 TYPE LOCALITY: U.S.S.R., R.S.F.S.R., Chitinsk. Obl., Torei-Nor (Lake).
 DISTRIBUTION: Transbaikalia (U.S.S.R.); Mongolia; N. China.
 COMMENT: Subgenus *Spermophilus*; see Gromov *et al.*, 1965:244. Corbet, 1978:83, tentatively included *alashanicus* in this species, but see Orlov and Davaa, 1975, pp. 8-9, in [Systematics and cytogenetics of mammals], Orlov, ed., "Nauka," Moscow, who provided evidence of specific distinctness. See comment under *alashanicus*. Ellerman and Morrison-Scott, 1951:506, included *dauricus* in *citellus*; but see Gromov *et al.*, 1965:244, who considered *dauricus* a distinct species.
- Spermophilus elegans* Kennicott, 1863. Acad. Nat. Sci. Philad., p. 158.
 TYPE LOCALITY: U.S.A., Wyoming, Uinta Co., Fort Bridger.
 DISTRIBUTION: N.E. Nevada, S.E. Oregon, S. Idaho, and S.W. Montana to C. Colorado and W. Nebraska (U.S.A.).
 COMMENT: Subgenus *Spermophilus*; see Hall, 1981:385. Regarded by Howell, 1938, N. Am. Fauna, 56:1-256, and Hall, 1981:385, as a subspecies of *richardsonii*; but Nadler *et al.*, 1971, Syst. Zool., 20:298-305, Robinson and Hoffmann, 1975, Syst. Zool., 28:79-88, and Koeppl *et al.*, 1978, J. Mammal., 59:677-696, provided evidence of specific distinctness and included *aureus* and *nevadensis* in *elegans*.
- Spermophilus erythrogegens* Brandt, 1841. Bull. Acad. Sci. St. Petersburg., p. 43.
 TYPE LOCALITY: U.S.S.R., Tomsk. Obl., foothills of Altai Mtns., near Barnaul.
 DISTRIBUTION: E. Kazakhstan and S.W. Siberia (U.S.S.R.); Sinkiang (China). Isolated population (*pallidicauda*) in Mongolia and Inner Mongolia (China).
 COMMENT: Includes *brevicauda* (= *intermedius*), *carruthersi*, and *pallidicauda*; subgenus *Colobotis*; see Gromov *et al.*, 1965:315. Hall, 1981:381, included *Colobotis* in subgenus *Spermophilus*. Ellerman and Morrison-Scott, 1951:508, 511, regarded *brevicauda* and *carruthersi* as synonyms of *pygmaeus*, and *pallidicauda* as a full species. Sludskii *et al.*, 1969, [Mammals of Kazakhstan], vol. 1, "Nauka", Alma-Ata, p. 177, considered *intermedius* (= *brevicauda*) a full species. Provisionally included in *major* by Corbet, 1978:84; but see Gromov *et al.*, 1965:315, Vorontsov and Lyapunova, 1970, Byull. Mosk. Ova. Ispyt. Prir. Otd. Biol., 75:122-136, and 1976, pp. 337-353, in *Beringia in Cenozoic*, V. Kontrimavichus, ed., Acad. Sci., Vladivostok, for evidence of specific distinctness.
 ISIS NUMBER: 5301410002032017001 as *S. pallidicauda*.
- Spermophilus franklinii* (Sabine, 1822). Trans. Linn. Soc. Lond., 13:587.
 TYPE LOCALITY: Canada, Saskatchewan, Carlton House.
 DISTRIBUTION: N. Great Plains; Alberta, Saskatchewan, and Manitoba (Canada), south to Kansas, Illinois, and Indiana (U.S.A.).
 COMMENT: Subgenus *Poliocitellus*; see Hall, 1981:397. Gromov *et al.*, 1965:155, considered *Poliocitellus* a subgenus of the genus *Ictidomys*.
 ISIS NUMBER: 5301410002032010001.
- Spermophilus fulvus* (Lichtenstein, 1823). Naturh. Abh. Eversmann's Reise, p. 119.
 TYPE LOCALITY: U.S.S.R., Kazakh. S.S.R., E. of Mugodzhary Mtns., near Kuvandzhur River.
 DISTRIBUTION: Kazakhstan (U.S.S.R.), from the Caspian Sea and the Volga River to Lake Balkash south to N.E. Iran, and N. Afghanistan; Sinkiang (China).
 COMMENT: Subgenus *Colobotis*; see Gromov *et al.*, 1965:276. Hall, 1981:381, included *Colobotis* in subgenus *Spermophilus*.
 ISIS NUMBER: 5301410002032011001.
- Spermophilus lateralis* (Say, 1823). In Long, Account of an Exped. from Pittsburgh to the Rocky Mtns., 2:46.
 TYPE LOCALITY: U.S.A., Colorado, Fremont Co., Arkansas River, about 26 mi. (42 km) below Canyon City.
 DISTRIBUTION: Montane W. North America, from C. British Columbia to S. New Mexico in the Rocky Mtns., and the Columbia River south to S. California and Nevada.
 COMMENT: Subgenus *Callospermophilus*; see Hall, 1981:406. Gromov *et al.*, 1965:150, considered *Callospermophilus* a subgenus of the genus *Otospermophilus*.
 ISIS NUMBER: 5301410002032012001.

Spermophilus madrensis (Merriam, 1901). Proc. Wash. Acad. Sci., 3:563.

TYPE LOCALITY: Mexico, Chihuahua, Sierra Madre, near Guadalupe y Calvo, 7000 ft. (2134 m).

DISTRIBUTION: S.W. Chihuahua (Mexico).

COMMENT: Subgenus *Callospermophilus*; see Hall, 1981:410. Gromov *et al.*, 1965:150, considered *Callospermophilus* a subgenus of the genus *Otospermophilus*.

ISIS NUMBER: 5301410002032013001.

Spermophilus major (Pallas, 1778). Nova Spec. Quad. Glir. Ord., p. 125.

TYPE LOCALITY: U.S.S.R., R.S.F.S.R., Kuibyshevsk. Obl., near Kuibyshev (=Samara).

DISTRIBUTION: Steppe between Volga and Irtysh Rivers (U.S.S.R.).

COMMENT: Subgenus *Colobotis*; see Gromov *et al.*, 1965:290. Hall, 1981:381, included *Colobotis* in subgenus *Spermophilus*. Occasionally hybridizes with *erythrogegens* and *fulvus*; see Denisov, 1963, Zool. Zh., 42:1887-1899, and Ognev, 1947, [Mamm. U.S.S.R., Adjac. Count.], Acad. Sci. Moscow, p. 24. Corbet, 1978:84, provisionally included *erythrogegens* and *brevicauda* in this species, but Gromov *et al.*, 1965:290, Vorontsov and Lyapunova, 1970, Byull. Mosk. Ova. Ispyt. Prir. Otd. Biol., 75:122-136, and 1976, pp. 337-353, in Beringia in Cenozoic, V. Kontrimavichus, ed., Acad. Sci., Vladivostok, considered *erythrogegens* a distinct species, and Gromov *et al.*, 1965:315, included *brevicauda* in *erythrogegens*; see comment under *erythrogegens*.

ISIS NUMBER: 5301410002032014001.

Spermophilus mexicanus (Erxleben, 1777). Syst. Regn. Anim., 1:428.

TYPE LOCALITY: Mexico, Toluca.

DISTRIBUTION: S. New Mexico and W. Texas (U.S.A.) to Jalisco and S. Puebla (C. Mexico).

COMMENT: Subgenus *Ictidomys*; see Hall, 1981:394. Gromov *et al.*, 1965:153, considered *Ictidomys* a distinct genus. Known to hybridize at several localities with *tridecemlineatus*; see Cothran *et al.*, 1977, J. Mammal., 58:610-622.

ISIS NUMBER: 5301410002032015001.

Spermophilus mohavensis Merriam, 1889. N. Am. Fauna, 2:15.

TYPE LOCALITY: U.S.A., California, San Bernardino Co., near Rabbit Springs, about 15 mi. (24 km) E. Hesperia.

DISTRIBUTION: N.W. Mohave Desert and Owens Valley (S. California, U.S.A.).

COMMENT: Subgenus *Xerospermophilus*; see Hall, 1981:405. Gromov *et al.*, 1965:151, considered *Xerospermophilus* a distinct genus. Type locality designated by Grinnell and Dixon, 1918, Mon. Bull. Calif. Comm. Hort., 7:667.

ISIS NUMBER: 5301410002032016001.

Spermophilus musicus Menetries, 1832. Cat. Raisonne Mus. Peale Phila., p. 21.

TYPE LOCALITY: U.S.S.R., Gruzinsk. S.S.R., Uchkulan ("Caucasus").

DISTRIBUTION: N. Caucasus Mtns. (U.S.S.R.).

