

ORDER INSECTIVORA

by Rainer Hutterer

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COMMENTS: Formerly included elephant shrews and tree shrews which, since Butler (1972) are placed in two separate orders, Macroscelidea and Scandentia. Reviewed by Cabrera (1925). Phylogeny of living and fossil insectivores treated by Van Valen (1967). For basic data on brain structure and evolution see Stephan et al. (1991). For a synopsis of karyotype data see Reumer and Meylan (1986).

Family Solenodontidae Gill, 1872. *Smithson. Misc. Coll.*, 11(1):19.

COMMENTS: Dobson (1882:82) was the first to raise Gill's subfamily to family level.

Solenodon Brandt, 1833. *Mem. Acad. Imp. Sci., St. Petersburg*, ser. 6, 2:459.

TYPE SPECIES: *Solenodon paradoxus* Brandt, 1833.

SYNONYMS: *Antillocale*, *Atopogale*.

COMMENTS: Includes *Antillocale* and *Atopogale*; see Patterson (1962:2) and Varona (1974:6).

Besides the two extant species, two presumably extinct species have been described from Cuba ("Giant *Solenodon*") and Hispaniola (*Antillocale marcanoi* Patterson, 1962); see Morgan and Woods (1986). Remains of *Solenodon marcanoi* have been found in a horizon of "Late Pleistocene or Recent" age (Patterson, 1962).

Solenodon cubanus Peters, 1861. *Monatsb. K. Preuss. Akad. Wiss. Berlin*, 1861:169.

TYPE LOCALITY: Cuba, Oriente Prov., Bayamo.

DISTRIBUTION: Oriente Prov. (Cuba).

STATUS: U.S. ESA and IUCN - Endangered.

SYNONYMS: *poeyanus*.

COMMENTS: Sometimes placed in a distinct genus or subgenus, *Atopogale*, see Hall and Kelson (1959:22) and Hall (1981:22), but see Poduschka and Poduschka (1983:225-238) who regarded *Atopogale* as a synonym of *Solenodon*. For biological information see Varona (1983b).

Solenodon marcanoi (Patterson, 1962). *Breviora*, 165:2.

TYPE LOCALITY: Dominican Republic, San Rafael Prov., Hondo Valle Mun.; unnamed cave 2 km SW of Rancho La Guardia.

DISTRIBUTION: Known only from the type locality.

STATUS: Extinct.

COMMENTS: See comment under *Solenodon*.

Solenodon paradoxus Brandt, 1833. *Mem. Acad. Imp. Sci., St. Petersburg*, ser. 6, 2:459.

TYPE LOCALITY: "Hispaniola", Dominican Republic.

DISTRIBUTION: Haiti, Dominican Republic (Hispaniola).

STATUS: U.S. ESA and IUCN - Endangered.

Family Nesophontidae Anthony, 1916. *Bull. Am. Mus. Nat. Hist.*, 35:725.

COMMENTS: Known only from sub-Recent fossils from the Greater Antilles. One genus with eight taxa have been named, of which Hall (1981) listed six as valid species. Morgan and Woods (1986) recognized eight species. Recent efforts to locate surviving populations have been unsuccessful (Woods et al., 1985). See also comments under *Nesophontes*.

Nesophontes Anthony, 1916. *Bull. Am. Mus. Nat. Hist.*, 35:725.

TYPE SPECIES: *Nesophontes edithae* Anthony, 1916.

COMMENTS: All species of *Nesophontes* appear to have survived the late Pleistocene extinction, at least five species are known to have existed into post Columbian times, and several species apparently did not go extinct until the early part of this century (Morgan and Woods, 1986). Includes an undescribed species from the Cayman Isls which was found in post-Columbian deposits (Morgan and Woods, 1986; Varona, 1974).

Nesophontes edithae Anthony, 1916. Bull. Am. Mus. Nat. Hist., 35:725.

TYPE LOCALITY: Puerto Rico, Cueva Cathedral, near Morovis.

DISTRIBUTION: Puerto Rico.

STATUS: Extinct.

Nesophontes hypomicrus Miller, 1929. Smithson. Misc. Coll., 81:4.

TYPE LOCALITY: Haiti, 4 mi east of St. Michel, cave near the Atalaya plantation.

DISTRIBUTION: Haiti and Gonave Isl.

STATUS: Extinct.

Nesophontes longirostris Anthony, 1919. Bull. Am. Mus. Nat. Hist., 41:633.

TYPE LOCALITY: Cuba, Oriente, cave near the beach at Daiquiri.

DISTRIBUTION: Cuba.

STATUS: Extinct.

Nesophontes major Arredondo, 1970. Memoria, Soc. Cienc. Nat. La Salle, 30(86):126.

TYPE LOCALITY: Cuba, Habana, Bacuranao, Cueva de la Santa.

DISTRIBUTION: Cuba.

STATUS: Extinct.

Nesophontes micrus G. M. Allen, 1917. Bull. Mus. Comp. Zool., 61:5.

TYPE LOCALITY: Cuba, Matanzas, Sierra de Hato Nuevo.

DISTRIBUTION: Cuba, Haiti, and Pinos Isl.

STATUS: Extinct.

Nesophontes paramicrus Miller, 1929. Smithson. Misc. Coll., 81(9):3.

TYPE LOCALITY: Haiti, cave approximately 4 mi E St. Michel.

DISTRIBUTION: Haiti.

STATUS: Extinct.

Nesophontes submicrus Arredondo, 1970. Memoria, Soc. Cienc. Nat. La Salle, 30(86):137.

TYPE LOCALITY: Cuba, Habana, Bacuranao, Cueva de la Santa.

DISTRIBUTION: Cuba.

STATUS: Extinct.

Nesophontes zamicros Miller, 1929. Smithson. Misc. Coll., 81:7.

TYPE LOCALITY: Haiti, 4 mi east of St. Michel, cave near Atalaya plantation.

DISTRIBUTION: Haiti.

STATUS: Extinct.

Family Tenrecidae Gray, 1821. London Med. Repos., 15:301.

COMMENTS: Includes Potamogalinae (see Corbet, 1974).

Subfamily Geogalinae Trouessart, 1879. Rev. Mag. Zool., Paris, ser. 3, 7:275.

Geogale Milne-Edwards and G. Grandidier, 1872. Ann. Sci. Nat. Zool., 15 (art. 19):1.

TYPE SPECIES: *Geogale aurita* Milne-Edwards and G. Grandidier, 1872.

SYNONYMS: *Cryptogale* (see Genest and Petter, 1975).

Geogale aurita Milne-Edwards and G. Grandidier, 1872. Ann. Sci. Nat. Zool., 15 (art. 19):1.

TYPE LOCALITY: Madagascar, Morondava.

DISTRIBUTION: NE and SW Madagascar, in Lamboharana, Tulear [Toliary], and Fenerive.

STATUS: IUCN - *G. a. aurita* Insufficiently known; *G. a. orientalis* Indeterminate.

SYNONYMS: *australis*, *orientalis*.

Subfamily Oryzorictinae Dobson, 1882. Monogr. Insectivora, 1:71.

Limnogale Major, 1896. Ann. Mag. Nat. Hist., ser. 6, 18:318.

TYPE SPECIES: *Limnogale mergulus* Major, 1896.

Limnogale mergulus Major, 1896. Ann. Mag. Nat. Hist., ser. 6, 18:318.

TYPE LOCALITY: Madagascar, NE Betsileo, Imasindry.

DISTRIBUTION: E Madagascar, freshwater streams; see map in Nicoll and Rathbun (1990:9).

STATUS: IUCN - Indeterminate.

Microgale Thomas, 1882. J. Linn. Soc., Zool., 16:319.

TYPE SPECIES: *Microgale longicaudata* Thomas, 1882.

SYNONYMS: *Leptogale*, *Nesogale*; *Oryzorictes* Major, 1896 (not Grandidier, 1870), *Paramicrogale*.

COMMENTS: See MacPhee (1987a:4), who revised the entire genus and whose conclusions are followed here.

Microgale brevicaudata G. Grandidier, 1899. Bull. Mus. Hist. Nat. Paris, 5:349.

TYPE LOCALITY: "environs of Mahanara, NE coast of Madagascar", 78 km S of Iharana [Vohimarina], Antsiranana, Antalaha, Madagascar.

DISTRIBUTION: Madagascar, forest.

STATUS: IUCN - Insufficiently known as *M. brevicaudata*; Indeterminate as *M. occidentalis*.

SYNONYMS: *breviceps*, *occidentalis*.

Microgale cowani Thomas, 1882. J. Linn. Soc., Zool., 16:319.

TYPE LOCALITY: "Ankafina forest, eastern Betsileo", hill 10 km S of Ambohimahaso, 3 km W of Tsarafidy town, Fianarantsoa, Fianarantsoa, E Madagascar.

DISTRIBUTION: N, E, and EC Madagascar.

STATUS: IUCN - Insufficiently known as *M. crassipes*, *M. drouhardi*, *M. longirostris*, *M. melanorrhachis*, and *M. taiva*.

SYNONYMS: *crassipes*, *drouhardi*, *longirostris*, *melanorrhachis*, *nigrescens*, *taiva*.

Microgale dobsoni Thomas, 1884. Ann. Mag. Nat. Hist., ser. 5, 14:337.

TYPE LOCALITY: "Nandesen forest, central Betsileo", uncertain location, perhaps a patch of forest E of Nandihizana village (1340 m), S of Ambositra, Fianarantsoa, Fianarantsoa, Madagascar.

DISTRIBUTION: Forests of E and EC Madagascar.

COMMENTS: Formerly included in *Nesogale*, see Thomas (1918a:302).

Microgale dryas Jenkins, 1992. Bull. Brit. Mus. (Nat. Hist.) Zool., 58:53.

TYPE LOCALITY: NE Madagascar, primary forest in Ambatovaky Special Reserve (16°51'S, 49°08'E), 600-750 m.

DISTRIBUTION: Known only from the type locality.

COMMENTS: This species occurs sympatrically with *M. cowani*, *M. principula*, and *M. talazaci* (Jenkins, 1992).

Microgale gracilis (Major, 1896). Ann. Mag. Nat. Hist., ser. 6, 18:318.

TYPE LOCALITY: "Ambohimombo forest", 43 km by road SE of Ambositra, Fianarantsoa, Fianarantsoa, Madagascar.

DISTRIBUTION: E forest of Madagascar.

STATUS: IUCN - Insufficiently known.

COMMENTS: Formerly included in *Leptogale*, see Thomas (1918a).

Microgale longicaudata Thomas, 1882. J. Linn. Soc., Zool., 16:319.

TYPE LOCALITY: "Ankafina forest, eastern Betsileo", hill 10 km S of Ambohimahaso, 3 km W of Tsarafidy town, Fianarantsoa, Fianarantsoa, E Madagascar.

DISTRIBUTION: E and N Madagascar.

STATUS: IUCN - Insufficiently known as *M. longicaudata* and *M. majori*; Indeterminate as *M. prolixicaudata*.

SYNONYMS: *majori*, *prolixicaudata*.

Microgale parvula G. Grandidier, 1934. Bull. Mus. Hist. Nat. Paris, 6:476.

TYPE LOCALITY: "Environs of Diego Suarez", Antsiranana, Antsiranana, Madagascar.

DISTRIBUTION: N Madagascar.

STATUS: IUCN - Insufficiently known.

COMMENTS: Known only from the holotype.

Microgale principula Thomas, 1926. Ann. Mag. Nat. Hist., ser. 9, 17:250.

TYPE LOCALITY: "Midongy du Sud, SE Madagascar", Midongy Atsimo, Fianarantsoa, Farafangana, Madagascar.

DISTRIBUTION: E and extreme E part of S Madagascar.

STATUS: IUCN - Insufficiently known as *M. principula* and *M. sorella*.

SYNONYMS: *decaryi*, *sorella*.

Microgale pulla Jenkins, 1988. Am. Mus. Novit., 2910:2.

TYPE LOCALITY: "Foret d'Andrivola, ca. 10 km southwest of Maintimbato Village, ca. 40 km southwest of Maroantsetra", NE Madagascar.

DISTRIBUTION: NE Madagascar.

STATUS: IUCN - Insufficiently known.

COMMENTS: Known only from the holotype; may represent an adult specimen of *M. parvula*, a species of which only the juvenile holotype is known.

Microgale pusilla Major, 1896. Ann. Mag. Nat. Hist., ser. 6, 18:461.

TYPE LOCALITY: "Neighbourhood of Vinanitelo", 50 km SE of Fianarantsoa town and 10 km SSE of Vohitrafeno town, W margin of E forest, Fianarantsoa, Fianarantsoa, Madagascar.

DISTRIBUTION: E, EC, S, and SW Madagascar.

Microgale talazaci Major, 1896. Ann. Mag. Nat. Hist., ser. 6, 18:318.

TYPE LOCALITY: "Neighbourhood of Vinanitelo", 50 km SE of Fianarantsoa town and 10 km SSE of Vohitrafeno town, W margin of E forest, Fianarantsoa, Fianarantsoa, Madagascar.

DISTRIBUTION: N, E, and EC Madagascar.

COMMENTS: Formerly included in *Nesogale*, see Thomas (1918a).

Microgale thomasi Major, 1896. Ann. Mag. Nat. Hist., ser. 6, 18:318.

TYPE LOCALITY: "Ampitambe forest (N.E. Betsileo)", Madagascar; uncertain locality, see MacPhee (1987a:5-6).

DISTRIBUTION: E Madagascar.

STATUS: IUCN - Insufficiently known.

Oryzorictes A. Grandidier, 1870. Rev. Mag. Zool. Paris, 22:49.

TYPE SPECIES: *Oryzorictes hova* A. Grandidier, 1870.

SYNONYMS: *Nesoryctes*.

COMMENTS: *Nesoryctes* is considered a subgenus of *Oryzorictes*, see Heim de Balsac (1972).

Oryzorictes hova A. Grandidier, 1870. Rev. Mag. Zool. Paris, 22:49.

TYPE LOCALITY: Madagascar, near rice fields of Ankay and Antsihanaka.

DISTRIBUTION: C Madagascar.

Oryzorictes talpoides G. Grandidier and Petit, 1930. Bull. Mus. Hist. Nat. Paris, ser. 2, 2(5):498.

TYPE LOCALITY: Madagascar, Majunga Prov., coastal plain of Marovoay.

DISTRIBUTION: NW Madagascar.

Oryzorictes tetradactylus Milne-Edwards and G. Grandidier, 1882. Le Naturaliste, 4:55.

TYPE LOCALITY: Madagascar, Ampitambe, Sirabe, Imerina.

DISTRIBUTION: C Madagascar.

SYNONYMS: *niger*.

COMMENTS: *O. niger* Major, 1896, is considered a melanistic form of *tetradactylus*, see Thomas (1918a:302). Formerly included in *Nesoryctes*, see Heim de Balsac (1972).

Subfamily Potamogalinae Allman, 1865. Proc. Zool. Soc. Lond., 1865:467.

Micropotamogale Heim de Balsac, 1954. C.R. Acad. Sci. Paris, 239:102.

TYPE SPECIES: *Micropotamogale lamottei* Heim de Balsac, 1954.

SYNONYMS: *Mesopotamogale* (see Corbet, 1974).