COMMENT: Subgenus *Spermophilus*; see Gromov *et al.*, 1965:249. Regarded by Ellerman and Morrison-Scott, 1951:508, and Corbet, 1978:83, as a subspecies of *pygmaeus*. Gromov *et al.*, 1965:249, and Vorontsov and Lyapunova, 1970, Byull. Mosk. Ova. Ispyt. Prir. Otd. Biol., 75:122-136, and 1976, pp. 337-353, in Beringia in Cenozoic, V. Kontrimavichus, ed., Acad. Sci., Vladivostok, provided evidence of specific distinctness.

Spermophilus parryii (Richardson, 1825). In Parry, 1825 (1827), appendix to Parry's J. of Second Voy., p. 316.

TYPE LOCALITY: Canada, Hudson Bay, Melville Peninsula, Lyon Inlet, Five Hawser Bay.

DISTRIBUTION: N.W. Canada; Alaska (U.S.A.); N.E. Yakutia, Anadyrsk. Krai, and Chukotka (U.S.S.R.).

COMMENT: Subgenus *Urocitellus*; see Gromov *et al.*, 1965:184. Hall, 1981:381, included *Urocitellus* in subgenus *Spermophilus*. Regarded by Ellerman and Morrison-Scott, 1951:511, and Hall and Kelson, 1959:343, as a synonym of *undulatus*. Gromov *et al.*, 1965:184, and Nadler *et al.*, 1974, Comp. Biochem. Physiol., 47A:663-681, provided evidence of specific distinctness. Reviewed by Chernyavskii, 1972, Trud. Mosk. Soc. Nat., 48:199-214, Serdyuk, 1979, Zool. Zh., 58:1692-1702,

- (Palearctic), and Pearson, 1981, Geographic and intraspecific cranial variation in North American arctic ground squirrels, M.A. Thesis, Univ. Kansas, Lawrence, 96 pp. (Nearctic).
 ISIS NUMBER: 5301410002032018001.
- Spermophilus perotensis* Merriam, 1893. Proc. Biol. Soc. Wash., 8:131.
 TYPE LOCALITY: Mexico, Veracruz, Perote.
 DISTRIBUTION: Veracruz and Puebla (E.C. Mexico).
 COMMENT: Subgenus *Ictidomys*; see Hall, 1981:397. Gromov *et al.*, 1965:153, considered *Ictidomys* a distinct genus.
 ISIS NUMBER: 5301410002032019001.
- Spermophilus pygmaeus* (Pallas, 1778). Nova Spec. Quad. Glir. Ord., p. 122.
 TYPE LOCALITY: U.S.S.R., Kazakh. S.S.R., between Ural and Emba Rivers.
 DISTRIBUTION: Kazakhstan and S. Ural Mtns. to Crimea (U.S.S.R.).
 COMMENT: Subgenus *Spermophilus*; see Gromov *et al.*, 1965:257. See comment under *musicus*. Hybridizes rarely with *erythrogegens*, *fulvus*, and *major*; see Bazhanov, 1944, Dokl. Akad. Nauk S.S.S.R., 42(7):321-322, Bazhanov, 1945, Vestn. Kazakh. Fil. Akad. Nauk S.S.S.R., 5(8):37-39, and Denisov, 1964, Nauchin. Dokl. Vyssh. Shk. Biol. Nauki, 2:49-54. Also hybridizes with *suslicus*; see Denisov and Smirnova, 1976, Acta Theriol., 21:267-278.
 ISIS NUMBER: 5301410002032020001.
- Spermophilus relictus* (Kashkarov, 1923). Trans. Turk. Sci. Soc., 1:185.
 TYPE LOCALITY: U.S.S.R., Kirgiz. S.S.R., Talassk. Obl., Talassk. Alatau, Kara-Bura, and Kumysh-Tagh Valleys.
 DISTRIBUTION: Tien Shan Mtns. in Kirgizia and S.E. Kazakhstan (U.S.S.R.).
 COMMENT: Subgenus *Spermophilus*; see Gromov *et al.*, 1965:198.
- Spermophilus richardsonii* (Sabine, 1822). Trans. Linn. Soc. Lond., 13:589.
 TYPE LOCALITY: Canada, Saskatchewan, Carleton House.
 DISTRIBUTION: N. Great Plains in S. Alberta, S. Saskatchewan, S. Manitoba (Canada), Montana, North Dakota, N.E. South Dakota, W. Minnesota, and N.W. Iowa (U.S.A.).
 COMMENT: Subgenus *Spermophilus*; see Hall, 1981:385. Formerly included *elegans*; see comment under that species.
 ISIS NUMBER: 5301410002032021001.
- Spermophilus saturatus* (Rhoads, 1895). Proc. Acad. Nat. Sci. Phila., 47:43.
 TYPE LOCALITY: U.S.A., Washington, Kittitas Co., Lake Kichelos (=Keechelus), 8000 ft. (2438 m).
 DISTRIBUTION: Cascade Mtns. of W. Washington (U.S.A.) and S.W. British Columbia (Canada).
 COMMENT: Subgenus *Callospermophilus*; see Hall, 1981:409. Gromov *et al.*, 1965:150, considered *Callospermophilus* a subgenus of the genus *Otospermophilus*.
 ISIS NUMBER: 5301410002032022001.
- Spermophilus spilosoma* Bennett, 1833. Proc. Zool. Soc. Lond., 1833:40.
 TYPE LOCALITY: Mexico, Durango, Durango (City).
 DISTRIBUTION: C. Mexico to S. Texas, S.W. South Dakota, and N.W. Arizona (U.S.A.).
 COMMENT: Subgenus *Ictidomys*; see Hall, 1981:395. Gromov *et al.*, 1965:153, considered *Ictidomys* a distinct genus. Reviewed by Streubel and Fitzgerald, 1978, Mamm. Species, 101:1-4. Howell, 1938, N. Am. Fauna, 56:122, fixed the type locality.
 ISIS NUMBER: 5301410002032023001.
- Spermophilus suslicus* (Guldenstaedt, 1770). Nova Comm. Acad. Sci. Petrop., 14:389.
 TYPE LOCALITY: U.S.S.R., Voronezhsk. Obl., near Voronezh (City).
 DISTRIBUTION: Steppes of C. and S. Europe, including Poland, E. Rumania, Ukraine north to Oka River and east to the Volga River (U.S.S.R.).
 COMMENT: Subgenus *Spermophilus*; see Gromov *et al.*, 1965:212. See also comment under *pygmaeus*.
 ISIS NUMBER: 5301410002032024001.