Micropotamogale lamottei Heim de Balsac, 1954. C.R. Acad. Sci. Paris, 239:103.

TYPE LOCALITY: Guinea, Mt. Nimba, Ziela.

DISTRIBUTION: Environs of Mt. Nimba in Guinea, Liberia, and Ivory Coast.

STATUS: IUCN - Endangered.

COMMENTS: For a survey of the distribution and ecology, see Vogel (1983).

Micropotamogale ruwenzorii (de Witte and Frechkop, 1955). Bull. Inst. Roy. Sci. Nat. Belg., 31(84):1.

TYPE LOCALITY: Zaire, W slopes of Mt. Ruwenzori.

DISTRIBUTION: Ruwenzori region (Uganda, Zaire), and W of Lake Edward and Lake Kivu (Zaire).

STATUS: IUCN - Indeterminate.

COMMENTS: Heim de Balsac (1956) proposed for this species a new genus, *Mesopotamogale*, which is currently regarded as a subgenus; see Corbet (1974).

Potamogale du Chaillu, 1860. Proc. Boston Soc. Nat. Hist., 7:363.

TYPE SPECIES: *Cynogale velox* du Chaillu, 1860.

SYNONYMS: *Bayonia*, *Mythomys*.

Potamogale velox (du Chaillu, 1860). Proc. Boston Soc. Nat. Hist., 7:363.

TYPE LOCALITY: Gabon, Ogowe River.

DISTRIBUTION: Tropical Africa; from Nigeria to Angola and east to the Rift valley.

SYNONYMS: *allmani*, *argens*.

Subfamily Tenrecinae Gray, 1821. London Med. Repos., 15:301.

Echinops Martin, 1838. Proc. Zool. Soc. Lond., 1838:17.

TYPE SPECIES: *Echinops telfairi* Martin, 1838.

SYNONYMS: *Echinogale*.

Echinops telfairi Martin, 1838. Proc. Zool. Soc. Lond., 1838:17.

TYPE LOCALITY: Madagascar.

DISTRIBUTION: S Madagascar.

SYNONYMS: *miwarti*, *nigrescens*, *pallens*.

Hemicentetes Mivart, 1871. Proc. Zool. Soc. Lond., 1871:72.

TYPE SPECIES: *Erinaceus madagascariensis* Shaw, 1800 (= *Ericulus semispinosus* G. Cuvier, 1798).

Hemicentetes semispinosus (G. Cuvier, 1798). Tabl. Elem. Hist. Nat. Anim., 1798:108.

TYPE LOCALITY: Madagascar.

DISTRIBUTION: Madagascar, in E forests.

SYNONYMS: *buffoni*; *madagascariensis* Shaw, 1800 (not Zimmermann), *nigriceps*, *variegatus*.

COMMENTS: Includes *nigriceps*, see Genest and Petter (1975). Eisenberg and Gould (1970:78) believed *nigriceps* is distinct from *semispinosus*.

Setifer Froriep, 1806. In Dumeril, Analit. Zool. mit Zusätzen, p. 15.

TYPE SPECIES: *Erinaceus setosus* Schreber, 1777.

SYNONYMS: *Dasogale*, *Ericulus*.

COMMENTS: Includes *Ericulus*, see Eisenberg and Gould (1970:49); and *Dasogale*, see Poduschka and Poduschka (1982:253).

Setifer setosus (Schreber, 1777). Die Säugethiere, 3:583, pl. 164.

TYPE LOCALITY: Madagascar.

DISTRIBUTION: Madagascar, C plateau.

SYNONYMS: *acanthurus*, *fontoynonti*, *nigrescens*, *spinosus*.

COMMENTS: *Dasogale fontoynonti* was based on a juvenile *Setifer setosus*, see Poduschka and Poduschka (1982:253) and MacPhee (1987b:133).

Tenrec Lacépède, 1799. Tabl. Mamm., p.7.

TYPE SPECIES: *Erinaceus ecaudatus* Schreber, 1777.

SYNONYMS: *Centetes* (see Cabrera, 1925:193).

Tenrec ecaudatus (Schreber, 1777). Die Säugethiere, 3:584.

TYPE LOCALITY: Madagascar.

DISTRIBUTION: Madagascar, Comoro Isls, introduced on Reunion, Mauritius, and the Seychelle Isls.

SYNONYMS: *armatus*, *tanrec*.

Family Chrysochloridae Gray, 1825. Ann. Philos., n.s., 10:335.

COMMENTS: For widely divergent treatments see Simonetta (1968), Meester (1974), and Petter (1981a). The generic treatment follows Meester et al. (1986:15-24).

Amblysomus Pomel, 1848. Arch. Sci. Phys. Nat. Geneve, 9:247.

TYPE SPECIES: *Chrysochloris hottentotus* A. Smith, 1829.

SYNONYMS: *Neamblysomus* (see Ellerman et al., 1953).

Amblysomus gunningi (Broom, 1908). Ann. Transvaal Mus., 1:14.

TYPE LOCALITY: South Africa, Transvaal, Woodbush.

DISTRIBUTION: Woodbush Forest and New Agatha Forest Reserve, E Transvaal, South Africa.

STATUS: IUCN - Indeterminate.

COMMENTS: Formerly in the monotypic genus *Neamblysomus* Roberts, 1924.

Amblysomus hottentotus (A. Smith, 1829). Zool. J., 4:436.

TYPE LOCALITY: "Interior parts of South Africa", Grahamstown, E Cape Province, South Africa.

DISTRIBUTION: Natal, Lesotho, Swaziland and Transvaal to S Cape Prov. (South Africa); also NE Orange Free State.

SYNONYMS: *albifrons*, *devilliersi*, *drakensbergensis*, *garneri*, *longiceps*, *marleyi*, *natalensis*, *orangiensis*, *pondoliae*.

COMMENTS: Includes *devilliersi* and *marleyi* as subspecies, see Meester et al. (1986:23).

Amblysomus iris Thomas and Schwann, 1905. Abstr. Proc. Zool. Soc. Lond., 1905(18):23.

TYPE LOCALITY: South Africa, Zululand, Umfolozi Station.

DISTRIBUTION: S Cape Prov. to Transkei, Natal, including Zululand, and SE Transvaal (South Africa).

STATUS: IUCN - Indeterminate.

SYNONYMS: *corriae*, *littoralis*, *septentrionalis*.

COMMENTS: Includes *corriae* and *septentrionalis* as subspecies, see Meester et al. (1986:23).

Amblysomus julianae Meester, 1972. Ann. Transvaal Mus., 28(4):35.

TYPE LOCALITY: South Africa, Transvaal, Pretoria, The Willows.

DISTRIBUTION: Pretoria, Nylstroom/Nylsvley, and Kruger Nat. Park (Transvaal, South Africa).

STATUS: IUCN - Indeterminate.

Calcochloris Mivart, 1867. J. Anat. Physiol., London, 2:133.

TYPE SPECIES: *Chrysochloris obtusirostris* Peters, 1851.

SYNONYMS: *Chrysotricha*.

COMMENTS: Includes *Chrysotricha*, see Meester et al. (1986:23). Ellerman et al. (1953) included *Calcochloris* in *Amblysomus*.

Calcochloris obtusirostris (Peters, 1851). Bericht. Verhandl. K. Preuss. Akad. Wiss. Berlin, 16:467.

TYPE LOCALITY: Coastal Mozambique, Inhambane, 24°S.

DISTRIBUTION: Zululand and E Transvaal (South Africa), S Zimbabwe, and S Mozambique.

STATUS: IUCN - Rare.

SYNONYMS: *chrysillus*, *limpopoensis*.

COMMENTS: Includes *chrysillus* and *limpopoensis* as subspecies, see Roberts (1951:114-115).

Chlorotalpa Roberts, 1924. Ann. Transvaal Mus., 10:64.

TYPE SPECIES: *Chrysochloris duthieae* Broom, 1907.

SYNONYMS: *Amblysomus*, *Carpitalpa*.

COMMENTS: Included in *Amblysomus* by Ellerman et al. (1953) and by Petter (1981a).

Lundholm (1955a:285) described *Carpitalpa* and *Kilimalpa* (here included in *Chrysochloris*) as subgenera; *Carpitalpa* was regarded by Simonetta (1968) as a valid genus. Both included in *Amblysomus* by Meester (1974).

Chlorotalpa arendsi Lundholm, 1955. Ann. Transvaal Mus., 22:285.

TYPE LOCALITY: E escarpment of Zimbabwe, Inyanga, Pungwe Falls.

DISTRIBUTION: E Zimbabwe and adjacent Mozambique.

COMMENTS: Formerly included in *Carpitalpa* by Simonetta (1968).

Chlorotalpa duthieae (Broom, 1907). Trans. S. Afr. Philos. Soc., 18:292.

TYPE LOCALITY: South Africa, S Cape Prov., Knysna.

DISTRIBUTION: S Cape Prov., South Africa.

STATUS: IUCN - Rare.

Chlorotalpa leucorhina (Huet, 1885). Nouv. Arch. Mus. Hist. Nat. Paris, Bull., 8:8.

TYPE LOCALITY: "Gulf of Guinea Coast, Congo."

DISTRIBUTION: N Angola, Zaire, Cameroon, Central African Republic.

SYNONYMS: *cahni*, *congicus*, *luluanus*.

COMMENTS: Includes *cahni* as a subspecies, see Meester (1974). Included in *Chrysochloris* by Allen (1939); included in *Amblysomus* by Simonetta (1968) and Petter (1981a).

Chlorotalpa sclateri (Broom, 1907). Ann. Mag. Nat. Hist., ser. 7, 19:263.

TYPE LOCALITY: South Africa, Cape Prov., Beaufort West.

DISTRIBUTION: Cape Prov., E Orange Free State, and S Transvaal (South Africa); Lesotho.

STATUS: IUCN - Indeterminate.

SYNONYMS: *guillarmodi*, *montana*, *shortridgei*.

COMMENTS: Meester et al. (1986:21) listed *guillarmodi*, *shortridgei*, and *montana* as subspecies. Included in *Amblysomus* by Petter (1981a).

Chlorotalpa tytonis (Simonetta, 1968). Monitore Zool. Ital., n.s., 2(suppl.):31.

TYPE LOCALITY: Somalia, Giohar (= Villaggio Duca degli Abruzzi).

DISTRIBUTION: Known only from the type locality.

STATUS: IUCN - Indeterminate.

COMMENTS: Assigned to *Amblysomus* by Simonetta (1968:31) and Petter (1981a); Meester (1974) placed this species in *Chlorotalpa*.

Chrysochloris Lacépède, 1799. Tabl. Mamm., p. 7.

TYPE SPECIES: *Chrysochloris capensis* Lacépède, 1799 (= *Talpa asiatica* Linnaeus, 1758).

SYNONYMS: *Kalimitalpa*.

Chrysochloris asiatica (Linnaeus, 1758). Syst. Nat., 10th ed., 1:53.

TYPE LOCALITY: "In Sibiria"; usually taken as Cape of Good Hope, South Africa. See Ellerman et al. (1953).

DISTRIBUTION: W Cape Prov. and Robben Isl. (South Africa); perhaps Damaraland, Namibia.

SYNONYMS: *auratus*, *aurea*, *capensis*, *bayoni*, *calviniae*, *concolor*, *damarensis*, *dixoni*, *elegans*, *inaurata*, *minor*, *namaquensis*, *rubra*, *shortridgei*, *taylori*, *tenuis*, *visserae* (see Meester et al., 1986).

Chrysochloris stuhlmanni Matschie, 1894. Sitzb. Ges. Naturf. Fr. Berlin, p. 123.

TYPE LOCALITY: Uganda, Ruwenzori region, "Ukondjo und Kinyawanga".

DISTRIBUTION: Cameroon, N Zaire, Uganda, Kenya, Tanzania.

SYNONYMS: *balsaci*, *fosteri*, *tropicalis*, *vermiculus*.

COMMENTS: See Meester (1974) who placed *stuhlmanni* in *Chrysochloris*. Lundholm (1955a) proposed the name *Chlorotalpa* (*Kilimitalpa*) for this species. Simonetta (1968:31) regarded it as a synonym of *Carpitalpa*. He placed *arendsi*, *stuhlmanni* and *fosteri* in *Carpitalpa* and *tropicalis* in *Chlorotalpa*. Lamotte and Petter (1981) described *balsaci* from Mt. Oku, Cameroon, a form which may deserve full specific status. Also the isolated *tropicalis* should be re-studied.

Chrysochloris visagiei Broom, 1950. Ann. Transvaal Mus., 21:238.

TYPE LOCALITY: South Africa, Cape Prov., Gouna (54 mi. [87 km] E Calvinia).

DISTRIBUTION: Known only from the type.

STATUS: IUCN - Indeterminate.

COMMENTS: Possibly an aberrant *asiatica*; see Meester (1974). Simonetta (1968:31) included it in *asiatica* as a subspecies.

Chrysospalax Gill, 1883. Standard Nat. Hist., 5 (Mamm.):137.

TYPE SPECIES: *Chrysochloris trevelyani* Günther, 1875.

SYNONYMS: *Bematiscus* (see Ellerman et al., 1953).

Chrysospalax trevelyani (Günther, 1875). Proc. Zool. Soc. Lond., 1875:311.

TYPE LOCALITY: South Africa, Cape Prov., Pirie Forest, near King William's Town.

DISTRIBUTION: Cape Prov. (South Africa).

STATUS: IUCN - Rare.

Chrysospalax villosus (A. Smith, 1833). S. Afr. Quart. J., 2:81.

TYPE LOCALITY: "Towards Natal", near Durban, South Africa; see Roberts (1951:121).

DISTRIBUTION: Transvaal and Natal (South Africa).

STATUS: IUCN - Vulnerable.

SYNONYMS: *dobsoni*, *leschae*, *pratensis*, *rufopallidus*, *rufus*, *transvaalensis*.

COMMENTS: Meester et al. (1986:16-17) listed *dobsoni*, *leschae*, *rufopallidus*, *rufus*, and *transvaalensis* as subspecies.

Cryptochloris Shortridge and Carter, 1938. Ann. S. Afr. Mus., 32:284.

TYPE SPECIES: *Cryptochloris zyli* Shortridge and Carter, 1938.

COMMENTS: Simonetta (1968:31) regarded *Cryptochloris* as a synonym of *Chrysochloris*.

Cryptochloris wintoni (Broom, 1907). Ann. Mag. Nat. Hist., ser. 7, 19:264.

TYPE LOCALITY: South Africa, Cape Prov., Little Namaqualand, Port Nolloth.

DISTRIBUTION: Little Namaqualand, Cape Prov., South Africa.

STATUS: IUCN - Indeterminate.

Cryptochloris zyli Shortridge and Carter, 1938. Ann. S. Afr. Mus., 32:284.

TYPE LOCALITY: South Africa, NW Cape Prov., Compagnies Drift, 16 km inland from Lamberts Bay.

DISTRIBUTION: Known only from the type locality.

STATUS: IUCN - Indeterminate.

COMMENTS: Considered a subspecies of *wintoni* by Ellerman et al. (1953); however, Meester et al. (1986:18) argued for specific status.

Eremitalpa Roberts, 1924. Ann. Transvaal Mus., 10:63.

TYPE SPECIES: *Chrysochloris granti* Broom, 1907.

Eremitalpa granti (Broom, 1907). Ann. Mag. Nat. Hist., ser. 7, 19:265.

TYPE LOCALITY: South Africa; Garies, south of Kamiesberg, Little Namaqualand, Cape Prov.

DISTRIBUTION: Coastal dunes from Cape Prov., South Africa, to Namib Desert, Namibia.

STATUS: IUCN - Rare.

SYNONYMS: *cana*, *namibensis*.

COMMENTS: Includes *namibensis* as a subspecies; see Meester et al. (1986:19).

Family Erinaceidae Fischer von Waldheim, 1817. Mem. Soc. Imp. Nat., Moscow, 5:372.

COMMENTS: Name often accredited to Bonaparte, 1838. Reviewed by Corbet (1988) and Frost et al. (1991).

Subfamily Erinaceinae Fischer von Waldheim, 1817. Mem. Soc. Imp. Nat., Moscow, 5:372.

COMMENTS: Reviewed by Robbins and Setzer (1985) and Corbet (1988).

Atelerix Pomel, 1848. Arch. Sci. Phys. Nat. Geneve, 9:251.

TYPE SPECIES: *Erinaceus albiventris* Wagner, 1841.

SYNONYMS: *Aethechinus*, *Peroechinus*.

COMMENTS: Formerly in *Erinaceus*, but see Robbins and Setzer (1985) and Corbet (1988:149).

Atelerix albiventris (Wagner, 1841). In Schreber, Die Säugethiere, Suppl. 2:22.

TYPE LOCALITY: Probably Senegal or Gambia; see Allen (1939:20).

DISTRIBUTION: Savanna and steppe zones from Senegal to Ethiopia and south to the Zambezi River.

SYNONYMS: *adansoni*, *atratus*, *diadematus*, *faradius*, *heterodactylus*, *hindei*, *kilimanus*, *langi*, *lowei*, *oweni*, *pruneri*, *sotikae*, *spiculus*, *spinifex* (see Corbet, 1988:149 and Ansell, 1974b).

Atelerix algirus Lereboullet, 1842. Mem. Soc. Hist. Nat. Strasbourg, 3(2), art. QQ:4.

TYPE LOCALITY: Algeria, "provient de Oran".

DISTRIBUTION: Coastal Western Sahara to Algeria, Tunisia, and N Libya; introduced into Canary Isls, Balearic Isls, Malta, and Mediterranean France and Spain; one historical record from Puerto Rico.

SYNONYMS: *caniculus*, *diadematus*, *fallax*, *girbaensis*, *krugi*, *lavaudeni*, *vagans*.

COMMENTS: Authorship is often credited to Duvernoy and Lereboullet, 1842, but Saint-Girons (1972) showed that Lereboullet was the only author. Includes *vagans* and *girbaensis* as subspecies, see Hutterer (1983c).

Atelerix frontalis A. Smith, 1831. S. Afr. Quart. J., 2:10,29.

TYPE LOCALITY: "Cape Colony"; restricted to northern parts of the Graaff Reinet district, Cape Prov., South Africa, by Ellerman et al. (1953).

DISTRIBUTION: Cape Province to E Botswana and W Zimbabwe; and Namibia to SW Angola.

STATUS: IUCN - Rare.

SYNONYMS: *angolae*, *angolensis*, *capensis*, *diadematus* Dobson, 1882, *fractilis*.

COMMENTS: Includes *angolae* as a subspecies, see Meester et al. (1986:15).

Atelerix sclateri Anderson, 1895. Proc. Zool. Soc. Lond., 1895:415.

TYPE LOCALITY: "Taf in Central Somaliland." [Somalia].

DISTRIBUTION: N Somalia.

COMMENTS: Closely related to *albiventris* and might be only a subspecies, see Corbet (1988:152).

Erinaceus Linnaeus, 1758. Syst. Nat., 10th ed., 1:52.

TYPE SPECIES: *Erinaceus europaeus* Linnaeus, 1758.

COMMENTS: Formerly included *Atelerix* and *Aethechinus*; see Corbet (1988) and comments under *Atelerix*. Does not include *Mesechinus*, see comments therein.

Erinaceus amurensis Schrenk, 1859. Reisen im Amur-Lande, 1, pl. 4, fig. 2:100.

TYPE LOCALITY: "In der Nähe der Stadt Aigun, im mandschurischen Dorfe Gulssoja am Amur", E Siberia.

DISTRIBUTION: Russia; Amur River and tributaries, from Zeya eastward, then south through E China to Hunan Prov.; Korea.

SYNONYMS: *chinensis*, *dealbatus*, *hanensis*, *koreanus*, *koreensis*, *kreyenbergi*, *orientalis*, *tschifuensis*, *ussuriensis*.

COMMENTS: Formerly included in *europaeus* (see Corbet, 1978c, and Gromov and Baranova, 1981); but considered distinct by Corbet (1984). Range and subspecific boundaries uncertain, partly due to confusion with *Hemiechinus*, see Corbet (1988:144).

Erinaceus concolor Martin, 1838. Proc. Zool. Soc. Lond., 1837:103 [1838].

TYPE LOCALITY: Near Trabzon, Turkey.

DISTRIBUTION: E Europe; S Russia and W Siberia to River Ob; Asia Minor to Israel and Iran; Greek and Adriatic islands including Crete, Corfu, and Rhodes.

SYNONYMS: *abasgicus*, *bolkayi*, *danubicus*, *drozdovskii*, *kievensis*, *nesiotes*, *pallidus*, *ponticus*, *rhodius*, *roumanicus*, *sacer*, *transcaasicus*.

COMMENTS: Formerly included in *europaeus*; but see Kratochvíl (1975), Král (1967), and Orlov (1969:6). Geographic variation is pronounced and some names (see above) possibly represent valid subspecies; see Giagia and Ondrias (1980) and Corbet (1988:142).

Erinaceus europaeus Linnaeus, 1758. Syst. Nat., 10th ed., 1:52.

TYPE LOCALITY: "Europa", Sweden.

DISTRIBUTION: W Europe; Spain to Italy and Istrian Peninsula; north to Poland, Scandinavia and NW European Russia. Islands of Ireland, Britain, Corsica, Sardinia, Sicily, and many smaller islands. European range mapped by Holz and Niethammer (1990:37). Introduced to New Zealand, see King (1990).

SYNONYMS: *caniceps*, *caninus*, *consolei*, *centralrossicus*, *dissimilis*, *echinus*, *erinaceus*, *hispanicus*, *italicus*, *meridionalis*, *occidentalis*, *pallidus*, *suillus*, *typicus*.

COMMENTS: Formerly included *amurensis* and *concolor*, see comments therein. Subspecific boundaries are uncertain, see Corbet (1988:137).

Hemiechinus Fitzinger, 1866. Sitzb. Akad. Wiss. Wien, 54, 1:565.

TYPE SPECIES: *Erinaceus platyotis* Sundevall, 1842 (= *Erinaceus auritus* Gmelin, 1770).

SYNONYMS: *Eriacus*, *Erinaceolus*, *Macroechinus*, *Paraechinus*.

COMMENTS: Regarded as a subgenus of *Erinaceus* by Gureev (1979:168) and Gromov and Baranova (1981:9). Corbet (1978c:15) considered *Hemiechinus* a distinct genus, later reviewed by Corbet (1988), who included *Mesechinus*, see comments therein. Pavlinov and Rossolimo (1987:12-13) included *Paraechinus* in *Hemiechinus* as a valid subgenus, as did Frost et al. (1991:27), while Corbet (1988) argued for a generic separation of *Paraechinus*. The taxonomy of this group is unsettled, and different opinions about generic and specific boundaries still exist.

Hemiechinus aethiopicus (Ehrenberg, 1832). Symb. Phys. Mamm., 2, sig. k, footnote.

TYPE LOCALITY: Sudan, "In desertis dongolanis habitat".

DISTRIBUTION: Sahara from Mauritania to Egypt and Awash, Ethiopia; Arabia deserts; insular populations on Djerba (Tunisia), Bahrain and Tanb (Persian Gulf).

SYNONYMS: *albatius*, *albior*, *blancalis*, *brachydactylus*, *deserti*, *dorsalis*, *ludlowi*, *oniscus*, *pallidus*, *pectoralis*, *senaariensis*, *wassifi*.

COMMENTS: Subgenus *Paraechinus*. Species and subspecies arrangement unclear; Corbet (1988:153-154) retained Arabian *dorsalis* (= *pectoralis*) as a subspecies, while Osborn and Helmy (1980) regarded *aethiopicus*, *deserti* and *dorsalis* as distinct species.

Hemiechinus auritus (Gmelin, 1770). Nova Comm. Acad. Sci. Petropoli, 14:519.

TYPE LOCALITY: S Russia, "in regione Astrachanensi", (= Astrakhan, 46°21'N, 48°03'E).

DISTRIBUTION: Steppe zone from E Ukraine to Mongolia in the north and from Libya to W Pakistan in the south.

SYNONYMS: *albulus*, *aegyptius*, *alaschanicus*, *brachyotis*, *calligoni*, *caspicus*, *chorassanicus*, *dorotheae*, *frontalis* Dobson, 1882, *holdereri*, *homalacanthus*, *insularis*, *libycus*, *major*, *megalotis*, *metwalli*, *microtus*, *minor*, *persicus*, *platyotis*, *russowi*, *syriacus*, *turanicus*, *turfanicus*, *turkestanicus* (see Corbet, 1988; Frost et al., 1991).

COMMENTS: Subgenus *Hemiechinus*. Corbet (1988:159) accepted *albulus*, *auritus*, and *megalotis* as valid subspecies; *megalotis* was formerly regarded as a distinct species but intergrades with *auritus* in Afghanistan; see Niethammer (1973). Osborn and Helmy (1980:57-64) recognized two subspecies within Egypt, *aegyptius* and *libycus*. The form of Cyprus (*dorotheae*) may be also distinct, according to Boye (1991:115).

Hemiechinus collaris (Gray, 1830). In Hardwicke, Illust. Indian Zool., 1, pl.8.

TYPE LOCALITY: "Doab", restricted by Wroughton (1910:81) to "between Jumna and Ganges Rivers", India; see discussion in Wroughton (1910:81).

DISTRIBUTION: Pakistan and NW India.

SYNONYMS: *grayi*, *indicus*, *spatangus*.

COMMENTS: Subgenus *Hemiechinus*. Formerly included in *auritus*, but Roberts (1977) indicated that there is discontinuity in distribution and morphology between *collaris* (which he called *auritus collaris*) and *auritus* (which he called *megalotis*).

Hemiechinus hypomelas (Brandt, 1836). Bull. Sci. Acad. Imp. Sci. St. Petersburg, 1:32.

TYPE LOCALITY: "Pays de Turcomans", somewhere in S Kazakhstan. See Ognev (1927) for discussion.

DISTRIBUTION: Arid steppe and desert zones from Iran and Turkmenistan east almost to Tashkent (Uzbekistan), to the Indus R. and N Pakistan; isolates in Oman, near Aden and on the islands of Tanb and Kharg in the Persian Gulf.

SYNONYMS: *amir*, *blanfordi*, *eversmanni*, *jerdoni*, *macracanthus*, *niger*, *sabaeus*, *seniculus*.

COMMENTS: Subgenus *Paraechinus*. Includes *eversmanni*, *sabaeus* and *seniculus* as possible and *blanfordi* as a distinct subspecies; see Corbet (1988:155).

Hemiechinus micropus (Blyth, 1846). J. Asiat. Soc. Bengal, 15:170.

TYPE LOCALITY: "Bhawulpore" = Bahawalpur, Punjab, Pakistan.

DISTRIBUTION: The arid zones of Pakistan and NW India.

SYNONYMS: *intermedius*, *kutchicus*, *mentalis*, *pictus*.

COMMENTS: Type species of subgenus *Paraechinus*. Biswas and Ghose (1970) regarded *intermedius* as a species but Corbet (1988:156-157) included it in *Paraechinus micropus* as a synonym.

Hemiechinus nudiventris (Horsfield, 1851). Cat. Mamm. Mus. E. India Co., p. 136.

TYPE LOCALITY: "Madras" = Madras city or Tamil Nadu province, India.

DISTRIBUTION: Few records from the S Indian provinces Madras (= Tamil Nadu) and Travancore (= Kerala).

COMMENTS: Subgenus *Paraechinus*. Biswas and Ghose (1970) gave *nudiventris* specific rank while Corbet (1988:156-157) regarded it as a distinct subspecies of *micropus*. Provisionally listed as a species, following Frost et al. (1991:29).

Mesechinus Ognev, 1951. Byull. Moskov. Ova. Ispyt. Prir. Otd. Biol., 56:8.

TYPE SPECIES: *Erinaceus dauuricus* Sundevall, 1842.

COMMENTS: Pavlinov and Rossolimo (1987:11) proposed to place *Mesechinus* as subgenus in *Erinaceus* while Corbet (1988:163) included it in *Hemiechinus*. Most recently, Frost et al. (1991:30) concluded that *Mesechinus* deserves full generic status.

Mesechinus dauuricus (Sundevall, 1842). K. Svenska Vetensk.-Akad. Handl. Stockholm, 1841:237 [1842].

TYPE LOCALITY: "Dauria" = Dauria, Transbaikalia, Russia (49°57'N, 116°55'E).

DISTRIBUTION: NE Mongolia east to upper Amur Basin in Russia and adjacent parts of Inner Mongolia and W Manchuria, China.

SYNONYMS: *manchuricus*, *przewalskii*, *sibiricus*.

COMMENTS: Includes *sibiricus*; see Corbet (1978c:15, a). A considerable confusion of names has occurred in the literature; see Corbet (1988:163). Possibly includes *miodon*, see comments under *M. hughi*.

Mesechinus hughi (Thomas, 1908). Abstr. Proc. Zool. Soc. Lond., 1908(63):44.

TYPE LOCALITY: "Paochi, Shen-si" = Baoji, Shaanxi Prov., China.

DISTRIBUTION: Known from around two localities in Shaanxi and Shanxi Prov., C China.

SYNONYMS: *miodon*, *sylvaticus*.

COMMENTS: Formerly included in *Erinaceus europaeus* by Ellerman and Morrison-Scott (1951:21), and in *Hemiechinus dauuricus* (here called *Mesechinus dauuricus*) by Corbet (1978c:15). Includes *H. sylvaticus* described by Ma (1964:35). The form *miodon*, known from an isolated population in the Ordos desert, Shaanxi, has been alternatively assigned to *M. dauuricus* or to *M. hughi*, see discussion in Frost et al. (1991) for tentative placement here.

Subfamily Hylomyinae Anderson, 1879. Anat. Zool. Res., Yunnan, 1:138.

SYNONYMS: Echinisoricinae, Galericinae, Gymnurinae.

COMMENTS: Better known as Echinisoricinae or Galericinae; but see Frost et al. (1991:23), whose taxonomic proposal is adopted here.

Echinorex Blainville, 1838. C.R. Acad. Sci. Paris, 6:742.

TYPE SPECIES: *Viverra gymnura* Raffles, 1822.

SYNONYMS: *Gymnura*.

COMMENTS: *Gymnura* Lesson, 1827, is preoccupied by *Gymnura* Kuhl, 1824 (a fish); see Ellerman and Morrison-Scott (1951:17) and Medway (1977:15).