- Spermophilus tereticaudus* Baird, 1858. *Mammals in Repts. Expl. Surv.*...., 8(1):315.
TYPE LOCALITY: U.S.A., California, Imperial Co., Old Fort Yuma.
DISTRIBUTION: Deserts of S.E. California, S. Nevada, W. Arizona (U.S.A.), N.E. Baja California and Sonora (Mexico).
COMMENT: Subgenus *Xerospermophilus*; see Hall, 1981:405. Gromov *et al.*, 1965:151, considered *Xerospermophilus* a distinct genus.
ISIS NUMBER: 5301410002032025001.
- Spermophilus townsendii* Bachman, 1839. *J. Acad. Nat. Sci. Phila.*, 8:61.
TYPE LOCALITY: U.S.A., Washington, Walla Walla Co., near Wallula.
DISTRIBUTION: Great Basin region of E. Washington, Oregon, S. Idaho, E. California, Nevada, and W. Utah (U.S.A.).
COMMENT: Subgenus *Spermophilus*; see Hall, 1981:382. Includes several chromosomally different groups (*mollis*, *vigilis*) that may be distinct species; see Vorontsov and Lyapunova, 1970, *Byull. Mosk. Ova. Ispyt. Prir. Otd. Biol.*, 75:122-136.
ISIS NUMBER: 5301410002032026001.
- Spermophilus tridecemlineatus* (Mitchill, 1821). *Med. Repos. (N.Y.)*, (n.s.), 6(21):248.
TYPE LOCALITY: U.S.A., C. Minnesota.
DISTRIBUTION: Great Plains, from C. Texas to E. Utah, Ohio (U.S.A.) and S.C. Canada.
COMMENT: Subgenus *Ictidomys*; see Hall, 1981:391. Gromov *et al.*, 1965:153, considered *Ictidomys* a distinct genus. Reviewed by Streubel and Fitzgerald, 1978, *Mamm. Species*, 103:1-5. See also comment under *mexicanus*.
ISIS NUMBER: 5301410002032027001.
- Spermophilus undulatus* (Pallas, 1778). *Nova Spec. Quad. Glir. Ord.*, p. 122.
TYPE LOCALITY: U.S.S.R., Buryat A.S.S.R., Selenga River.
DISTRIBUTION: E. Kazakhstan, S. Siberia, Transbaikalia (U.S.S.R.), N. Mongolia, Heilungkiang and Sinkiang (China).
COMMENT: Subgenus *Urocitellus*; see Gromov *et al.*, 1965:162. Hall, 1981:381, included *Urocitellus* in subgenus *Spermophilus*. Formerly included *parryii*; see Hall and Kelson, 1959:343; but also see Nadler *et al.*, 1974, *Comp. Biochem. Physiol.*, 47A:663-681.
ISIS NUMBER: 5301410002032028001.
- Spermophilus variegatus* (Erxleben, 1777). *Syst. Regn. Anim.*, 1:421.
TYPE LOCALITY: Mexico, Distrito Federal, Valley of Mexico, near Mexico City.
DISTRIBUTION: S. Nevada to S.W. Texas and Utah (U.S.A.) to Puebla (C. Mexico).
COMMENT: Subgenus *Otospermophilus*; see Hall, 1981:399. Gromov *et al.*, 1965:145, considered *Otospermophilus* a distinct genus. Nelson, 1898, *Science*, n.s., 8:897, fixed the type locality.
ISIS NUMBER: 5301410002032029001.
- Spermophilus washingtoni* (A. H. Howell, 1938). *N. Am. Fauna*, 56:69.
TYPE LOCALITY: U.S.A., Washington, Walla Walla Co., Touchet.
DISTRIBUTION: S.E. Washington, N.E. Oregon (U.S.A.).
COMMENT: Subgenus *Spermophilus*; see Hall, 1981:384.
ISIS NUMBER: 5301410002032030001.
- Spermophilus xanthoprimum* (Bennett, 1835). *Proc. Zool. Soc. Lond.*, 1835:90.
TYPE LOCALITY: N.E. Turkey, Armenia, Erzerum (=Erzurum).
DISTRIBUTION: Soviet Transcaucasia, Turkey, Syria, and Palestine.
COMMENT: Subgenus *Spermophilus*; see Gromov *et al.*, 1965:237. Regarded by Ellerman and Morrison-Scott, 1951:506, and Corbet, 1978:83, as a synonym of *citellus*; but see Gromov *et al.*, 1965:237, and Vorontsov and Lyapunova, 1970, *Byull. Mosk. Ova. Ispyt. Prir. Otd. Biol.*, 75:122-136, who provided evidence of specific distinctness.
- Sundasciurus* Moore, 1958. *Am. Mus. Novit.*, 1914:2.
COMMENT: Reviewed, in part, by Heaney, 1979, *Proc. Biol. Soc. Wash.*, 92:280-286.
ISIS NUMBER: 5301410002033000000.

- Sundasciurus brookei* (Thomas, 1892). Ann. Mag. Nat. Hist., ser. 6, 9:253.
 TYPE LOCALITY: Malaysia, Sarawak, Mt. Dulit.
 DISTRIBUTION: Mountains of Borneo.
 ISIS NUMBER: 5301410002033001001.
- Sundasciurus davensis* (Sanborn, 1952). Fieldiana Zool., 33:117.
 TYPE LOCALITY: Philippines, Mindanao, Davao Prov., Taguon Muncip, Madaam.
 DISTRIBUTION: Known only from the type locality.
 COMMENT: May be conspecific with *mindanensis*, *philippinensis*, and *samarensis* (LRH).
- Sundasciurus hippurus* (I. Geoffroy, 1831). In Zool. Voy. de Belanger Indes Orient., 2:149.
 TYPE LOCALITY: Malaysia, Malacca.
 DISTRIBUTION: Malaysian subregion except Java and S.W. Philippines.
 ISIS NUMBER: 5301410002033002001.
- Sundasciurus hoogstraali* (Sanborn, 1952). Fieldiana Zool., 33:115.
 TYPE LOCALITY: Philippines, Calamian Isls., Busuanga Isl., Dimaniang.
 DISTRIBUTION: Busuanga Isl. (Philippines).
 COMMENT: Member of the *steerii* group; see comment under *steerii* (LRH).
- Sundasciurus jentinki* (Thomas, 1887). Ann. Mag. Nat. Hist., ser. 5, 20:128.
 TYPE LOCALITY: Malaysia, Sabah, Mt. Kinabalu.
 DISTRIBUTION: Mountains of N. Borneo.
- Sundasciurus juvenicus* (Thomas, 1908). Ann. Mag. Nat. Hist., ser. 8, 2:498.
 TYPE LOCALITY: Philippines, Palawan Isl.
 DISTRIBUTION: N. Palawan Isl. (Philippines).
 COMMENT: Member of the *steerii* group; see comment under *steerii* (LRH).
- Sundasciurus lowii* (Thomas, 1892). Ann. Mag. Nat. Hist., ser. 6, 2:253.
 TYPE LOCALITY: Malaysia, Sarawak, Lumbidon.
 DISTRIBUTION: Malaysian subregion, except Java and S.W. Philippines.
 COMMENT: Includes *fraterculus*, from the Mentawi Isls.; see Chasen, 1940, Bull. Raffles Mus., 15:144.
 ISIS NUMBER: 5301410002033003001.
- Sundasciurus mindanensis* (Steere, 1890). List of the Birds and Mammals collected by the Steere Expedition to the Philippines, p. 29.
 TYPE LOCALITY: Philippines, Mindanao.
 DISTRIBUTION: Mindanao and adjacent small islands (Philippines).
 COMMENT: May be conspecific with *davensis*, *philippinensis*, and *samarensis* (LRH).
 ISIS NUMBER: 5301410002033004001.
- Sundasciurus mollendorffi* Matschie, 1898. Sitzb. Ges. Naturf. Fr. Berlin, 5:41.
 TYPE LOCALITY: Philippines, Calamian Isls., Culion Isl.
 DISTRIBUTION: Known only from the type locality.
 COMMENT: Includes *albicauda*; see Matschie, 1898; *albicauda* was listed as a distinct species by Corbet and Hill, 1980, without comment. Member of the *steerii* group (LRH).
 ISIS NUMBER: 5301410002033005001.
- Sundasciurus philippinensis* (Waterhouse, 1839). Proc. Zool. Soc. Lond., 1839:117.
 TYPE LOCALITY: Philippines, Mindanao Isl.
 DISTRIBUTION: S. and W. Mindanao, and Basilan (Philippines).
 COMMENT: May be conspecific with *davensis*, *mindanensis*, and *samarensis* (LRH).
 ISIS NUMBER: 5301410002033006001.
- Sundasciurus rabori* Heaney, 1979. Proc. Biol. Soc. Wash., 92:280-286.
 TYPE LOCALITY: Philippines, Palawan Isl., Mt. Mantalingajan, Magtaguimbong.
 DISTRIBUTION: Known only from type locality, but probably widespread in mountains on Palawan (Philippines).
- Sundasciurus samarensis* (Steere, 1890). List of the Birds and Mammals Collected by the Steere Expedition to the Philippines, p. 30.
 TYPE LOCALITY: Philippines, Samar.
 DISTRIBUTION: Samar and Leyte Isls. (Philippines).
 COMMENT: May be conspecific with *davensis*, *mindanensis*, and *philippinensis* (LRH).

Sundasciurus steerii (Gunther, 1877). Proc. Zool. Soc. Lond., 1876:735.

TYPE LOCALITY: Philippines, Balabac Isl.

DISTRIBUTION: Balabac and S. Palawan Isl. in lowlands (Philippines).

COMMENT: Member of the *steerii* group, which contains 1-3 species; see Heaney, 1979, Proc. Biol. Soc. Wash., 92:280-286.

ISIS NUMBER: 5301410002033007001.

Sundasciurus tenuis (Horsfield, 1824). Zool. Res. Java, 1824:153.

TYPE LOCALITY: Singapore.

DISTRIBUTION: Malaysian subregion, except Java and S.W. Philippines.

ISIS NUMBER: 5301410002033008001.

Syntheosciurus Bangs, 1902. Bull. Mus. Comp. Zool. Harv. Univ., 39:25.

REVIEWED BY: D. A. Sutton (DAS).

COMMENT: Goodwin, 1946, Bull. Am. Mus. Nat. Hist., 87:275-473, suggested that *Syntheosciurus* might be a subgenus of *Sciurus*; but see Heaney and Hoffmann, 1978, J. Mammal., 59:854-855, Enders, 1980, J. Mammal., 61:725-727, and Hall, 1981:438.

ISIS NUMBER: 5301410002034000000.

Syntheosciurus brochus Bangs, 1902. Bull. Mus. Comp. Zool. Harv. Univ., 39:25.

TYPE LOCALITY: Panama, Chiriqui, 8 mi. (13 km) N. of Boquete, 7000 ft. (2134 m).

DISTRIBUTION: Costa Rica to N. Panama.

COMMENT: Reviewed by Enders, 1953, J. Mammal., 34:509. Includes *poasensis*; see Heaney and Hoffmann, 1978, J. Mammal., 59:854-855, Enders, 1980, J. Mammal., 61:726, and Hall, 1981:438.