Echinorex gymnura (Raffles, 1822). Trans. Linn. Soc. London, 13:272.

TYPE LOCALITY: Not given; "Sumatra" implied.

DISTRIBUTION: Malayan Peninsula, Borneo and Sumatra, Labuan island.

SYNONYMS: *albus*, *birmanica*, *borneotica*, *candida*, *minor*, *rafflesii*.

COMMENTS: Two subspecies, *gymnura* (Sumatra and Malay Peninsula) and *albus* (Borneo) are recognized; see Corbet (1988:128). The common spelling of the specific epithet as *gymnurus* is incorrect; see Frost et al. (1991:24).

Hylomys Müller, 1840. In Temminck, Verh. Nat. Gesch. Nederland Overz. Bezitt., Zool., Zoogd. Indisch. Archipel, p. 50[1840].

TYPE SPECIES: *Hylomys suillus* Müller, 1840.

SYNONYMS: *Neohylomys*, *Neotetracus* (according to Frost et al., 1991:23).

COMMENTS: For date of publication see Appendix I.

Hylomys hainanensis (Shaw and Wong, 1959). Acta Zool. Sinica, 11:422.

TYPE LOCALITY: China, "Pai-sa Hsian, Hainan Island" [= Baisha Xian, an administrative unit at 19°13'N, 109°26'E].

DISTRIBUTION: Island of Hainan, China.

Hylomys sinensis (Trouessart, 1909). Ann. Mag. Nat. Hist., ser. 8, 4:390.

TYPE LOCALITY: "Ta-tsien-lou, province of Se-tchouen (China Occidental) at an altitude of 2454 meters" [= Kangding, Sichuan Sheng, 30°07'N, 102°02'E].

DISTRIBUTION: S China in Sichuan and Yunnan, and adjacent parts of Burma and N Vietnam.

SYNONYMS: *cuttingi*, *fulvescens*.

COMMENTS: Two subspecies, *fulvescens* and *cuttingi*, have been described; see Corbet (1988:127).

Hylomys suillus Müller, 1840. In Temminck, Verh. Nat. Gesch. Nederland Overz. Bezitt., Zool., Zoogd. Indisch. Archipel., p. 50[1840].

TYPE LOCALITY: "Java en het andere van Sumatra" Indonesia.

DISTRIBUTION: Peninsular Malaysia to Indochina and the Yunnan/Burmese border; islands of Borneo, Java, Sumatra and Tioman.

SYNONYMS: *dorsalis*, *maxi*, *microtinus*, *parvus*, *pegunensis*, *siamensis*, *tionis*.

COMMENTS: Includes *dorsalis* and *tionis* as discrete subspecies; see Corbet (1988:122). For date of publication see Appendix I.

Podogymnura Mearns, 1905. Proc. U.S. Natl. Mus., 28:436.

TYPE SPECIES: *Podogymnura truei* Mearns, 1905.

COMMENTS: Reviewed by Heaney and Morgan (1982), Corbet (1988), and Frost et al. (1991).

Podogymnura aureospinula Heaney and Morgan, 1982. Proc. Biol. Soc. Washington, 95:14.

TYPE LOCALITY: "Plaridel, Albor Municipality, Dinagat Island, Surigao del Norte Province," Philippines.

DISTRIBUTION: Dinagat Island, Philippines.

COMMENTS: Heaney and Morgan (1982) suggested "golden-spined gymnure" as an English name, but Poduschka and Poduschka (1985) argued that the stiff dorsal hairs are not always spiny and golden, and Corbet and Hill (1991:27) suggested "spiny moonrat" as a common name. Heaney and Morgan (1982) considered that generic rank might be justified for this species but decided to include it in *Podogymnura* in order to emphasize the close relationship between the two species of Philippine gymnures; see also Corbet (1988:130-131).

Podogymnura truei Mearns, 1905. Proc. U.S. Natl. Mus., 28:437.

TYPE LOCALITY: Philippines, Mindanao, Mount Apo, Davao.

DISTRIBUTION: Mindanao Isl, Philippines.

STATUS: IUCN - Vulnerable.

SYNONYMS: *minima*.

COMMENTS: Includes *minima* Sanborn, 1953; see data of Heaney and Morgan (1982).

Family Soricidae Fischer von Waldheim, 1817. Mem. Soc. Imp. Nat. Moscow, 5:372.

SYNONYMS: Heterosoricidae.

COMMENTS: Revised by Repenning (1967) and Gureev (1971, 1979). For conflicting views of phylogeny, see Jammot (1983), George (1986), and Reumer (1987). Geological age currently believed to be Miocene, but recently the genera *Cretasorex* (Nesov and Gureev, 1981) from the Upper Cretaceous of Uzbekistan and *Ernosorex* (Wang and Li, 1990) from the Eocene of China have been assigned to this family; while the former clearly represents a shrew the latter does not and may be a member of Plesiosoricidae. Currently accepted limits of subfamilies and tribes are very tentative. Most authors do not follow Reumer (1987) and include the extinct Heterosoricinae as a subfamily (Engesser, 1975; Storch and Qiu, 1991), a view also accepted here. As a consequence, all living shrews as the sister group of Heterosoricidae should be classified in a single subfamily Soricinae, with Soricini and Crocidurini as tribes. However, as a convincing new phylogenetic system of fossil and living shrews has not yet been elaborated and as the application of two extant subfamilies proposed by Repenning (1967) is very much in use, it is provisionally applied here until new evidence has been presented.

Subfamily Crocidurinae Milne-Edwards, 1872. Rech. Hist. Nat. Mammifères, p. 256.SYNONYMS: *Crocidosoricinae*, *Myosoricinae*.COMMENTS: Perhaps not a monophyletic group. Reumer (1987) postulated a new subfamily, *Crocidosoricinae*, for a number of fossil genera previously included in *Crocidurinae*. By application of the characters given for the new clade, a number of recent genera such as *Congosorex*, *Myosorex* and *Surdisorex* would go with it. The entire group is in need of revision.*Congosorex* Heim de Balsac and Lamotte, 1956. *Mammalia*, 20:167.TYPE SPECIES: *Myosorex polli* Heim de Balsac and Lamotte, 1956.COMMENTS: Described as a subgenus of *Myosorex* by Heim de Balsac and Lamotte (1956), but differs in its tooth formula, long tail and large ears and was therefore treated as a full genus by Heim de Balsac (1967), a view followed here.*Congosorex polli* (Heim de Balsac and Lamotte, 1956). *Mammalia*, 20:155.

TYPE LOCALITY: Zaire, "Lubondai (Kasai)".

DISTRIBUTION: Known only from type locality in S Zaire.

STATUS: IUCN - Insufficiently known.

COMMENTS: Since the discovery in 1955 this distinct species has not been collected again.

Crocidura Wagler, 1832. *Isis*, p. 275.TYPE SPECIES: *Sorex leucodon* Herman, 1780.SYNONYMS: *Afrosorex*, *Heliosorex*, *Leucodon*, *Paurodus*, *Praesorex*, *Rhinomus* (see Allen, 1939; Heim de Balsac and Meester, 1977; and Hutterer, 1986a).COMMENTS: Eurasian species revised by Jenkins (1976). Phylogenetic relationships of African and Palearctic species studied by Maddalena (1990). Gureev (1979) listed *Praesorex* as a distinct genus.*Crocidura Aleksandrisi* Vesmanis, 1977. *Bonn. Zool. Beitr.*, 28:3.

TYPE LOCALITY: Libya, Cyrenaica, 5 km W. Tocr.

DISTRIBUTION: Restricted to Cyrenaica, Libya.

COMMENTS: Sometimes included in *C. suaveolens* but currently regarded as a valid species (Hutterer, 1991).*Crocidura allex* Osgood, 1910. *Field Mus. Nat. Hist. Publ.*, Zool. Ser., 10(3):20.

TYPE LOCALITY: Kenya, "Naivasha, British East Africa".

DISTRIBUTION: Highlands of SW Kenya; Mt. Kilimanjaro, Meru and Ngorogoro, N Tanzania.

SYNONYMS: *alpina*, *zinki* (see Heim de Balsac and Meester, 1977).COMMENTS: Gureev (1979) listed *alpina* as a distinct species without comment.*Crocidura andamanensis* Miller, 1902. *Proc. U.S. Natl. Mus.*, 24:777.

TYPE LOCALITY: India, Andaman Isls, South Andaman Isl.

DISTRIBUTION: Andaman Isls, Bay of Bengal.

COMMENTS: Erroneously attributed to genus *Suncus* by Krumbiegel (1978:71).*Crocidura ansellorum* Hutterer and Dippenaar, 1987. *Bonn. Zool. Beitr.*, 38:1, 269.

TYPE LOCALITY: Zambia, Mwinilunga Distr., Kasombu stream (= Isombu River), 4100 ft.

DISTRIBUTION: N Zambia.

STATUS: IUCN - Insufficiently known.

COMMENTS: Known from only two specimens.

Crocidura arabica Hutterer and Harrison, 1988. *Bonn. Zool. Beitr.*, 39:64.

TYPE LOCALITY: Oman, Dhofar, Khadrafi [16°42'N, 53°09'E].

DISTRIBUTION: Coastal plains of S Arabian Peninsula (Yemen, Oman).

COMMENTS: Previous to the recognition of *arabica*, specimens have been assigned to *russula* or *suaveolens*; see Harrison and Bates (1991).*Crocidura armenica* Gureev, 1963. *In Mammal Fauna of the U.S.S.R.*, 1:118.

TYPE LOCALITY: Armenia, 14 km down river from Garni.

DISTRIBUTION: Armenia, Caucasus.

COMMENTS: Revised by Gureev (1979), who considered *armenica* as distinct from *pergrisea*; but see Dolgov and Yudin (1975), who considered it a subspecies; Gromov and Baranova (1981) listed it as a distinct species.

Crocridura attenuata Milne-Edwards, 1872. Rech. Hist. Nat. Mamm., p. 263.

TYPE LOCALITY: China, Szechwan Prov., Moupin.

DISTRIBUTION: Assam, India; Nepal; Bhutan; Burma; Thailand; Vietnam; Hainan, China; Taiwan; Peninsular Malaysia; Sumatra; Java; Christmas Isl (Indian Ocean); Batan Isl, Philippines.

SYNONYMS: *aequicaudata*, *grisea*, *kingiana*, *rubricosa*, *tanakae*, *trichura*.

COMMENTS: Reviewed by Heaney and Timm (1983b) and Jenkins (1976). Jenkins (1982) included the long-tailed *aequicaudata*, which may not be justified.

Crocridura attila Dollman, 1915. Ann. Mag. Nat. Hist., ser. 8, 15:141.

TYPE LOCALITY: Cameroon, Bitye.

DISTRIBUTION: Cameroon Mtns to E Zaire.

COMMENTS: Formerly included in *buettikoferi*, but separated by Hutterer and Joger (1982).

Crocridura baileyi Osgood, 1936. Field Mus. Nat. Hist. Publ., Zool. Ser., 20:225.

TYPE LOCALITY: Ethiopia, Simien Mtns, Ras Dashan (= Mt. Geech).

DISTRIBUTION: Ethiopian highlands west of the Rift Valley.

STATUS: IUCN - Insufficiently known.

COMMENTS: Revised by Dippenaar (1980).

Crocridura batesi Dollman, 1915. Ann. Mag. Nat. Hist., ser. 8, 15:143.

TYPE LOCALITY: "Como River, Gabon."

DISTRIBUTION: Lowland forest in S Cameroon and Gabon.

COMMENTS: Often included in *poensis*; specimens from Cameroon and Gabon have been reported as *wimmeri*; but see Brosset (1988).

Crocridura beatus Miller, 1910. Proc. U.S. Natl. Mus., 38:392.

TYPE LOCALITY: Philippines, Mindanao, Summit of Mt. Bliss, 1,461 m.

DISTRIBUTION: Philippines: Mindanao, Leyte, Maripipi.

SYNONYMS: *parvacauda*.

COMMENTS: Includes *parvacauda*; see Heaney et al. (1987:36). Distribution reviewed by Heaney (1986).

Crocridura beccarii Dobson, 1886. Ann. Mus. Civ. Stor. Nat. Genova, ser. 2, 4:556.

TYPE LOCALITY: Indonesia, Sumatra, Mt. Singalang.

DISTRIBUTION: Sumatra.

COMMENTS: Species identity unresolved; see Jenkins (1982:277).

Crocridura bottegi Thomas, 1898. Ann. Mus. Civ. Stor. Nat. Genova, ser. 2, 18:677.

TYPE LOCALITY: Ethiopia, north-east of Lake Turkana, "between Badditu and Dime".

DISTRIBUTION: Scattered records from Guinea to Ethiopia and N Kenya.

SYNONYMS: *eburnea*.

COMMENTS: Includes *eburnea*; see Heim de Balsac and Meester (1977). Previously also included *obscurior* which is now treated as a distinct species.

Crocridura bottegoides Hutterer and Yalden, 1990. In Peters and Hutterer (eds.), Vertebrates in the Tropics, Bonn, p. 67.

TYPE LOCALITY: Ethiopia, Bale Mtns, Harenn Forest, Katcha Camp, 2400 m.

DISTRIBUTION: Bale Mtns and Mt. Albasso, Ethiopia.

Crocridura buettikoferi Jentink, 1888. Notes Leyden Mus., 10:47.

TYPE LOCALITY: Robertsport, Liberia.

DISTRIBUTION: West African high forest; Guinea-Bissau to Liberia; Nigeria.

COMMENTS: Formerly included *attila*; see Hutterer and Joger (1982).

Crocridura caliginea Hollister, 1916. Bull. Am. Mus. Nat. Hist., 35:664.

TYPE LOCALITY: Zaire, Medje.

DISTRIBUTION: Known only from two localities in NE Zaire.

COMMENTS: The species was recently rediscovered by Hutterer and Dudu (1990).

Crocridura canariensis Hutterer, Lopez-Jurado and Vogel, 1987. J. Nat. Hist., 21:1354.

TYPE LOCALITY: Spain, Canary Isls, Fuerteventura, Tiscamanita.

DISTRIBUTION: E Canary Islands.

STATUS: Protected by Spanish law.

COMMENTS: Related to *sicula*; see Maddalena and Vogel (1990).

- Crocidura cinderella* Thomas, 1911. Ann. Mag. Nat. Hist., ser. 8, 8:119.
TYPE LOCALITY: "Gemenjulla, French Gambia."
DISTRIBUTION: Senegal and Gambia, Mali and Niger.
COMMENTS: May be related to *tarfayensis* of Morocco and Mauritania; see Hutterer (1987).
- Crocidura congobelgica* Hollister, 1916. Bull. Am. Mus. Nat. Hist., 35:670.
TYPE LOCALITY: Zaire, "Lubila, near Bafwasende".
DISTRIBUTION: NE Zaire.
STATUS: IUCN - Insufficiently known.
COMMENTS: For a discussion of relationships, see Heim de Balsac (1968a).
- Crocidura cossyrensis* Contoli, 1989. Hystrix, N.S., 1:121, footnote.
TYPE LOCALITY: Italy, Pantelleria Isl.
DISTRIBUTION: Only Pantelleria Isl (Italy).
COMMENTS: The species was first reported as *russula*; see Contoli and Amori (1986); then validly named in a footnote (Contoli et al., 1989) and later redescribed by Contoli (1990). Closely related to *russula* and may be part of it (Sar  et al., 1990).
- Crocidura crenata* Brosset, Dubost, and Heim de Balsac, 1965. Mammalia, 29:268.
TYPE LOCALITY: Gabon, Belinga.
DISTRIBUTION: High forest in S Cameroon, N Gabon, and E Zaire.
STATUS: IUCN - Insufficiently known.
COMMENTS: The specific epithet obviously was chosen because the species has extremely long feet and tail; Brosset (1988) showed that they aid in jumping rather than climbing.
- Crocidura crossei* Thomas, 1895. Ann. Mag. Nat. Hist., ser. 6, 16:53.
TYPE LOCALITY: Nigeria, "Asaba, 150 mi. [241 km] up the Niger River".
DISTRIBUTION: Lowland forest from Sierra Leone to W Cameroon.
SYNONYMS: *ebriensis*, *ingoldbyi*, *jouvenetae*.
COMMENTS: Includes *ebriensis*, *ingoldbyi* and *jouvenetae*; see Heim de Balsac and Meester (1977). May be composite of two species, *crossei* and *jouvenetae*.
- Crocidura cyanea* (Duvernoy, 1838). Mem. Soc. Hist. Nat. Strasbourg, 2:2.
TYPE LOCALITY: "La riviere des Elephants, au sud de l'Afrique" = Citrusdal, South Africa *vide* Shortridge (1942:27).
DISTRIBUTION: South Africa, Namibia, Angola, Botswana, Mozambique; records further north uncertain.
SYNONYMS: *argentatus*, *electa*, *holobrunneus*, *infumatus*, *martensi*, *pondoensis*, *vryburgensis*.
COMMENTS: The species concept applied by Heim de Balsac and Meester (1977), and Meester et al. (1986) included a number of names which evidently do not belong to *cyanea* but to species such as *parvipes* and *smithii*; see Hutterer (1986a) and Hutterer and Joger (1982). The limits of distribution of *cyanea* have not yet been established; the taxon *erica* which has been included in *cyanea* may be related to *hirta*.
- Crocidura denti* Dollman, 1915. Ann. Mag. Nat. Hist., ser. 8, 16:377.
TYPE LOCALITY: Between Mawambi and Avakubi, Ituri Forest, Zaire.
DISTRIBUTION: NE Zaire, Gabon, Cameroon.
COMMENTS: Considered a distinct species by Heim de Balsac (1959:216).
- Crocidura desperata* Hutterer, Jenkins and Verheyen, 1991. Oryx, 25:165.
TYPE LOCALITY: S Tanzania, Rungwe Mtns, mountain bamboo zone above 2000 m.
DISTRIBUTION: Relict forest patches at Rungwe and Uzungwe Mtns, S Tanzania.
STATUS: Extremely localized; endangered by forest clearing.
- Crocidura dhofarensis* Hutterer and Harrison, 1988. Bonn. Zool. Beitr., 39:68.
TYPE LOCALITY: Oman, Dhofar, Khadrafi, 620 m.
DISTRIBUTION: Known only from the type locality.
COMMENTS: Originally described as a subspecies of *C. somalica*, but Hutterer et al. (1992) provided arguments for full specific status.
- Crocidura dolichura* Peters, 1876. Monatsb. K. Preuss. Akad. Wiss. Berlin, 1876:475.
TYPE LOCALITY: Cameroon, "Bonjongo".

DISTRIBUTION: High forest in Nigeria, S Cameroon, Bioko, Gabon, Central African Republic, Congo Republic, Zaire, and adjacent Uganda and Burundi.

COMMENTS: Does not include *latona*, *ludia*, *muricauda*, and *polia*; see under these species.

Crocidura douceti Heim de Balsac, 1958. Mem. Inst. Fr. Afr. Noire, 53:329.

TYPE LOCALITY: Ivory Coast, Adiopodoume.

DISTRIBUTION: Forest-savanna border of Guinea, Ivory Coast, and Nigeria.

COMMENTS: Reviewed by Hutterer and Happold (1983).

Crocidura dsinezumi (Temminck, 1843). In Siebold, Fauna Japonica, 2(Mamm.):26.

TYPE LOCALITY: Japan, Kyushu.

DISTRIBUTION: Japan; Quelpart Isl (Korea); possibly Taiwan.

SYNONYMS: *chisai*, *hosletti*, *intermedia*, *okinoshimae*, *quelpartis*, *umbrina*.

COMMENTS: The spelling of the name was clarified by Corbet (1978b); *dsinezumi* was placed on the Official List of Specific Names; see the International Commission on Zoological Nomenclature (1983). Includes *chisai* and *quelpartis*, but not *orii*; see Corbet (1978c). Formerly included in *russula*; see Jameson and Jones (1977). The subspecies *hosletti* described by these authors from Taiwan is tentatively included in *dsinezumi* rather than *russula* on the basis of published measurements and descriptions.

Crocidura eisentrauti Heim de Balsac, 1957. Zool. Jahrb. Abt. Syst. Oekol. Geogr. Tiere, 85:616.

TYPE LOCALITY: Cameroon, Mt. Cameroon, "Johann-Albrecht-Hütte, 2900 m".

DISTRIBUTION: Higher elevations of Mt. Cameroon (Cameroon).

STATUS: IUCN - Insufficiently known.

COMMENTS: Only known from Mount Cameroon. Not conspecific with *C. vulcani*; see under *C. hildegardae*.

Crocidura elgonius Osgood, 1910. Ann. Mag. Nat. Hist., ser. 8, 5:369.

TYPE LOCALITY: Kenya, Mt. Elgon, Kirui.

DISTRIBUTION: Mt. Elgon (W Kenya); NE Tanzania.

COMMENTS: Regarded as a distinct species by Heim de Balsac and Meester (1977) and Hutterer (1983b).

Crocidura elongata Miller and Hollister, 1921. Proc. Biol. Soc. Washington, 34:101.

TYPE LOCALITY: Indonesia, Sulawesi, Temboan (SW from Tondano Lake).

DISTRIBUTION: N and C Sulawesi.

COMMENTS: See Musser (1987) for ecological notes and a photograph.

Crocidura erica Dollman, 1915. Ann. Mag. Nat. Hist., ser. 8, 15:145.

TYPE LOCALITY: Angola, Pungo Andongo.

DISTRIBUTION: W Angola.

COMMENTS: Resembles *hirta* in cranial dimensions; see Heim de Balsac and Meester (1977). Related to *nigricans*, according to Crawford-Cabral (1987).

Crocidura fischeri Pagenstecher, 1885. Jb. Hamburger Wiss. Anst., 2:34.

TYPE LOCALITY: "Nguruman"; northwest of Lake Natron, close to Mt. Sambo, Kenya (near border to Tanzania); see discussion by Moreau et al. (1946) and Aggundey and Schlitter (1986).

DISTRIBUTION: Nguruman (Kenya), and Himo (Tanzania).

COMMENTS: Type species of subgenus *Afrosorex*. Revised by Hutterer (1986a).

Crocidura flavescens (I. Geoffroy, 1827). Dict. Class. Hist. Nat., 11:324.

TYPE LOCALITY: "La Cafrerie et le pays des Hottentots" = King William's Town, South Africa.

DISTRIBUTION: South Africa.

SYNONYMS: *capensis*, *cinnamomeus*, *knysnae*, *rutilus*.

COMMENTS: For correct original citation see Ellerman et al. (1953). Does not include *olivieri*; see Maddalena et al. (1987) and comments under that species. Reviewed by Meester (1963).

Crocidura floweri Dollman, 1915. Ann. Mag. Nat. Hist., ser. 8, 15:515.

TYPE LOCALITY: "Giza, Egypt."

DISTRIBUTION: Environs of Upper Nile valley and Wadi el Natrun, Egypt.

COMMENTS: Mummified shrews from Ancient Egypt have been identified as *C. floweri*; see Heim de Balsac and Mein (1971). Possibly related to *crossei* and *arabica*; see Hutterer and Harrison (1988).

Crocidura foxi Dollman, 1915. Ann. Mag. Nat. Hist., ser. 8, 15:514.

TYPE LOCALITY: Nigeria, Panyam.

DISTRIBUTION: Known only from Jos Plateau, Nigeria, but possibly has a wider distribution in the Sudan savanna zone of West Africa from Senegal to S Sudan.

SYNONYMS: *tephra*.

COMMENTS: A member of the *poensis* group, *foxi* may be conspecific with *theresae*, which it antedates; see Hutterer and Happold (1983). A series from Owerri, S Nigeria, referred to *foxi* by these authors, was later, upon re-examination, identified as a dark form of *lamottei*. The holotype of *tephra* Setzer, 1956 has been recently examined and is regarded as representing *foxi* in S Sudan; a previous allocation to *viaria* (Hutterer, 1984) was based upon examination of a paratype skin; however, the holotype represents a different species.

Crocidura fuliginosa (Blyth, 1855). J. Asiat. Soc. Bengal, ser. 2, 24:362.

TYPE LOCALITY: Burma, Schwegyin, near Pegu.

DISTRIBUTION: N India, Burma, adjacent China, Malaysian Peninsula and adjacent isls; perhaps also Borneo, Sumatra and Java; exact distribution unknown.

SYNONYMS: *baluensis*, *brevicauda*, *brunnea*, *doriae*, *dracula*, *foetida*, *grisescens*, *kelabit*, *lawuana*, *lepidura*, *macklotii*, *mansumensis*, *melanorhyncha*, *orientalis*, *praedax*, *pudjonica*, *tenuis*, *villosa*, *vosmaeri*.

COMMENTS: The taxonomy of this common S Asian shrew is in urgent need of revision. Ruedi et al. (1990) recently demonstrated unrecognized sympatry of two entirely cryptic but chromosomally distinct forms, one of which has been provisionally labeled *C. cf. malayana*. For taxa currently included in *fuliginosa* see above and Jenkins (1976, 1982). Medway (1977) and Heaney and Timm (1983b) also included *dracula*, which Lekagul and McNeely (1977) considered a distinct species. The list of synonyms is very provisional; see also under *malayana*.

Crocidura fulvastra (Sundevall, 1843). K. Svenska Vetensk-Akad. Handl. Stockholm, 1842:172 [1843].

TYPE LOCALITY: Sudan, "Bahr el Abiad".

DISTRIBUTION: Sudan savanna from Kenya to Mali.

SYNONYMS: *arethusia*, *beta*, *diana*, *macrodon*, *marrensis*, *sericea*, *strauchii* (see Hutterer, 1984; Hutterer and Kock, 1983; and Hutterer and Happold, 1983).

COMMENTS: Gureev (1979) listed *beta* as a distinct species without comment.

Crocidura fumosa Thomas, 1904. Ann. Mag. Nat. Hist., ser. 7, 14:238.

TYPE LOCALITY: Kenya, "Camp 18, western slope of Mt. Kenya, 2,600 m".

DISTRIBUTION: Mt. Kenya and Aberdare Range (Kenya).

SYNONYMS: *alchemillae*.

COMMENTS: Includes *alchemillae*; see Dippenaar and Meester (1989) who revised the species.

Crocidura fuscomurina (Heuglin, 1865). Leopoldina, 5, in Nouv. Acta Acad. Caes. Leop.-Carol., 32:36.

TYPE LOCALITY: Sudan, Bahr-el-Ghazal, Meshra-el-Req.

DISTRIBUTION: Sudan and Guinea savanna from Senegal to Ethiopia, and south to South Africa.

SYNONYMS: *bicolor*, *cunninghami*, *hendersoni*, *marita*, *sansibarica*, *tephragaster*, *woosnami*.

COMMENTS: Revised by Hutterer (1983b). *C. planiceps* may belong here but relationships are yet unsolved. See comments under *C. pasha*.

Crocidura glassi Heim de Balsac, 1966. Mammalia, 30:448.

TYPE LOCALITY: Ethiopia, "Camp in Gara Mulata Mts, Harar".

DISTRIBUTION: Ethiopian highlands east of Rift Valley.

STATUS: IUCN - Insufficiently known.

COMMENTS: Often confused with *fumosa* or *thalia*; see Dippenaar (1980).

- Crocidura goliath* Thomas, 1906. Ann. Mag. Nat. Hist., ser. 7, 17:177.
 TYPE LOCALITY: "Efulen, Cameroons."
 DISTRIBUTION: High forest of S Cameroon, Gabon, and Zaire.
 STATUS: Listed by IUCN as Extinct, but this is incorrect.
 COMMENTS: Type species of subgenus *Praesorex* Thomas, 1913. Often included in *flavescens* or *olivieri*, but apparently represents a distinct species which lives in sympatry with *C. olivieri* in the Central African forest; see Hutterer (in Colyn, 1986:22).
- Crocidura gracilipes* Peters, 1870. Monatsb. K. Preuss. Akad. Wiss. Berlin, 1870:584.
 TYPE LOCALITY: "Auf der Reise nach dem Kilimandscharo"; unidentifiable but usually taken as "Kilimanjaro, Tanzania"; see Moreau et al. (1946:395).
 DISTRIBUTION: Known only from the type specimen with unknown origin.
 COMMENTS: Does not include *hildegardae*; see Demeter and Hutterer (1986:201). A recent examination of the type specimen indicated a conspecificity with *C. cyanea*.
- Crocidura grandiceps* Hutterer, 1983. Rev. Suisse Zool., 90:699.
 TYPE LOCALITY: Ghana, Sefwi-Wiawso, Krokosua Hills, N of Asempanaya (Asampaniye).
 DISTRIBUTION: High forest regions of Guinea, Ivory Coast, Ghana, Nigeria, and possibly Cameroon.
- Crocidura grandis* Miller, 1911. Proc. U.S. Natl. Mus., 38:393.
 TYPE LOCALITY: Philippines, Mindanao, Grand Malindang Mt., 6100 ft.
 DISTRIBUTION: Known only from Mt. Malindang, Mindanao, Philippines.
 COMMENTS: Status unknown; probably confined to primary forest (Heaney et al., 1987:38).
- Crocidura grassei* Brosset, Dubost, and Heim de Balsac, 1965. Biologia Gabonica, 1:165.
 TYPE LOCALITY: Gabon, Belinga.
 DISTRIBUTION: Recorded from high forest regions at Belinga (Gabon), Boukoko (Central African Republic), and Yaounde (Cameroon; see Heim de Balsac, 1968c).
 STATUS: IUCN - Insufficiently known.
- Crocidura grayi* Dobson, 1890. Ann. Mag. Nat. Hist., ser. 6, 6:494.
 TYPE LOCALITY: Philippines, Luzon.
 DISTRIBUTION: Luzon and Mindoro, Philippines, in primary forest.
 SYNONYMS: *halconus*.
 COMMENTS: Heaney et al. (1987) included *halconus* as a synonym.
- Crocidura greenwoodi* Heim de Balsac, 1966. Monitore Zool. Ital., 74(suppl.):215.
 TYPE LOCALITY: Somalia, "Gelib".
 DISTRIBUTION: S Somalia.
 COMMENTS: Species confined to the Horn of Africa; apparently related to *fulvastra* and *hirta*.
- Crocidura gueldenstaedtii* (Pallas, 1811). Zoogr. Rosso-Asiat., 1:132.
 TYPE LOCALITY: Georgia, near Dushet (N of Tbilisi).
 DISTRIBUTION: Transcaucasia.
 SYNONYMS: *aralychensis*, *bogdanowii*, *fumigatus*, *longicaudata*.
 COMMENTS: This name has produced much confusion. Ellerman and Morrison-Scott (1966) listed it as a subspecies of *russula* and were followed by Corbet (1978c), among others. Richter (1970) applied *gueldenstaedtii* even to Mediterranean populations of *suaveolens* and was followed in that action by Kahmann and Vesmanis (1976). Hutterer (1981d) suggested that all these populations represent *suaveolens*; this was supported by karyological and biochemical data (Catzefflis et al., 1985). Despite convincing evidence some Russian authors (e.g., Grafodatsky et al., 1988) still claim the existence of *gueldenstaedtii* as a species in the Caucasus. This species is most certainly conspecific with *suaveolens*.
- Crocidura harennna* Hutterer and Yalden, 1990. In Peters and Hutterer (eds.), Vertebrates in the Tropics, Bonn, p. 64.
 TYPE LOCALITY: Ethiopia, Bale Mtns, Harennna Forest.
 DISTRIBUTION: Known only from the type locality.
 COMMENTS: Related to *C. phaeura*.
- Crocidura hildegardae* Thomas, 1904. Ann. Mag. Nat. Hist., ser. 7, 14:240.
 TYPE LOCALITY: "Fort Hall, Kenya Colony."