ISIS NUMBER: 5301410002034001001.

Tamias Illiger, 1811. Prodr. Syst. Mamm. et Avium., p. 83.

REVIEWED BY: F. J. Brenner (FJB); H. E. Broadbooks (HEB); J. R. Callahan (JRCL); D. P. Snyder (DPS); D. A. Sutton (DAS).

COMMENT: N. American forms revised by Howell, 1929, N. Am. Fauna, 52:11-23.

Includes *Eutamias* (*T. sibiricus*), *Tamias* (*T. striatus*), and *Neotamias* as subgenera; see Ellerman, 1940:428, Corbet, 1978:85, and Nadler *et al.*, 1977, Am. Midl. Nat., 98:343-353. Disagreement exists regarding the status of *Eutamias* and *Neotamias*; see Ellis and Maxson, 1979, J. Mammal., 60:331-334, White, 1953, Univ. Kans. Publ. Mus. Nat. Hist., 5(32):543-561, and Hall, 1981:337. DPS considered this arrangement tentative until additional biochemical and cytological data can be evaluated.

ISIS NUMBER: 5301410002035000000 as *Tamias*.

5301410002007000000 as *Eutamias*.

Tamias alpinus Merriam, 1893. Proc. Biol. Soc. Wash., 8:137.

TYPE LOCALITY: U.S.A., California, Tulare Co., Big Cottonwood Meadows, just south of Mt. Whitney, 3050 m.

DISTRIBUTION: Alpine zone in Sierra Nevada, from Tuolumne to Tulare Counties (E.C. California, U.S.A.).

ISIS NUMBER: 5301410002007001001 as *Eutamias alpinus*.

Tamias amoenus J. A. Allen, 1890. Bull. Am. Mus. Nat. Hist., 3:90.

TYPE LOCALITY: U.S.A., Oregon, Klamath Co., Fort Klamath.

DISTRIBUTION: C. British Columbia (Canada) south to C. California east to C. Montana and W. Wyoming (U.S.A.).

ISIS NUMBER: 5301410002007002001 as *Eutamias amoenus*.

Tamias bulleri J. A. Allen, 1889. Bull. Am. Mus. Nat. Hist., 2:173.

TYPE LOCALITY: Mexico, Zacatecas, Sierra de Valparaiso.

DISTRIBUTION: Sierra Madre, in S. Durango, W. Zacatecas, and N. Jalisco (Mexico).

COMMENT: Monotypic; formerly included *durangae* and *solivagus*, which were considered *incertae sedis* by Callahan, 1980, Southwest. Nat., 25:1-8; see *durangae*.

ISIS NUMBER: 5301410002007003001 as *Eutamias bulleri*.

- Tamias canipes* (V. Bailey, 1902). Proc. Biol. Soc. Wash., 15:117.
 TYPE LOCALITY: U.S.A., Texas, Culberson Co., Guadalupe Mtns., head of Dog Canyon, 2130 m.
 DISTRIBUTION: Mountains of S.E. New Mexico and W. Texas (U.S.A.).
 COMMENT: Elevated from subspecies of *cinereicollis* by Fleharty, 1960, J. Mammal., 41:235-242. Reviewed by Findley *et al.*, 1975, Mammals of New Mexico, Univ. of New Mexico Press, Albuquerque, p. 103-112.
 ISIS NUMBER: 5301410002007004001 as *Eutamias canipes*.
- Tamias cinereicollis* J. A. Allen, 1890. Bull. Am. Mus. Nat. Hist., 3:94.
 TYPE LOCALITY: U.S.A., Arizona, Coconino Co., San Francisco Mtns.
 DISTRIBUTION: Mountains of C. and E. Arizona and C. and S.W. New Mexico (U.S.A.).
 ISIS NUMBER: 5301410002007005001 as *Eutamias cinereicollis*.
- Tamias dorsalis* Baird, 1855. Proc. Acad. Nat. Sci. Phila., 7:332.
 TYPE LOCALITY: U.S.A., New Mexico, Grant Co., Fort Webster, copper mines of the Mimbres (=near Santa Rita).
 DISTRIBUTION: E. Nevada, S. Idaho, Utah, S.W. Wyoming, and N.W. Colorado south through Arizona and W. New Mexico (U.S.A.) to N.W. Durango, W. Coahuila, and coastal Sonora (Mexico).
 COMMENT: Reviewed by Callahan and Davis, 1977, Southwest. Nat., 22:71, who included *sonoriensis* in this species.
 ISIS NUMBER: 5301410002007006001 as *Eutamias dorsalis*.
- Tamias durangae* (J. A. Allen, 1903). Bull. Am. Mus. Nat. Hist., 19:594.
 TYPE LOCALITY: Mexico, Durango, Sierra de Candella, Arroyo de Bucy, 7000 ft. (2134 m).
 DISTRIBUTION: S.W. Chihuahua to W.C. Durango; S.E. Coahuila (Mexico).
 COMMENT: Formerly included in *bulleri*; includes *solivagus*; probably conspecific with *canipes*; see Callahan, 1980, Southwest. Nat., 25:1-8, who considered both *durangae* and *solivagus*, *incertae sedis*.
- Tamias merriami* J. A. Allen, 1889. Bull. Am. Mus. Nat. Hist., 2:176.
 TYPE LOCALITY: U.S.A., California, San Bernardino Co., San Bernardino Mtns., N. of San Bernardino, 4500 ft. (1372 m).
 DISTRIBUTION: From San Francisco Bay south in the Coast Range, and south of Columbia (California, U.S.A.) in the Sierra Nevada, to extreme N. Baja California (Mexico).
 COMMENT: Formerly included *meridionalis* and *obscurus*; see Callahan, 1977, J. Mammal., 58:188-201. See also comment under *obscurus*.
 ISIS NUMBER: 5301410002007007001 as *Eutamias merriami*.
- Tamias minimus* Bachman, 1839. J. Acad. Nat. Sci. Phila., 8:71.
 TYPE LOCALITY: U.S.A., Wyoming, Sweetwater Co., Green River, near mouth of Big Sandy Creek.
 DISTRIBUTION: C. Yukon (Canada) south through Sierra Nevada and S. New Mexico, east to Michigan (U.S.A.) and W. Quebec (Canada).
 ISIS NUMBER: 5301410002007008001 as *Eutamias minimus*.
- Tamias obscurus* J. A. Allen, 1890. Bull. Am. Mus. Nat. Hist., 3:70.
 TYPE LOCALITY: Mexico, Baja California, Sierra San Pedro Martir, near Vallecitos.
 DISTRIBUTION: S. California (San Bernardino Co., U.S.A.) to C. Baja California (Mexico).
 COMMENT: Regarded by Howell, 1929, as a synonym of *merriami*; but see Callahan, 1977, J. Mammal., 58:188-201, who provided evidence of specific distinctness and included *meridionalis* and *davisi* in this species.
- Tamias ochrogenys* (Merriam, 1897). Proc. Biol. Soc. Wash., 11:195.
 TYPE LOCALITY: U.S.A., California, Mendocino Co., Mendocino.
 DISTRIBUTION: Coast of N. California from Van Duzen River south to S. Sonoma Co. (U.S.A.).
 COMMENT: Elevated from subspecies of *townsendii* by Sutton and Nadler, 1974, Southwest. Nat., 19:199-212.

- Tamias palmeri* (Merriam, 1897). Proc. Biol. Soc. Wash., 11:208.
TYPE LOCALITY: U.S.A., Nevada, Clark Co., Charleston Peak, 8000 ft. (2438 m).
DISTRIBUTION: Charleston Mtns. (S. Nevada, U.S.A.).
ISIS NUMBER: 5301410002007009001 as *Eutamias palmeri*.
- Tamias panamintinus* Merriam, 1893. Proc. Biol. Soc. Wash., 8:134.
TYPE LOCALITY: U.S.A., California, Inyo Co., Panamint Mtns., Johnson Canyon, vicinity of Hungry Bill's Ranch, about 5000 ft. (1524 m).
DISTRIBUTION: Mountains of S.E. California and S.W. Nevada (U.S.A.).
ISIS NUMBER: 5301410002007010001 as *Eutamias panamintinus*.
- Tamias quadrimaculatus* Gray, 1867. Ann. Mag. Nat. Hist., ser. 3, 20:435.
TYPE LOCALITY: U.S.A., California, Placer Co., Michigan Bluff.
DISTRIBUTION: Sierra Nevada of E.C. California (Plumas to Mariposa Cos.) and adjacent W.C. Nevada (U.S.A.).
ISIS NUMBER: 5301410002007011001 as *Eutamias quadrimaculatus*.
- Tamias quadrivittatus* (Say, 1823). In James, Account of an Exped., to Rocky Mtns..., 2:45.
TYPE LOCALITY: U.S.A., Colorado, Fremont Co., Arkansas River, about 26 mi. (42 km) below Canon City.
DISTRIBUTION: Mountains of Colorado and E. Utah south to N.E. Arizona and S. New Mexico (U.S.A.).
COMMENT: Includes *australis* from the Organ Mtns., New Mexico; see Patterson, 1980, J. Mammal., 61:455-464.
ISIS NUMBER: 5301410002007012001 as *Eutamias quadrivittatus*.
- Tamias ruficaudus* (A. H. Howell, 1920). Proc. Biol. Soc. Wash., 33:91.
TYPE LOCALITY: U.S.A., Montana, Glacier Co., Upper St. Mary's Lake.
DISTRIBUTION: N.E. Washington to W. Montana (U.S.A.), and S.E. British Columbia (Canada).
ISIS NUMBER: 5301410002007013001 as *Eutamias ruficaudus*.
- Tamias senex* J. A. Allen, 1890. Bull. Am. Mus. Nat. Hist., 3:83.
TYPE LOCALITY: U.S.A., California, Placer Co., summit of Donner Pass.
DISTRIBUTION: Sierra Nevada of E.C. California and W.C. Nevada to N. coast of California, and N.C. Oregon (U.S.A.).
COMMENT: Elevated from subspecies of *townsendii* by Sutton and Nadler, 1974, Southwest. Nat., 19:199-212.
- Tamias sibiricus* (Laxmann, 1769). Sibirische Briefe, Gottingen, p. 69.
TYPE LOCALITY: U.S.S.R., R.S.F.S.R., Altaisk Krai, near Barnaul.
DISTRIBUTION: N. European U.S.S.R. and Siberia, to China and Korea; Sakhalin; S. Kurile Isls. (U.S.S.R.); Hokkaido (Japan).
COMMENT: Subgenus *Eutamias*; see Gromov *et al.*, 1965:125. See Chaworth-Musters, 1937, Ann. Mag. Nat. Hist., 19:158, for clarification of the type locality.
ISIS NUMBER: 5301410002007014001 as *Eutamias sibiricus* (sic).
- Tamias siskiyou* (A. H. Howell, 1922). J. Mammal., 3:180.
TYPE LOCALITY: U.S.A., California, Siskiyou Co., Siskiyou Mtns., summit of White Mtn., 6000 ft. (1829 m).
DISTRIBUTION: Siskiyou Mtns. and coast of N. California to C. Oregon (U.S.A.).
COMMENT: Elevated from subspecies of *townsendii* by Sutton and Nadler, 1974, Southwest. Nat., 19:199-212.
- Tamias sonomae* (Grinnell, 1915). Univ. Calif. Publ. Zool., 12:321.
TYPE LOCALITY: U.S.A., California, Sonoma Co., 1 mi. (1.6 km) W. of Guerneville.
DISTRIBUTION: N.W. California, from San Francisco Bay north to Siskiyou Co. (U.S.A.).
ISIS NUMBER: 5301410002007015001 as *Eutamias sonomae*.
- Tamias speciosus* Merriam, 1890. In J. A. Allen, Bull. Am. Mus. Nat. Hist., 3:86.
TYPE LOCALITY: U.S.A., California, San Bernardino Co., San Bernardino Mtns., Whitewater Creek, 7500 ft. (2255 m).
DISTRIBUTION: Sierra Nevada from Mt. Lassen to San Bernardino Mtns. (California); W. Nevada (U.S.A.).
ISIS NUMBER: 5301410002007016001 as *Eutamias speciosus*.

- Tamias striatus* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:64.
 TYPE LOCALITY: U.S.A., South Carolina, upper Savannah River.
 DISTRIBUTION: S. Manitoba and Nova Scotia (Canada) to Louisiana, Alabama, and Georgia, east to Atlantic Coast (U.S.A.).
 COMMENT: Subgenus *Tamias* see Gromov *et al.*, 1965:134. Type locality restricted by Howell, 1929, N. Am. Fauna, 52:14.
 ISIS NUMBER: 5301410002035001001.
- Tamias townsendii* Bachman, 1839. J. Acad. Nat. Sci. Phila., 8(1):68.
 TYPE LOCALITY: U.S.A., Oregon, Multnomah Co., lower Columbia River, near lower mouth of Willamette River.
 DISTRIBUTION: S.W. British Columbia (Canada), W. Washington and Oregon to the Rogue River (U.S.A.).
 COMMENT: Formerly included *ochrogenys*, *siskiyou* and *senex*; see comments under those species.
 ISIS NUMBER: 5301410002007017001 as *Eutamias townsendii*.
- Tamias umbrinus* J. A. Allen, 1890. Bull. Am. Mus. Nat. Hist., 3:96.
 TYPE LOCALITY: U.S.A., Utah, Summit Co., Uinta Mtns., Blacks Fork, about 8000 ft. (2438 m).
 DISTRIBUTION: E. California and N. Arizona to N. Colorado, S.E. and N.W. Wyoming, and extreme S.W. Montana (U.S.A.).
 ISIS NUMBER: 5301410002007018001 as *Eutamias umbrinus*.
- Tamiasciurus* Trouessart, 1880. Le Naturaliste, 2(37):292.
 REVIEWED BY: F. J. Brenner (FJB); D. A. Sutton (DAS).
 ISIS NUMBER: 5301410002036000000.
- Tamiasciurus douglasii* (Bachman, 1839). Proc. Zool. Soc. Lond., 1838:99.
 TYPE LOCALITY: U.S.A., Oregon, Clatsop Co., mouth of Columbia River ("shores of Columbia River").
 DISTRIBUTION: Coast and Cascade Ranges and Sierra Nevada of S.W. British Columbia (Canada) to S. California (U.S.A.).
 COMMENT: Formerly included *mearnsi*; see Lindsay, 1981, J. Mammal., 62:673-682.
 ISIS NUMBER: 5301410002036001001.
- Tamiasciurus hudsonicus* (Erxleben, 1777). Syst. Regn. Anim., 1:416.
 TYPE LOCALITY: Canada, Ontario, mouth of the Severn River.
 DISTRIBUTION: Alaska, throughout Canada (south of the tundra), W. U.S.A. in mountain states; N.E. U.S.A.
 COMMENT: Includes *fremonti*; see Hardy, 1950, Proc. Biol. Soc. Wash., 63:13-14.
 ISIS NUMBER: 5301410002036002001.
- Tamiasciurus mearnsi* (Townsend, 1897). Proc. Biol. Soc. Wash., 11:146.
 TYPE LOCALITY: Mexico, Baja California Norte, San Pedro Martir Mountains.
 DISTRIBUTION: Sierra San Pedro Martir Mountains (Baja California Norte, Mexico).
 COMMENT: Formerly included in *douglasii*; see Lindsay, 1981, J. Mammal., 62:673-682.
- Tamiops* J. A. Allen, 1906. Bull. Am. Mus. Nat. Hist., 22:475.
 COMMENT: Formerly included in *Callosciurus*; see Moore and Tate, 1965, Fieldiana Zool., 48:1-351, who revised *Tamiops*.
 ISIS NUMBER: 5301410002037000000.
- Tamiops maritimus* (Bonhote, 1900). Ann. Mag. Nat. Hist., ser. 7, 5:51.
 TYPE LOCALITY: China, Fukien, Foochow.
 DISTRIBUTION: Hupei and Chekiang (China), through S. Vietnam and Laos; Hainan (China); Taiwan.
 ISIS NUMBER: 5301410002037002001.
- Tamiops macclellandi* (Horsfield, 1840). Proc. Zool. Soc. Lond., 1839:152.
 TYPE LOCALITY: India, Assam.
 DISTRIBUTION: E. Nepal to N. Vietnam and Yunnan (China), south through Indochina to the S. Malay Peninsula.
 ISIS NUMBER: 5301410002037001001.

Tamiops rodolphei (Milne-Edwards, 1867). Rev. Mag. Zool. Paris, ser. 2, 19:227.

TYPE LOCALITY: Vietnam, Saigon.

DISTRIBUTION: E. Thailand; Kampuchea; S. Vietnam.

ISIS NUMBER: 5301410002037003001.

Tamiops swinhoi (Milne-Edwards, 1874). Recherches...des Mammif., 1:308.

TYPE LOCALITY: China, Szechwan, Moupin (=Muping).

DISTRIBUTION: E. China to N. Burma and N. Vietnam.

ISIS NUMBER: 5301410002037004001.

Trogopterus Heude, 1898. Mem. Hist. Nat. Emp. Chin., 4(1):46-47.

ISIS NUMBER: 5301410002051000000.

Trogopterus xanthipes (Milne-Edwards, 1867). Ann. Sci. Nat. Zool., 8:376.

TYPE LOCALITY: China, N.E. of Hopei.

DISTRIBUTION: Montane forests, from Yunnan to C. and W. China.