- DISTRIBUTION: Localized in West Africa (Nigeria, Cameroon), common in C and E Africa; forest.
- SYNONYMS: *altae*, *holobrunneus*, *ibeana*, *lutreola*, *maanjae*, *phaios*, *procera*, *rubecula*, *virgata* (see Heim de Balsac and Meester, 1977).
- COMMENTS: Does not include *gracilipes*; see Dieterlen and Heim de Balsac (1979) and Demeter and Hutterer (1986). Gureev (1979) listed *ibeana*, *lutreola*, and *maanjae* as distinct species without comment. Species group in need of revision.
- Crocidura hirta* Peters, 1852. Reise nach Mossambique, Säugethiere, p. 78.
- TYPE LOCALITY: Mozambique, Tette, 17° S.
- DISTRIBUTION: Angola, Zaire, Uganda, Kenya, Somalia, Tanzania, Malawi, Zimbabwe, Zambia, Mozambique, Botswana, Namibia, South Africa.
- SYNONYMS: *annellata*, *beirae*, *bloyeti*, *canescens*, *deserti*, *langi*, *luimbalensis*, *velutina* (see Heim de Balsac and Meester, 1977).
- COMMENTS: Gureev (1979) listed *beirae* and *deserti* as distinct species; the latter may well be separable. *C. bloyeti*, formerly listed as a species, is included here because it was based on a juvenile *hirta*. The Angolan *erica* may also belong here.
- Crocidura hispida* Thomas, 1913. Ann. Mag. Nat. Hist., ser. 8, 11:468.
- TYPE LOCALITY: India, Andaman Isls, Middle Andaman Isl (northern end).
- DISTRIBUTION: Middle Andaman Isl (Andaman Isls, India).
- Crocidura horsfieldii* (Tomes, 1856). Ann. Mag. Nat. Hist., ser. 2, 17:23.
- TYPE LOCALITY: "Ceylon."
- DISTRIBUTION: Sri Lanka; N Thailand to Vietnam; Nepal; Mysore and Ladak (India); Yunnan, Fukien, and Hainan Isl (China); Taiwan; Ryukyu Isls (Japan).
- SYNONYMS: *indochinensis*, *kurodai*, *myoides*, *retusa*, *tadae*, *watasei*, *wuchihensis*.
- COMMENTS: Subspecies or synonyms discussed by Jenkins (1976) and Jameson and Jones (1977). Usually spelled *horsfieldi* but Corbet and Hill (1991) correctly used *horsfieldii*.
- Crocidura jacksoni* Thomas, 1904. Ann. Mag. Nat. Hist., ser. 7, 14:238.
- TYPE LOCALITY: Kenya, "Ravine Station".
- DISTRIBUTION: E Zaire, Uganda, Kenya, N Tanzania.
- SYNONYMS: *amalae*.
- COMMENTS: Includes *amalae*; see Heim de Balsac and Meester (1977:17).
- Crocidura jenkinsi* Chakraborty, 1978. Bull. Zool. Surv. India, 1:303.
- TYPE LOCALITY: "Wright Myo, South Andaman Isl., India."
- DISTRIBUTION: Known only from the type locality.
- COMMENTS: Included in *nicobarica* by Corbet and Hill (1991), without comment.
- Crocidura kivuana* Heim de Balsac, 1968. Biologia Gabonica, 4:319.
- TYPE LOCALITY: Zaire, Kivu, Tschibati.
- DISTRIBUTION: Kahuzi-Biega National Park (Zaire).
- STATUS: IUCN - Insufficiently known.
- COMMENTS: Very localized species occurring in montane swamps; see Dieterlen and Heim de Balsac (1979).
- Crocidura lamottei* Heim de Balsac, 1968. Mammalia, 32:386.
- TYPE LOCALITY: Ivory Coast, "Lamto (savane)".
- DISTRIBUTION: Sudan and Guinea savanna from Senegal to W Cameroon.
- SYNONYMS: *elegans*.
- COMMENTS: Includes *elegans* as a subspecies; see Hutterer (1986a).
- Crocidura lanosa* Heim de Balsac, 1968. Biologia Gabonica, 4:309.
- TYPE LOCALITY: Zaire, Kivu, "Lemera".
- DISTRIBUTION: Uinka (Rwanda); Kivu, Lemera and Irangi (Zaire).
- STATUS: IUCN - Insufficiently known.
- COMMENTS: Present knowledge summarized by Dieterlen and Heim de Balsac (1979).
- Crocidura lasiura* Dobson, 1890. Ann. Mag. Nat. Hist., ser. 6, 5:31.
- TYPE LOCALITY: NE China, (Manchuria), Ussuri River.
- DISTRIBUTION: Ussuri Region (Russia) and NE China to Korea; Kiangsu (China).
- SYNONYMS: *campuslincolnsensis*, *lizenkani*, *sodyi*, *thomasi*, *yamashinai* (see Corbet, 1978c:29).

- Crocidura latona* Hollister, 1916. Bull. Am. Mus. Nat. Hist., 35:667.
TYPE LOCALITY: Zaire, Medje.
DISTRIBUTION: Lowland rainforest of NE Zaire.
STATUS: IUCN - Insufficiently known.
- Crocidura lea* Miller and Hollister, 1921. Proc. Biol. Soc. Washington, 34:102.
TYPE LOCALITY: Indonesia, Sulawesi, Temboan.
DISTRIBUTION: N and C Sulawesi, tropical rain forest (Musser, 1987).
- Crocidura leucodon* (Hermann, 1780). In Zimmermann, Geogr. Gesch. Mensch. Vierf. Thiere, 2:382.
TYPE LOCALITY: France, Bas Rhin, vicinity of Strasbourg.
DISTRIBUTION: France to the Volga and Caucasus; Elburz Mtns; Asia Minor; Israel; Lebanon; Lesbos Isl (Aegean Sea).
SYNONYMS: *albipes*, *caspica*, *judaica*, *lasia*, *leucodus*, *microurus*, *narentae*, *persica*.
COMMENTS: Reviewed by Richter (1970) and Gureev (1979). Includes *persica*; see Dolgov (1979). Gureev (1979) and Gromov and Baranova (1981) listed *persica* as a distinct species without comment. Includes *lasia*; see Catzefflis et al. (1985), Gureev (1979), and Jenkins (1976); but also Corbet (1978c). Includes *caspica* from Iran and *judaica* from Palestine. European range reviewed by Krapp (1990), Arabian range by Harrison and Bates (1991).
- Crocidura levicula* Miller and Hollister, 1921. Proc. Biol. Soc. Washington, 34:103.
TYPE LOCALITY: Indonesia, Sulawesi, Pinedapa.
DISTRIBUTION: Tropical rain forest of C and SE Sulawesi (Musser, 1987).
- Crocidura littoralis* Heller, 1910. Smithson. Misc. Coll., 56(15):5.
TYPE LOCALITY: Uganda, Butiaba, east shore of Lake Albert.
DISTRIBUTION: Rain forest of Zaire, Uganda and Kenya.
SYNONYMS: *oritis*.
COMMENTS: This species was included in *monax*, but is now regarded as distinct (Dieterlen and Heim de Balsac, 1979).
- Crocidura longipes* Hutterer and Happold, 1983. Bonn. Zool. Monogr., 18:53.
TYPE LOCALITY: Nigeria, "Dada, 11°34'N, 04°29'E".
DISTRIBUTION: Known from two swamps in Guinea savanna in W Nigeria.
STATUS: IUCN - Insufficiently known.
COMMENTS: May be related to *foxi*.
- Crocidura lucina* Dippenaar, 1980. Ann. Transvaal Mus., 32:134-138.
TYPE LOCALITY: Ethiopia, "Web River, near Dinshu".
DISTRIBUTION: Montane moorlands of E Ethiopia.
STATUS: IUCN - Insufficiently known.
COMMENTS: Species confined to the Afro-Alpine moorland (Hutterer and Yalden, 1990).
- Crocidura ludia* Hollister, 1916. Bull. Am. Mus. Nat. Hist., 35:668.
TYPE LOCALITY: Zaire, Medje.
DISTRIBUTION: Medje and Tandala (N Zaire).
STATUS: IUCN - Insufficiently known.
COMMENTS: Included in *dolichura* by Heim de Balsac and Meester (1977), but regarded as a full species by Hutterer and Dippenaar (1987).
- Crocidura luna* Dollman, 1910. Ann. Mag. Nat. Hist., ser. 8, 5:175.
TYPE LOCALITY: Zaire, "Bunkeya River, Shaba Province".
DISTRIBUTION: Mozambique, Zambia, Zimbabwe, E Angola, Zaire, Malawi, Tanzania, Kenya, Uganda, Rwanda.
SYNONYMS: *electa*, *garambae*, *inyangai*, *johnstoni*, *schistacea*, *umbrosa*.
COMMENTS: Revised by Dippenaar and Meester (1989). Does not include *macmillani*, *raineyi*, and *selina*. In a biochemical comparison, specimens from Rwanda grouped outside all other African *Crocidura* studied (Maddalena, 1990).
- Crocidura lusitania* Dollman, 1915. Ann. Mag. Nat. Hist., ser. 8, 15:516.
TYPE LOCALITY: Mauritania, "Trarza country".

DISTRIBUTION: Sahelian zone from S Morocco to Senegal, Nigeria, Sudan and Ethiopia; a Saharan record from Mali.

COMMENTS: For a summary of distributional records, see Hutterer (1986a) and Sidiyene (1989).

Crocidura macarthurii St. Leger, 1934. Ann. Mag. Nat. Hist., ser. 10, 13:559.

TYPE LOCALITY: Kenya, Tana River, Merifano (32 km from mouth of Tana River).

DISTRIBUTION: Savanna plains of Kenya and Somalia.

COMMENTS: The species has been recorded from Somalia as *smithii* (e.g., Heim de Balsac, 1966a); see Hutterer (1986a).

Crocidura macmillani Dollman, 1915. Ann. Mag. Nat. Hist., ser. 8, 16:361.

TYPE LOCALITY: Ethiopia, "Kotelee, Walamo".

DISTRIBUTION: Known only from the type locality.

COMMENTS: Formerly included in *fumosa* (Yalden et al., 1976) or *luna* (Heim de Balsac and Meester, 1977; Hutterer, 1981b), but Dippenaar (1980) has shown that in Ethiopia two endemic species, *macmillani* and *thalia*, were covered under these names.

Crocidura macowi Dollman, 1915. Ann. Mag. Nat. Hist., ser. 8, 16:378.

TYPE LOCALITY: Kenya, "Mt. Nyiro, S. of Lake Rudolf [Lake Turkana]".

DISTRIBUTION: Known only from the type locality.

COMMENTS: Regarded as a synonym of *hildegardae* by Osgood (1936), but retained as a species by Heim de Balsac and Meester (1977), who noticed similarities to *niobe*.

Crocidura malayana Robinson and Kloss, 1911. J. Fed. Malay St. Mus., 4:241-247.

TYPE LOCALITY: Malaysia, Perak, Maxwell's Hill.

DISTRIBUTION: Peninsular Malaysia and offshore islands; exact distribution unknown.

SYNONYMS: *aagaardi*, *aoris*, *gravida*, *klossi*, *negligens*, *maporensis*, *tionis*, *weberi*.

COMMENTS: This species was included in *fuliginosa* by Jenkins (1976, 1982), but Ruedi et al. (1990) reported two different karyotypes from sympatric populations in Peninsular Malaysia. They provisionally used *malayana* for the sibling species. Jenkins (1976, 1982), who revised this group, listed the synonyms given here under subspecies *fuliginosa malayana*. The proper allocation of all described names has still to be elaborated; other synonyms are listed under *fuliginosa*.

Crocidura manengubae Hutterer, 1982. Bonn. Zool. Beitr., 32:242.

TYPE LOCALITY: Cameroon, "Lager III, 1800m, Manenguba-See, Bamenda-Hochland".

DISTRIBUTION: Bamenda, Adamaoua, and Yaounde highlands, Cameroon.

STATUS: IUCN - Insufficiently known.

Crocidura maquassiensis Roberts, 1946. Ann. Transvaal Mus., 20:312.

TYPE LOCALITY: South Africa, W Transvaal, Maquassi, Klipkuil.

DISTRIBUTION: Transvaal (South Africa); Nyamaziwa Falls, and Matopo Hills (Zimbabwe).

STATUS: IUCN - Insufficiently known.

SYNONYMS: *malani*.

COMMENTS: Includes *malani*; and may be related to *pitmani*; see Meester (1963) and Meester et al. (1986).

Crocidura mariquensis (A. Smith, 1844). Illustr. Zool. S. Afr. Mamm., pl. 44, fig. 1.

TYPE LOCALITY: South Africa, "A wooded ravine near the tropic of Capricorn" = Marico River, near its junction with Limpopo.

DISTRIBUTION: Swamps and forest from South Africa to Mozambique, W Zimbabwe, and Zambia; NW Botswana and NE Namibia to SC Angola; perhaps SE Zaire.

SYNONYMS: *neavei*, *pilosa*, *shortridgei*, *sylvia*.

COMMENTS: Includes *pilosa* and *sylvia* as synonyms and *shortridgei* and *neavei* as subspecies; see Dippenaar (1977, 1979), who reviewed the species and selected a lectotype. May also include *nigricans*, which Crawford-Cabral (1987) considered distinct.

Crocidura maurisca Thomas, 1904. Ann. Mag. Nat. Hist., ser. 7, 14:239.

TYPE LOCALITY: Uganda, Entebbe.

DISTRIBUTION: Entebbe, Echuya Swamp (Uganda); Kaimosi (Kenya); in swamps and primary forest.