COMMENT: Includes *edithae* (Yunnan), *himalaicus* (S. Tibet), *minax* (Szechwan), and *mordax* (Hupei); closely related to *Belomys* from S.E. Asia; see Corbet, 1978:87.

ISIS NUMBER: 5301410002051001001.

Xerus Hemprich and Ehrenberg, 1833. Symb. Phys. Mamm., 1.

COMMENT: Includes *Euxerus* and *Geosciurus*; see Amtmann, 1975, Part 6.1:2. Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:153-206, considered *Euxerus* and *Geosciurus* distinct genera. *Euxerus* was considered distinct by Yalden *et al.*, 1976, Monitore Zool. Ital., n.s., suppl. 8(1):1-118, who were followed by Rupp, 1980, Saugetierk. Mitt., 28:87.

ISIS NUMBER: 5301410002038000000.

Xerus erythropus (E. Geoffroy, 1803). Cat. Mamm. Mus. Nat. Hist. Nat. Paris, p. 178.

TYPE LOCALITY: Senegal.

DISTRIBUTION: Morocco and Senegal to Ethiopia and Kenya.

COMMENT: Subgenus *Euxerus*; see Corbet, 1978:79, and Amtmann, 1975, Part 6.1:2; but also see comment under genus.

ISIS NUMBER: 5301410002038001001.

Xerus inauris (Zimmermann, 1780). Geogr. Gesch. Mensch. Vierf. Thiere, 2:344.

TYPE LOCALITY: South Africa, Kaffirland, 100 mi. (161 km) N. of Cape of Good Hope.

DISTRIBUTION: South Africa; S. Namibia; Botswana; W. Zimbabwe.

COMMENT: Subgenus *Geosciurus*; see Ellerman, 1940:422, and Amtmann, 1975, Part 6.1:2. Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:153-206, considered *Geosciurus* a distinct genus.

ISIS NUMBER: 5301410002038002001.

Xerus princeps (Thomas, 1929). Proc. Zool. Soc. Lond., 1929:106.

TYPE LOCALITY: N. Namibia, C. Koakoveld, Otjitundua.

DISTRIBUTION: Namibia; S.W. desert region of Angola.

COMMENT: Subgenus *Geosciurus*; see Ellerman, 1940:422, and Amtmann, 1975, Part 6.1:2. Moore, 1959, Bull. Am. Mus. Nat. Hist., 118:153-206, considered *Geosciurus* a distinct genus.

ISIS NUMBER: 5301410002038003001.

Xerus rutilus (Cretzschmar, 1826). Atlas Ruppell's Reise Nordl. Africa Saugeth., p. 59.

TYPE LOCALITY: Ethiopia, "Eastern slope of Abyssinia."

DISTRIBUTION: N.E. Sudan; Ethiopia; Somalia; Kenya; N.E. Uganda; N.E. Tanzania.

COMMENT: Subgenus *Xerus*; see Ellerman, 1940:420, and Amtmann, 1975, Part 6.1:2.

ISIS NUMBER: 5301410002038004001.

Family Geomyidae

REVIEWED BY: C. A. McLaughlin (CAM).

COMMENT: Genera revised by Russell, 1968, Univ. Kans. Publ. Mus. Nat. Hist., 16:473-579.

ISIS NUMBER: 5301410003000000000.

- Geomys Rafinesque*, 1817. Am. Mon. Mag., 2(1):45.
 REVIEWED BY: L. R. Heaney (LRH); K. T. Wilkins (KTW).
 COMMENT: A key to the species of *Geomys* was published by Baker and Williams, 1974, Mamm. Species, 35:1-4.
 ISIS NUMBER: 5301410003002000000.
- Geomys arenarius* Merriam, 1895. N. Am. Fauna, 8:139.
 REVIEWED BY: J. Ramirez-Pulido (JRP).
 TYPE LOCALITY: U.S.A., Texas, El Paso Co., El Paso.
 DISTRIBUTION: Extreme W. Texas, S.W. and S.C. New Mexico (U.S.A.); N. Chihuahua (Mexico).
 COMMENT: Reviewed by Williams and Baker, 1974, Mamm. Species, 36:1-3, and Williams and Genoways, 1978, Ann. Carnegie Mus., 47:541-570.
 ISIS NUMBER: 5301410003002001001.
- Geomys bursarius* (Shaw, 1800). Trans. Linn. Soc. Lond., 5:227.
 REVIEWED BY: E. B. Hart (EBH).
 TYPE LOCALITY: U.S.A., Minnesota, Sherburne Co., Elk River.
 DISTRIBUTION: S.C. Manitoba (Canada) to N.W. Indiana, S.W. Louisiana, S.C. Texas, E.C. New Mexico (U.S.A.).
 COMMENT: Includes *breviceps* and *lutescens*; see Hall, 1981:499-500. Revised by Merriam, 1895, N. Am. Fauna, 8:120. A superspecies group composed of 3 to 5 species; under revision by Zimmerman, Heaney, and others (LRH). EBH believes *bursarius* probably contains three distinct species: (1) a species consisting of *ammophilus* and *attwateri*, (2) a species consisting of *brazensis*, *sagittalis*, *terricola*, *pratincola*, and *ludemani*, (3) a species consisting of the remaining subspecies. LRH disagrees with 2 and 3 above. Tucker and Schmidly, 1981 also considered *attwateri* distinct.
 ISIS NUMBER: 5301410003002002001.
- Geomys personatus* True, 1889. Proc. U.S. Nat. Mus., 11:159.
 REVIEWED BY: J. Ramirez-Pulido (JRP).
 TYPE LOCALITY: U.S.A., Texas, Cameron Co., Padre Isl.
 DISTRIBUTION: S. Texas, south of San Antonio and Del Rio, including Padre and Mustang Isl. (U.S.A.); barrier beaches of extreme N.E. Tamaulipas (Mexico).
 COMMENT: Reviewed by Davis, 1940, Bull. Texas Agric. Exper. Sta., 590:1-38, and Williams and Genoways, 1981, Ann. Carnegie Mus., 50(19):435-473.
 ISIS NUMBER: 5301410003002006001.
- Geomys pinetis* Rafinesque, 1806. Am. Mon. Mag., 2:45.
 TYPE LOCALITY: U.S.A., Georgia, Screven Co.
 DISTRIBUTION: N. and C. Florida; S. Georgia; S. Alabama (U.S.A.).
 COMMENT: *G. tuza* is a junior synonym; see Harper, 1952, Proc. Biol. Soc. Wash., 65:36. Includes *colonus*, *cumberlandius*, and *fontanelus*; see Williams and Genoways, 1980, Ann. Carnegie Mus., 49:405-453. Reviewed by Pembleton and Williams, 1978, Mamm. Species, 86:1-3.
 ISIS NUMBER: 5301410003002007001 as *G. pinetis*.
 5301410003002003001 as *G. colonus*.
 5301410003002004001 as *G. cumberlandius*.
 5301410003002005001 as *G. fontanelus*.
- Geomys tropicalis* Goldman, 1915. Proc. Biol. Soc. Wash., 28:134.
 TYPE LOCALITY: Mexico, Tamaulipas, Altamira.
 DISTRIBUTION: Vicinity of Altamira and Tampico in S.E. Tamaulipas (Mexico).
 COMMENT: Elevated to species status by Alvarez, 1963, Univ. Kans. Publ. Mus. Nat. Hist., 14:426-427. Reviewed by Baker and Williams, 1974, Mamm. Species, 35:1-4, and Williams and Genoways, 1977, Ann. Carnegie Mus., 46:245-264.
- Orthogeomys* Merriam, 1895. N. Am. Fauna, 8:172.
 REVIEWED BY: S. H. Jenkins (SHJ); R. D. Orr (RDO); J. Ramirez-Pulido (JRP); K. T. Wilkins (KTW).

- COMMENT: Includes *Heterogeomys* and *Macrogeomys*; see Russell, 1968, Univ. Kans. Publ. Mus. Nat. Hist., 16(6):528, who revised this genus.
ISIS NUMBER: 5301410003005000000 as *Orthogeomys*.
5301410003003000000 as *Heterogeomys*.
5301410003004000000 as *Macrogeomys*.
- Orthogeomys cavator* (Bangs, 1902). Bull. Mus. Comp. Zool. Harv. Univ., 39:42.
TYPE LOCALITY: Panama, Chiriqui Prov., Boquete, 4800 ft. (1463 m).
DISTRIBUTION: N.W. Panama to C. Costa Rica.
COMMENT: Reviewed by Goodwin, 1946, Bull. Am. Mus. Nat. Hist., 87:378-379.
ISIS NUMBER: 5301410003004001001 as *Macrogeomys cavator*.
- Orthogeomys cherriei* (J. A. Allen, 1893). Bull. Am. Mus. Nat. Hist., 5:337.
TYPE LOCALITY: Costa Rica, Limon Prov., Santa Clara.
DISTRIBUTION: E. lowlands of Costa Rica.
COMMENT: Revised by Goodwin, 1946, Bull. Am. Mus. Nat. Hist., 87:380-381.
ISIS NUMBER: 5301410003004002001 as *Macrogeomys cherriei*.
- Orthogeomys cuniculus* Elliot, 1905. Proc. Biol. Soc. Wash., 18:234.
TYPE LOCALITY: Mexico, Oaxaca, Zanatepec.
DISTRIBUTION: Known only from the type locality.
COMMENT: Reviewed by Nelson and Goldman, 1930, J. Mammal., 11:317.
ISIS NUMBER: 5301410003005001001.
- Orthogeomys dariensis* (Goldman, 1912). Smithson. Misc. Coll., 60(2):8.
TYPE LOCALITY: Panama, Darien Prov., Cana, upper Rio Tuyra, 2000 ft. (610 m).
DISTRIBUTION: E. Panama.
ISIS NUMBER: 5301410003004003001 as *Macrogeomys dariensis*.
- Orthogeomys grandis* (Thomas, 1893). Ann. Mag. Nat. Hist., ser. 6, 12:270.
TYPE LOCALITY: Guatemala, Sacatepequez Prov., Duenas.
DISTRIBUTION: Honduras to Jalisco (Mexico).
COMMENT: Burt and Stirton, 1961, Misc. Publ. Mus. Zool. Univ. Mich., 117:52, included *pygacanthus* in *grandis*; Russell, 1968, Univ. Kans. Publ. Mus. Nat. Hist., 16(6):477-579, considered *pygacanthus* a distinct species and is followed here.
ISIS NUMBER: 5301410003005002001.
- Orthogeomys heterodus* (Peters, 1865). Monatsb. Preuss. Akad. Wiss. Berlin, p. 177.
TYPE LOCALITY: Costa Rica, San Jose Prov., Escazu Hts.
DISTRIBUTION: C. Costa Rica.
COMMENT: Reviewed by Goodwin, 1946, Bull. Am. Mus. Nat. Hist., 87:376-378.
ISIS NUMBER: 5301410003004004001 as *Macrogeomys heterodus*.
- Orthogeomys hispidus* (Le Conte, 1852). Proc. Acad. Nat. Sci. Phila., 6:158.
TYPE LOCALITY: Mexico, Veracruz, near Jalapa.
DISTRIBUTION: Yucatan Peninsula, Belize, Guatemala, and N.W. Honduras, to S. Tamaulipas (Mexico).
COMMENT: Includes *hondurensis*; may include *lanius*; see Hall, 1981:511, 512. Revised by Nelson and Goldman, 1929, Proc. Biol. Soc. Wash., 42:147-152.
ISIS NUMBER: 5301410003003001001 as *Heterogeomys hispidus*.
- Orthogeomys lanius* (Elliot, 1905). Proc. Biol. Soc. Wash., 18:235.
TYPE LOCALITY: Mexico, Veracruz, Xuchil, S.E. side of Mt. Orizaba.
DISTRIBUTION: Known only from the type locality.
COMMENT: May be conspecific with *hispidus*; see Hall, 1981:512.
ISIS NUMBER: 5301410003003002001 as *Heterogeomys lanius*.
- Orthogeomys matagalpae* (J. A. Allen, 1910). Bull. Am. Mus. Nat. Hist., 28:97.
TYPE LOCALITY: Nicaragua, Matagalpa, Pena Blanca.
DISTRIBUTION: N.C. Nicaragua to S.C. Honduras.
ISIS NUMBER: 5301410003004005001 as *Macrogeomys matagalpae*.
- Orthogeomys pygacanthus* Dickey, 1928. Proc. Biol. Soc. Wash., 41:9.
TYPE LOCALITY: El Salvador, San Miguel Dept., Mt. Cacaguatique, 3500 ft. (1067 m).
DISTRIBUTION: El Salvador.

COMMENT: This species was included in *grandis* by Burt and Stirton, 1961, Misc. Publ. Mus. Zool. Univ. Mich., 117:52, but was considered a distinct species by Russell, 1968, Univ. Kans. Publ. Mus. Nat. Hist., 16(6):477-579, and Corbet and Hill, 1980:139. Hall, 1981:509, followed Burt and Stirton, 1961, in including this species in *grandis*; Russell, 1968, was not mentioned.

ISIS NUMBER: 5301410003005003001.

Orthogeomys underwoodi (Osgood, 1931). Field Mus. Nat. Hist. Publ. Zool. Ser., 295, 18:143.

TYPE LOCALITY: Costa Rica, San Jose Prov., Alto de Jabillo Pirris, between San Geronimo and Pozo Azul.

DISTRIBUTION: W. Costa Rica.

ISIS NUMBER: 5301410003004006001 as *Macrogeomys underwoodi*.

Pappogeomys Merriam, 1895. N. Am. Fauna, 8:145.

REVIEWED BY: S. H. Jenkins (SHJ); J. Ramirez-Pulido (JRP); K. T. Wilkins (KTW).

COMMENT: Includes *Cratogeomys* and *Platygeomys*; see Hooper, 1946, J. Mammal., 27:397; Russell, 1968, Univ. Kans. Publ. Mus. Nat. Hist., 16(7):592, revised the genus.

ISIS NUMBER: 5301410003006000000 as *Pappogeomys*.

5301410003001000000 as *Cratogeomys*.

Pappogeomys alcorni Russell, 1957. Univ. Kans. Publ. Mus. Nat. Hist., 9:359.

TYPE LOCALITY: Mexico, Jalisco, 4 mi. (6 km) W. of Mazamitla, 6600 ft. (2012 m).

DISTRIBUTION: S.E. Jalisco (Mexico), in Sierra del Tigre Mtns.

ISIS NUMBER: 5301410003006001001.

Pappogeomys bulleri (Thomas, 1892). Ann. Mag. Nat. Hist., ser. 6, 10:196.

TYPE LOCALITY: Mexico, Jalisco, Talpa, W. slope Sierra de Mascota, 8500 ft. (2591 m).

DISTRIBUTION: Nayarit and Jalisco to Colima (Mexico).

COMMENT: Reviewed by Genoways and Jones, 1969, J. Mammal., 50:748-755.

ISIS NUMBER: 5301410003006002001.

Pappogeomys castanops (Baird, 1852). Rept. Stansbury's Expl. Surv. Grt. Salt Lake Utah, App. C, p. 313.

TYPE LOCALITY: U.S.A., Colorado, Bent Co., along prairie road to Bent's Fort, near present town of Las Animas.

DISTRIBUTION: S.E. Colorado and S.W. Kansas (U.S.A.) to N. Tamaulipas and C. San Luis Potosi (Mexico). Colima (Mexico) (JRP).

COMMENT: May represent two species; see Berry and Baker, 1972, J. Mammal., 53:303-309.

ISIS NUMBER: 5301410003006003001.

Pappogeomys fumosus (Merriam, 1892). Proc. Biol. Soc. Wash., 7:165.

TYPE LOCALITY: Mexico, Colima, 3 mi. (5 km) W. of Colima, 1700 ft. (518 m).

DISTRIBUTION: Plain of Colima (Mexico).

ISIS NUMBER: 5301410003001001001 as *Cratogeomys fumosus*.

Pappogeomys gymnurus (Merriam, 1892). Proc. Biol. Soc. Wash., 7:166.

TYPE LOCALITY: Mexico, Jalisco, Zapotlan (=Ciudad Guzman), 4000 ft. (1219 m).

DISTRIBUTION: S. and C. Jalisco, N.E. Michoacan (Mexico).

ISIS NUMBER: 5301410003001002001 as *Cratogeomys gymnurus*.

Pappogeomys merriami (Thomas, 1893). Ann. Mag. Nat. Hist., ser. 6, 12:271.

TYPE LOCALITY: Mexico, "Southern Mexico," probably Valley of Mexico.

DISTRIBUTION: W.C. Veracruz to Distrito Federal, Morelos, and surrounding areas, including S.E. central plateau and S. Sierra Madre Oriental (Mexico).

COMMENT: Includes *perotensis*, *oreocetes*, and *peregrinus*; see Russell, 1968, Univ. Kans. Publ. Mus. Nat. Hist., 16(7):706-712.

ISIS NUMBER: 5301410003001003001 as *Cratogeomys merriami*.

5301410003001005001 as *Cratogeomys oreocetes*.

5301410003001006001 as *Cratogeomys peregrinus*.

5301410003001007001 as *Cratogeomys perotensis*.

Pappogeomys neglectus (Merriam, 1902). Proc. Biol. Soc. Wash., 15:68.

TYPE LOCALITY: Mexico, Queretaro, Cerro de la Calentura, about 8 mi. (13 km) N.W. of Pinal de Amoles, 9500 ft. (2896 m).

DISTRIBUTION: Known only from the type locality.

ISIS NUMBER: 5301410003001004001 as *Cratogeomys neglectus*.