- Crocidura maxi* Sody, 1936. *Natuurk. Tijdschr. Ned.-Ind.*, 96:53.
TYPE LOCALITY: Indonesia, Java, East Java.
DISTRIBUTION: Java, Lesser Sunda Isls, and Amboina (Moluccas, Indonesia).
COMMENTS: Occurs sympatrically with *monticola* in Java; see Jenkins (1982).
- Crocidura mindorus* Miller, 1910. *Proc. U.S. Natl. Mus.*, 38:392.
TYPE LOCALITY: Philippines, Mindoro, Mt. Halcon, 1,938 m.
DISTRIBUTION: Known only from Mt. Halcon, Mindoro, Philippines.
- Crocidura minuta* Otten, 1917. *Med. Burgerl. Geneesk. Dienst. Ned. Ind.*, 6:103.
TYPE LOCALITY: Indonesia, Java, East Java.
DISTRIBUTION: Java.
STATUS: Uncertain.
COMMENTS: May be conspecific with *monticola*, or an earlier name for *maxi*; see Jenkins (1982). However, *minuta* Otten, 1917, is preoccupied by *minuta* Lyddaker, 1902, and thus not available. This problem needs to be resolved.
- Crocidura miya* Phillips, 1929. *Spolia Zeylan.*, 15:113.
TYPE LOCALITY: Sri Lanka, Kandyan Hills, Nilambe Dist., Moolgama, 3,000 ft. [914 m].
DISTRIBUTION: Highlands of C Sri Lanka.
COMMENTS: A very distinctive species, resembling *C. elongata* of Sulawesi, or *C. dolichura* of Africa. Known by a handful of specimens; see Phillips (1980) for further information.
- Crocidura monax* Thomas, 1910. *Ann. Mag. Nat. Hist.*, ser. 8, 6:310.
TYPE LOCALITY: Tanzania, Mt. Kilimanjaro, Rombo, 6,000 ft. (1,828 m).
DISTRIBUTION: Montane forests in W Kenya and N Tanzania.
STATUS: IUCN - Insufficiently known.
COMMENTS: Part of the the *littoralis* group; see Dieterlen and Heim de Balsac (1979). Does not include *oritis* (part of *littoralis*) and *ultima* (treated as full species here) as suggested by Heim de Balsac and Meester (1977).
- Crocidura monticola* Peters, 1870. *Monatsb. K. Preuss. Akad. Wiss. Berlin*, 1870:584.
TYPE LOCALITY: Indonesia, Java, Mount Lawu, near Surakarta.
DISTRIBUTION: Borneo, Java, Peninsular Malaysia.
SYNONYMS: *bartelsii*.
COMMENTS: Revised by Jenkins (1982).
- Crocidura montis* Thomas, 1906. *Ann. Mag. Nat. Hist.* ser. 7, 18:138.
TYPE LOCALITY: Uganda, "Ruwenzori East, 12 500'" = Bujongolo, Mubuku Valley, eastern slope of Mt. Ruwenzori.
DISTRIBUTION: Montane forest in C and E Africa; Mt. Ruwenzori (Uganda); Mt. Meru (Tanzania), Imatong Mtns (Sudan); presumably also in Kenya.
COMMENTS: Formerly a subspecies of *fumosa* but see Demeter and Hutterer (1986) and Dippenaar and Meester (1989), who revised the species.
- Crocidura muricauda* (Miller, 1900). *Proc. Washington Acad. Sci.*, 2:645.
TYPE LOCALITY: "Mount Coffee, Liberia".
DISTRIBUTION: West African high forest from Guinea to Ghana.
COMMENTS: Usually included in *dolichura* as a subspecies but constantly differs in its hairy tail while *dolichura* never shows any pilosity of the tail.
- Crocidura mutesae* Heller, 1910. *Smithson. Misc. Coll.*, 56(15):3.
TYPE LOCALITY: Uganda, Kampala.
DISTRIBUTION: Uganda; perhaps more widely distributed.
STATUS: Taxonomic status unsolved.
COMMENTS: A large species, alternatively assigned to *hirta* (Allen, 1939) or *suahelae* (Heim de Balsac and Meester, 1977).
- Crocidura nana* Dobson, 1890. *Ann. Mag. Nat. Hist.*, ser. 6, 5:225.
TYPE LOCALITY: Somalia, Dollo.
DISTRIBUTION: Somalia, Ethiopia.
COMMENTS: The name *nana* has been applied to various small shrews of Somalia, Ethiopia, and Egypt, leading to the proposal (Setzer, 1957) that *nana* is conspecific with *religiosa* (which it does not antedate); a conclusion followed by Heim de Balsac and

Mein (1971) and Osborn and Helmy (1980). Personal examination of the holotype of *nana* revealed that it represents a juvenile (skull inside the skin) of a species larger than *religiosa*; this conclusion was supported by better preserved topotypical specimens from Somalia in the British Museum (Natural History), which were also compared with the neotype of *religiosa* (Corbet, 1978c:27). The proposed conspecificity is therefore not accepted, and *religiosa* remains an endemic of the Nile valley in Egypt. The relation of *nana* with other small species has yet to be studied.

Crocidura nanilla Thomas, 1909. Ann. Mag. Nat. Hist., ser. 8, 4:99.

TYPE LOCALITY: Uganda, "probably Entebbe".

DISTRIBUTION: Dry and moist savanna from West Africa (Mauritania) to Kenya and Uganda; perhaps further south.

SYNONYMS: *rudolfi*.

COMMENTS: Includes *rudolfi*; see Heim de Balsac and Meester (1977). Often confused with other small species such as *fuscomurina* and *pasha*. For a discussion of "small *Crocidura*", see Heim de Balsac (1968d).

Crocidura neglecta Jentink, 1888. Notes Leyden Mus., 10:165.

TYPE LOCALITY: Indonesia, Sumatra.

DISTRIBUTION: Sumatra.

COMMENTS: May be conspecific with, and in that case a prior name for *maxi*; see Jenkins (1982).

Crocidura negrina Rabor, 1952. Chicago Acad. Sci. Nat. Hist. Misc., 96:6.

TYPE LOCALITY: Philippines, Negros Isl, Cuernos de Negros Mtn, Dayongan, 1,300 m.

DISTRIBUTION: Primary forest at 500 to 1450m on S Negros Isl (Philippines).

STATUS: Threatened by habitat destruction, according to Heaney et al. (1987).

Crocidura nicobarica Miller, 1902. Proc. U.S. Natl. Mus., 24:776.

TYPE LOCALITY: India, Nicobar Isls, Great Nicobar Isl.

DISTRIBUTION: Great Nicobar Isl. (Nicobar Isls, India).

COMMENTS: Not a species of *Suncus*, as suggested by Krumbiegel (1978:71). Corbet and Hill (1991) included *jenkinsi* which is retained as distinct until more evidence is presented.

Crocidura nigeriae Dollman, 1915. Ann. Mag. Nat. Hist., ser. 8, 15:524.

TYPE LOCALITY: Nigeria, "Asaba, 150 miles up the Niger".

DISTRIBUTION: Rainforest in Nigeria, Cameroon, and Bioko; exact distribution unknown.

COMMENTS: Formerly included in *poensis*; but see Heim de Balsac (1957), Meylan and Vogel (1982), and Hutterer and Happold (1983).

Crocidura nigricans Bocage, 1889. J. Sci. Math. Phys. Nat. Lisboa, ser. 2, 1:28.

TYPE LOCALITY: Angola, Benguela Dist., Quindumbo.

DISTRIBUTION: Angola.

COMMENTS: Regarded unidentifiable by Heim de Balsac and Meester (1977), but specific status upheld by Crawford-Cabral (1987).

Crocidura nigripes Miller and Hollister, 1921. Proc. Biol. Soc. Washington, 34:101.

TYPE LOCALITY: Indonesia, Sulawesi, Temboan, SW from Tondano Lake.

DISTRIBUTION: N and C Sulawesi, in tropical rain forest (Musser, 1987).

SYNONYMS: *lipara*.

Crocidura nigrofusca Matschie, 1895. Säugethiere Deutsch-Ost-Afrikas, p. 33.

TYPE LOCALITY: Zaire, Semliki Valley, "Wukalala, Kinyawanga im Westen des Semliki".

DISTRIBUTION: S Ethiopia and Sudan through E Africa to Zambia and Angola, Zaire, perhaps Cameroon.

SYNONYMS: *ansorgei*, *cabrerai*, *kempi*, *lakiundae*, *luluae*, *nilotica*, *nyikae*, *provocax*, *soricoides* (?), *zaodon*, *zena* (see Heim de Balsac and Meester, 1977).

COMMENTS: Includes *luluae* Matschie, 1926 (Luluabourg, Zaire) and *zaodon* Osgood, 1910 (Nairobi, Kenya) which were listed as separate species by Heim de Balsac and Meester (1977) and Dippenaar and Meester (1989); see Hutterer et al. (1987b). The holotypes of *nigrofusca*, *luluae* and *zaodon* have been studied. Gureev (1979) listed *ansorgei*, *nilotica*, and *zena* as distinct species without comment.

- Crocidura nimbae* Heim de Balsac, 1956. Mammalia, 20:131.
TYPE LOCALITY: Guinea, Mt. Nimba, "baraque de Zouguépo".
DISTRIBUTION: Mt. Nimba (Guinea, Liberia); Sierra Leone (specimen in the National Museum of Natural History).
STATUS: IUCN - Insufficiently known.
COMMENTS: A very distinct species; not conspecific with *wimmeri* as previously suggested (see Hutterer, 1983a).
- Crocidura niobe* Thomas, 1906. Ann. Mag. Nat. Hist., ser. 7, 18:138.
TYPE LOCALITY: Uganda, "Ruwenzori East, 6000 ft." [= Mubuke Valley, 1828 m].
DISTRIBUTION: Montane forests of EC Africa (Uganda, Zaire); perhaps Ethiopia.
COMMENTS: Ethiopian records (Corbet and Yalden, 1972; Yalden et al., 1976) uncertain; see Hutterer and Yalden (1990).
- Crocidura obscurior* Heim de Balsac, 1958. Mém. Inst. fr. Afr. noire, 53:328.
TYPE LOCALITY: Guinea, Mt. Nimba, montane prairie.
DISTRIBUTION: Sierra Leone to Ivory Coast; possibly Nigeria.
COMMENTS: Described with some doubt as a subspecies of *bottegi*, but its almost sympatric distribution, a longer skull (Hutterer and Happold, 1983), and a different karyotype (Maddalena, pers. comm.) clearly distinguish it.
- Crocidura olivieri* (Lesson, 1827). Manuel de Mammalogie, p. 121.
TYPE LOCALITY: Egypt, Sakkara; the neotype designated by Corbet (1978c:30) was collected "near Giza".
DISTRIBUTION: Egypt; Senegal to Ethiopia, and southwards to N South Africa.
SYNONYMS: *anchietae*, *atlantis*, *bueae*, *cara*, *daphnia*, *darfurea*, *deltae*, *ferruginea*, *fuscosa*, *giffardi*, *guineensis*, *doriana*, *hansruppi*, *hedenborgiana*, *hera*, *herero*, *kijabae*, *kivu*, *luluana*, *manni*, *martiensseni*, *nyansae*, *occidentalis*, *odorata*, *spurelli*, *sururae*, *tatiana*, *toritensis*, *zuleika*.
COMMENTS: *Crocidura olivieri* is the valid name for the large African shrews previously known as *flavescens* (which is now the valid name for a species restricted to South Africa); see Maddalena et al. (1987). This group of giant shrews was reviewed by Heim de Balsac and Barloy (1966). Well known subspecies names are *anchietae*, *doriana*, *ferruginea*, *fuscosa*, *giffardi*, *guineensis*, *hansruppi*, *hedenborgiana*, *kivu*, *manni*, *martiensseni*, *nyansae*, *occidentalis*, *odorata*, *spurelli*, and *sururae*. Some of these were considered allospecies of a *flavescens* superspecies by Hutterer and Happold (1983). Many authors also distinguished pale (*occidentalis*, *manni*, *spurelli*) and black (*giffardi*, *hedenborgiana*, *martiensseni*, *odorata*) color morphs as different species but biochemical evidence showed that they are merely color morphs of a single and highly variable species (Maddalena, 1990). *Crocidura olivieri* may also include *zaphiri*; see Yalden et al. (1976).
- Crocidura orii* Kuroda, 1924. [New Mammals from the Ryukyu Islands], p. 3.
TYPE LOCALITY: Japan, Ryukyu Islands, Amami-Oshima, Komi.
DISTRIBUTION: Ryukyu Isls, Japan.
COMMENTS: Provisionally included in *dsinezumi* (Corbet, 1978c); but regarded as a separate species by Imaizumi (1961, 1970b), Abe (1967), and Jenkins (1976). The species was first described by Kuroda (1924) in a publication which, although privately published, has been regarded as available by all subsequent authors.
- Crocidura osorio* Molina and Hutterer, 1989. Bonn. Zool. Beitr., 40:86.
TYPE LOCALITY: Spain, Canary Isls, Gran Canaria, Finca de Osorio.
DISTRIBUTION: N cloud zone of Gran Canaria Isl, Canary Islands, Spain.
STATUS: Protected by Spanish law.
- Crocidura palawanensis* Taylor, 1934. Monogr. Bur. Sci. Manila, 30:88.
TYPE LOCALITY: Philippines, Palawan, Sir J. Brooke Point.
DISTRIBUTION: Palawan Isl, Philippines.
COMMENTS: May belong to *fuliginosa* (Heaney et al., 1987).
- Crocidura paradoxura* Dobson, 1886. Ann. Mus. Civ. Stor. Nat. Genova, 4:566.
TYPE LOCALITY: Indonesia, Sumatra, Mt. Singalang, 2,000 m.
DISTRIBUTION: Sumatra.

STATUS: Unknown.

COMMENTS: A large species with a long tail, possibly related to *fuliginosa*; specific identity unresolved (Jenkins, 1982:277).

Crocidura parvipes Osgood, 1910. Field Mus. Nat. Hist. Publ., Zool. Ser., 10:19.

TYPE LOCALITY: Kenya, "Voi, British East Africa".

DISTRIBUTION: Africa; Guinea and Sudan savanna from Cameroon to S Sudan, Ethiopia (Hutterer and Yalden, 1990), Kenya, Tanzania, S Zaire, Zambia to Angola.

SYNONYMS: *boydi*, *chitauensis*, *cuanzensis*, *katharina*, *lutrella*, *nisa*.

COMMENTS: Revised and included in subgenus *Afrosorex* by Hutterer (1986a).

Crocidura pasha Dollman, 1915. Ann. Mag. Nat. Hist., ser. 8, 15:517.

TYPE LOCALITY: "Atbara River, Sudan."

DISTRIBUTION: Sudan and Sahelian savanna of Sudan; a single record from Ethiopia (Demeter, 1982).

COMMENTS: Often confused with *nanilla* and *lusitania*; does not include *glebula* which is a synonym of *fuscomurina* or *planiceps*; see Hutterer and Kock (1983) and Hutterer and Happold (1983).

Crocidura pergrisea Miller, 1913. Proc. Biol. Soc. Washington, 26:113.

TYPE LOCALITY: Kashmir, Baltistan, Shigar, Skoro Loomba, 9,500 ft. (2900 m).

DISTRIBUTION: Mountains of W Himalaya (Kashmir).