Pappogeomys tylosrhinus (Merriam, 1895). N. Am. Fauna, 8:167.

TYPE LOCALITY: Mexico, Hidalgo, Tula, 6800 ft. (2073 m).

DISTRIBUTION: Distrito Federal, and Hidalgo to C. Jalisco (Mexico).

COMMENT: Includes *planiceps*; see Russell, 1968, Univ. Kans. Publ. Mus. Nat. Hist., 16(7):735.

ISIS NUMBER: 5301410003001009001 as *Cratogeomys tylosrhinus*.

5301410003001008001 as *Cratogeomys planiceps*.

Pappogeomys zinseri (Goldman, 1939). J. Mammal., 20:91.

TYPE LOCALITY: Mexico, Jalisco, Lagos, 6150 ft. (1875 m).

DISTRIBUTION: N.E. Jalisco (Mexico).

ISIS NUMBER: 5301410003001010001 as *Cratogeomys zinseri*.

Thomomys Wied, 1839. Nova Acta Phys.-Med. Acad. Caes. Leop.-Carol., 19(1):377.

REVIEWED BY: R. D. Orr (RDO).

ISIS NUMBER: 5301410003007000000.

Thomomys bottae (Eydox and Gervais, 1836). Mag. Zool. Paris, 6:23.

REVIEWED BY: J. Ramirez-Pulido (JRP).

TYPE LOCALITY: U.S.A., California, Monterey Co., Monterey, along coast.

DISTRIBUTION: S.W. U.S.A., north to Oregon and Colorado, south to Sinaloa and Nuevo Leon (Mexico).

COMMENT: Includes *baileyi*, *fulvus*, *suboles*, *harquahalae*, *pectoralis*, and *lachuguilla*; see Anderson, 1966, Syst. Zool., 15:189-198, and Hoffmeister, 1969, Misc. Publ. Univ. Kans. Mus. Nat. Hist., 51:75-91, who revised this species. Hoffmeister, 1969, found evidence of hybridization between *bottae* and *umbrinus* in Sycamore Canyon, Arizona; he provisionally considered *bottae* and *umbrinus* distinct species. Hall, 1981:469, reported evidence of intergradation in Nuevo Leon (Mexico), reviewed Hoffmeister, 1969, and included *bottae* in *umbrinus*.

ISIS NUMBER: 5301410003007002001 as *T. bottae*.

5301410003007001001 as *T. baileyi*.

Thomomys bulbivorus (Richardson, 1829). Fauna Boreali-Americana, 1:206.

TYPE LOCALITY: U.S.A., Oregon, banks of Columbia River, probably near Portland.

DISTRIBUTION: Willamette Valley (N.W. Oregon, U.S.A.).

COMMENT: Revised by Bailey, 1915, N. Am. Fauna, 39:1-136.

ISIS NUMBER: 5301410003007003001 as *T. bulbivorus* (sic).

Thomomys clusius Coues, 1875. Proc. Acad. Nat. Sci. Phila., 27:138.

TYPE LOCALITY: U.S.A., Wyoming, Carbon Co., Bridger Pass, 18 mi. (29 km) S.W. Rawlins.

DISTRIBUTION: Carbon and Sweetwater Cos. (C. Wyoming, U.S.A.).

COMMENT: Formerly included in *talpoides*; revised by Thaeler and Hinesley, 1979, J. Mammal., 60:480-488.

Thomomys idahoensis Merriam, 1901. Proc. Biol. Soc. Wash., 14:114.

TYPE LOCALITY: U.S.A., Idaho, Clark Co., Birch Creek.

DISTRIBUTION: E.C. Idaho, adjacent Montana and W. Wyoming; N. Utah (U.S.A.).

COMMENT: Includes *pygmaeus* and *confinus*; see Thaeler, 1972, J. Mammal., 53:417-428, Murrelet, 1977, and J. Mammal., 58:49-51, who revised this species. Formerly included in *talpoides* by Hall and Kelson, 1959:441, but see Hall, 1981:1179.

ISIS NUMBER: 5301410003007004001.

Thomomys mazama Merriam, 1897. Proc. Biol. Soc. Wash., 11:214.

TYPE LOCALITY: U.S.A., Oregon, Klamath Co., Anna Creek near Crater Lake, Mt. Mazama, 6000 ft. (1829 m).

DISTRIBUTION: N.W. Washington through C. Oregon to N. California (U.S.A.).

COMMENT: Revised by Thaeler, 1968, Univ. Calif. Publ. Zool., 86:1-46.

ISIS NUMBER: 5301410003007005001.

Thomomys monticola J. A. Allen, 1893. Bull. Am. Mus. Nat. Hist., 5:48.

TYPE LOCALITY: U.S.A., California, El Dorado Co., Mt. Tallac, 7500 ft. (2286 m).

DISTRIBUTION: Sierra Nevada Mtns. of N. and E.C. California; W.C. Nevada (U.S.A.).

COMMENT: Revised by Thaeler, 1968, Univ. Calif. Publ. Zool., 86:1-46.

ISIS NUMBER: 5301410003007006001.

Thomomys talpoides (Richardson, 1828). Zool. J., 3:518.

TYPE LOCALITY: Canada, Saskatchewan, North Saskatchewan River, Carlton House near Fort Carlton.

DISTRIBUTION: S. British Columbia and C. Alberta to S.W. Manitoba (Canada), south to C. and W. South Dakota, N. New Mexico, N. Arizona, C. and W. Nevada, and E.C. California (U.S.A.).

COMMENT: Formerly included *idahoensis* and *clusius*; see Thaeler, 1972, J. Mammal., 53:417-428, and Thaeler and Hinesley, 1979, J. Mammal., 60:480-488. Revised by Bailey, 1915, N. Am. Fauna, 39:1-136, Thaeler, 1968, Chromosoma, 25:172-183, and Thaeler, 1974, J. Mammal., 55:885-889.

ISIS NUMBER: 5301410003007007001.

Thomomys townsendii (Bachman, 1839). J. Acad. Nat. Sci. Phila., 8:105.

TYPE LOCALITY: U.S.A., Idaho, Canyon Co., near Nampa.

DISTRIBUTION: S.E. Idaho; S.W. Idaho; S.E. Oregon, N. Nevada, and N.E. California (U.S.A.).

COMMENT: Revised by Davis, 1937, J. Mammal., 18:145-158. Considered a distinct species by Thaeler, 1968, Evolution, 22:543-555, who provided evidence of a zone of hybridization between *bottae* and *townsendii*. Hall, 1981:469, 495, reviewed this evidence and included *townsendii* in *umbrinus* (*sensu* Hall). Includes *similis* which may be a distinct species (RDO).

ISIS NUMBER: 5301410003007008001.

Thomomys umbrinus (Richardson, 1829). Fauna Boreali-Americana, 1:202.

REVIEWED BY: J. Ramirez-Pulido (JRP).

TYPE LOCALITY: Mexico, Veracruz (probably vicinity of Boca del Norte).

DISTRIBUTION: S.W. U.S.A. to Puebla and Veracruz (Mexico).

COMMENT: Revised by Hoffmeister, 1969, Misc. Publ. Univ. Kans. Mus. Nat. Hist., 51:75-91. Hall, 1981:469, included *baileyi*, *bottae*, and *townsendii* in this species based on a reevaluation of data in Hoffmeister, 1969, Thaeler, 1968, Evolution, 22:543-555, and reported intergradation (between *umbrinus* and *bottae*) in Nuevo Leon (Mexico). Hoffmeister, 1969, considered *bottae* a distinct species; Thaeler, 1968, considered *townsendii* a distinct species. Further studies of these taxa are needed.

ISIS NUMBER: 5301410003007009001.

Zygoeomys Merriam, 1895. N. Am. Fauna, 8:195.

REVIEWED BY: R. D. Orr (RDO); J. Ramirez-Pulido (JRP).

ISIS NUMBER: 5301410003008000000.

Zygoeomys trichopus Merriam, 1895. N. Am. Fauna, 8:196.

TYPE LOCALITY: Mexico, Michoacan, Nahuatzen, 8000-8500 ft. (2438-2591 m).

DISTRIBUTION: Known from the type locality, and 6 mi. (10 km) S.E. of Patzcuaro (C. Michoacan, Mexico).

ISIS NUMBER: 5301410003008001001.

Family Heteromyidae

REVIEWED BY: D. F. Williams (DFW).

ISIS NUMBER: 5301410004000000000.

Dipodomys Gray, 1841. Ann. Mag. Nat. Hist., ser. 1, 7:521.

REVIEWED BY: T. L. Best (TLB); J. Ramirez-Pulido (JRP) (Mexico).

COMMENT: Interspecific relationships discussed by Schnell *et al.*, 1978, Syst. Zool., 27:34-48, and Johnson and Selander, 1971, Syst. Zool., 20:377-405.

ISIS NUMBER: 5301410004001000000.