COMMENTS: Some authors have included *armenica*, *serezkyensis*, and *zarudnyi* (see Spitzenberger, 1971, and Corbet, 1978c, for a review of literature); but all are now considered separate species. A considerable diversity of opinions exists in the literature on the allocation of the different forms. Following Jenkins (1976), the name *pergrisea* is applied only to the largest species, as represented by the type series from Baltistan.

Crocidura phaeura Osgood, 1936. Field Mus. Nat. Hist. Publ., Zool. Ser., 20:228.

TYPE LOCALITY: Ethiopia, Sidamo, west base of Mt. Guramba, NE of Allata.

DISTRIBUTION: Known only from the type locality.

STATUS: IUCN - Insufficiently known. Has not been collected since its discovery.

COMMENTS: Considered a full species by Dippenaar and Meester (1989). Related to *harennia*; see discussion in Hutterer and Yalden (1990).

Crocidura picea Sanderson, 1940. Trans. Zool. Soc. Lond., 24:682.

TYPE LOCALITY: Cameroon, Mamfe Div., Assumbo, Tinta.

DISTRIBUTION: Known only from the type locality.

COMMENTS: Status uncertain; holotype figured by Heim de Balsac and Hutterer (1982:142, fig. 3).

Crocidura pitmani Barclay, 1932. Ann. Mag. Nat. Hist., ser. 10, 10:440.

TYPE LOCALITY: Zambia, "Maluwe-Serenje Distr., 3800 ft."

DISTRIBUTION: C and N Zambia.

Crocidura planiceps Heller, 1910. Smithson. Misc. Coll., 56(15):5.

TYPE LOCALITY: Uganda, Lado Enclave, Rhino Camp.

DISTRIBUTION: Ethiopia, Uganda, Sudan, Zaire, Nigeria.

COMMENTS: Closely related to *fuscomurina*, if not conspecific; see Heim de Balsac (1968d) and Hutterer (1983b). See comments under *C. pasha*.

Crocidura poensis (Fraser, 1843). Proc. Zool. Soc. Lond., 1842:200 [1843].

TYPE LOCALITY: Equatorial Guinea, Bioko (Fernando Po), Clarence.

DISTRIBUTION: Bioko, Principe Isl, Cameroon to Liberia.

SYNONYMS: *calabarensis*, *pamela*, *schweitzeri*, *soricoides*, *stampflii* (see Heim de Balsac and Meester, 1977, and Hutterer and Happold, 1983).

Crocidura polia Hollister, 1916. Bull. Am. Mus. Nat. Hist., 35:669.

TYPE LOCALITY: Zaire, Medje.

DISTRIBUTION: Known only from the type locality.

STATUS: IUCN - Insufficiently known. Known only from a single specimen.

COMMENTS: Included in *dolichura* by Heim de Balsac and Meester (1977) but represents a distinct species.

Crocidura pullata Miller, 1911. Proc. Biol. Soc. Washington, 24:241.

TYPE LOCALITY: Kashmir, Kotihar, 7,000 ft.

DISTRIBUTION: Kashmir, India, Afghanistan, Pakistan, Yunnan (China), Thailand, full range unknown.

SYNONYMS: *rapax*, *vorax*.

COMMENTS: The name *pullata* is provisionally used as a label to include the Asian populations of what has been called *russula* by Jenkins (1976) and many other authors. It can be seen from the measurements provided by Jameson and Jones (1977) that the forms *pullata*, *rapax* and *vorax* differ from the European *russula* by a longer tail; all have been assigned to the West European species; see Lekagul and McNeely (1977), among others.

Crocidura raineyi Heller, 1912. Smithson. Misc. Coll. 60(12):7-8.

TYPE LOCALITY: Kenya, "North Creek, Mt. Garguez".

DISTRIBUTION: Known only from the type locality.

STATUS: IUCN - Insufficiently known.

COMMENTS: Since its description *C. raineyi* has been considered a valid species, but was synonymized in 1977 with *C. luna*, an error recently corrected by Dippenaar and Meester (1989).

Crocidura religiosa (I. Geoffroy, 1827). Mem. Mus. Hist. Nat. Paris, 15:128.

TYPE LOCALITY: Egypt, Giza.

DISTRIBUTION: Nile Valley (Egypt).

COMMENTS: Described from embalmed specimens from tombs at Thebes; holotype not preserved. Corbet (1978c:27) selected a neotype from Giza.

Crocidura rhoditis Miller and Hollister, 1921. Proc. Biol. Soc. Washington, 34:102.

TYPE LOCALITY: Indonesia, Sulawesi, Temboan.

DISTRIBUTION: Tropical rainforest of N, C, and SW Sulawesi (Musser, 1987).

Crocidura roosevelti (Heller, 1910). Smithson. Misc. Coll., 56(15):6.

TYPE LOCALITY: Uganda, Lado Enclave, Rhino Camp.

DISTRIBUTION: Forest-savanna margin of the Central African forest block; records from Angola, Cameroon, Central African Republic, Zaire, Uganda, Rwanda, and Tanzania (Hutterer, 1981a).

COMMENTS: Type species of subgenus *Heliosorex* Heller, 1910.

Crocidura russula (Hermann, 1780). In Zimmermann, Geogr. Gesch. Mensch. Vierf. Thiere, 2:382.

TYPE LOCALITY: France, Bas Rhin, near Strasbourg.

DISTRIBUTION: S and W Europe including some Atlantic island off France; Mediterranean islands (Ibiza, Sardinia, Pantelleria?); N Africa (Morocco, Algeria, Tunisia).

SYNONYMS: *albiventris*, *agilis*, *anthonyi*, *candidus*, *chaouianensis*, *chrysothorax*, *cinereus*, *cintrae*, *constrictus*, *fimbriatus*, *foucauldi*, *heljanensis*, *hydruntina*, *ibicensis*, *ichnusae*, *inodorus*, *leucurus*, *major*, *moschata*, *musaraneus*, *peta*, *poliogastra*, *pulchra*, *rufa*, *safii*, *thoracicus*, *unicolor*, *yebalensis*.

COMMENTS: Reviewed by Genoud and Hutterer (1990). The species is confined to W Europe and N Africa. Many populations from Asia and even Africa have been erroneously assigned to *russula* (see Ellermann and Morrison-Scott, 1951). Allozyme and karyotype analyses by Catzefflis et al. (1985) have shown that animals from E Europe, Asia Minor and Israel formerly identified as *russula* instead belong to *suaveolens*. This may also be true for other populations further east. Does not include *hosletti*, *rapax*, or *vorax* (see Ellerman and Morrison-Scott, 1966:81; Jameson and Jones, 1977:465), which are here included in *dsinezumi* and *pullata*, respectively. May include *cosyrensis*; see under that species.

Crocidura selina Dollman, 1915. Ann. Mag. Nat. Hist., ser. 8, 16:371-372.

TYPE LOCALITY: "Mabira Forest, Chagwe, Uganda."

DISTRIBUTION: Known only from three lowland forests in Uganda.

STATUS: IUCN - Insufficiently known.

COMMENTS: Previously included in *fumosa* or *luna*, but considered a distinct species by Dippenaar and Meester (1989).

Crocidura serezhkyensis Laptev, 1929. Opred. Mlekopitay. Sredney Asyy, Tashkent, 1:16.

TYPE LOCALITY: Tadshikistan, Pamir Mtns, Lake Sarezskoye.

DISTRIBUTION: Asia Minor, Azerbaijan, Turkmenistan, Tadshikistan and Kazakhstan.

SYNONYMS: *arispa*.

COMMENTS: Previously included in *pergrisea* (Spitzenberger, 1971; Jenkins, 1976), but considered a distinct species by Stogov and Bondar (1966) and Stogov (1985).

Populations in Asia Minor (*arispa* Spitzenberger, 1971) are linked with the typical ones in Kazakhstan and Tadshikistan by records from Azerbaijan (Grafodatsky et al., 1988) and Turkmenistan (Stogov and Bondar, 1966). Grafodatsky et al. (1988) reported on the karyotype of a specimen from Dzhulfa, SW Azerbaijan (under the name *pergrisea*); with $2n=22$ *serezhkyensis* has the lowest chromosome number ever recorded for a shrew.

Crocidura sibirica Dukelsky, 1930. Zool. Anz., 88:75.

TYPE LOCALITY: Russia, Siberia, S Krasnoyarsky Krai, upper Yenisei River, 96 km S of Minusinsk, Oznatchenoie.

DISTRIBUTION: C Asia from Lake Issyk Kul to Upper Ob River; Lake Baikal; perhaps also Sinkiang (China) and Mongolia (see Sokolov and Orlov, 1980:50).

SYNONYMS: *ognevi*.

COMMENTS: Includes *ognevi*; see Yudin (1989).

Crocidura sicula Miller, 1900. Proc. Biol. Soc. Washington, 14:41.

TYPE LOCALITY: Italy, Sicily, Palermo.

DISTRIBUTION: Sicily, Egadi Isls (Italy) and Gozo (Malta).

SYNONYMS: *aegatensis*, *calypso*, *caudata*, *esuae*.

COMMENTS: Revised by Hutterer (1991), who recognized one extinct and three extant subspecies. Formerly included in *leucodon*, *russula*, or *suaveolens*; but the species has a distinct karyotype (Vogel, 1988) and morphology (Vogel et al., 1989).

Crocidura silacea Thomas, 1895. Ann. Mag. Nat. Hist., ser. 6, 16:53.

TYPE LOCALITY: South Africa, E Transvaal, Barberton dist., De Kaap, Figtree Creek.

DISTRIBUTION: Occurs in most of South Africa, and parts of Botswana, Mozambique, and Zimbabwe; possibly has a wider distribution.

SYNONYMS: *holobrunneus*.

COMMENTS: This species was formerly assigned to *gracilipes* or *hildegardeae*, but is not conspecific with either of these; see Meester et al. (1986) for a discussion.

Crocidura smithii Thomas, 1895. Ann. Mag. Nat. Hist., ser. 6, 15:51.

TYPE LOCALITY: Ethiopia, Webi Shebeli, near Finik.

DISTRIBUTION: Arid regions of Senegal, Ethiopia, and probably Somalia.

SYNONYMS: *debalsaci*.

COMMENTS: Revised by Hutterer (1986a). Specimens reported from Somalia by Heim de Balsac (1966a) represent *macarthuri*; see under that species. Includes *debalsaci* as a subspecies; see Hutterer (1981b).

Crocidura somalica Thomas, 1895. Ann. Mag. Nat. Hist., ser. 6, 16:52.

TYPE LOCALITY: Ethiopia, Middle Webi Shebeli (about 5°30'N, 44°E) near Geledi (Galadi).

DISTRIBUTION: Dry savannas and semi-desert areas of Ethiopia, Sudan, and probably Somalia; Mali.

COMMENTS: Revised by Hutterer and Jenkins (1983). Recently recorded from the Sahara (Mali) by Hutterer et al. (1992), who regarded the subspecies *dhofarensis* from Oman as specifically distinct; see under *dhofarensis*.

Crocidura stenocephala Heim de Balsac, 1979. Säugetierkdl. Mitt., 27:258.

TYPE LOCALITY: E Zaire, "Kahuzi-Biega N.P."

DISTRIBUTION: Montane *Cyperus* swamps at Mt. Kahuzi, E Zaire.

STATUS: IUCN - Insufficiently known.

COMMENTS: Described as a subspecies of *littoralis* but regarded as a full species by Hutterer (1982a) and Dippenaar (pers. comm.).

Crocidura suaveolens (Pallas, 1811). Zoogr. Rosso-Asiat., 1:133.

TYPE LOCALITY: Russia, Crimea, Khersones, near Sevastopol.

- DISTRIBUTION:** Entire Palearctic from Spain to Korea; Atlantic islands (Scilly, Jersey, Sark, Ushant, Yeu); many Mediterranean islands including Corsica, Crete, Cyprus, and Menorca; Tsushima and Ullong Do between Korea and Japan.
- SYNONYMS:** *antipae*, *ariadne*, *astrabadensis*, *avicennai*, *balcanica*, *balearica*, *bruecheri*, *cantanbra*, *caneae*, *cassiteridum*, *coreae*, *corsicana*, *cypria*, *cyrnensis*, *debeauxi*, *dinniki*, *enezsizunensis*, *heptapotamica*, *hyrcania*, *iculisma*, *ilensis*, *italica*, *lar*, *lignicolor*, *longicauda*, *mimula*, *mimuloides*, *minuta*, *monacha*, *mordeni*, *oayensis*, *orientis*, *pamirensis*, *phaeopus*, *portali*, *praecypria*, *sarda*, *shantungensis*, *tristami*, *utsuryoensis*, *uxantisi*.
- COMMENTS:** A widespread and variable species which has often been confused with *russula*; the taxonomic status of many E Asian forms is still unsolved; see also under *gueldenstaedtii*. The European and Arabian range was reviewed by Vlasák and Niethammer (1990) and Harrison and Bates (1991), respectively; a discussion of *suaveolens* in Korea and Taiwan was given by Jones and Johnson (1960) and Jameson and Jones (1977).
- Crocidura susiana* Redding and Lay, 1978. Z. Säugetierk., 43:307.
TYPE LOCALITY: Iran, Khuzistan Province, 8 km SSW of Dezful (32°19'N, 48°21'E).
DISTRIBUTION: Known only from the vicinity of Dezful (SW Iran), but may have a wider distribution.
- Crocidura tansaniana* Hutterer, 1986. Bonn. Zool. Beitr., 37:27.
TYPE LOCALITY: Tanzania, Tanga Region, E Usambara Mtns, Amani.
DISTRIBUTION: Usambara Mtns (Tanzania).
STATUS: IUCN - Insufficiently known.
COMMENTS: Previously known only by the holotype, but recently more specimens have been identified.
- Crocidura tarella* Dollman, 1915. Ann. Mag. Nat. Hist., ser. 8, 17:135.
TYPE LOCALITY: "Chaya, near Ruchuru, Congo Belge."
DISTRIBUTION: Uganda.
COMMENTS: Formerly a subspecies of *turba* but Dippenaar (1980) regarded it a distinct species.
- Crocidura tarfayensis* Vesmanis and Vesmanis, 1980. Zool. Abh. Mus. Tierk. Dresden, 36:47.
TYPE LOCALITY: Morocco, Agadir Prov., 8 km south Tarfaya, 27°50'N, 12°30'W.
DISTRIBUTION: Atlantic coast of Sahara; south of Agadir (Morocco) through Western Sahara into Mauritania.
SYNONYMS: *agadiri*, *gouliminensis*, *tiznitensis* (see Hutterer, 1987).
COMMENTS: Recorded as *whitakeri* from Western Sahara by Heim de Balsac (1968e).
- Crocidura telfordi* Hutterer, 1986. Bonn. Zool. Beitr., 37:28.
TYPE LOCALITY: Tanzania, Uluguru Mtns, Morningside, 1150 m.
DISTRIBUTION: Known only from the type locality, in relict montane forest.
STATUS: IUCN - Insufficiently known.
- Crocidura tenuis* (Müller, 1840). In Temminck, Verh. Nat. Gesch. Nederland Overz. Bezitt., Zool., Zoogd. Indisch. Archipel, p. 26, 50[1840].
TYPE LOCALITY: Indonesia, "Timor."
DISTRIBUTION: Timor (Indonesia).
COMMENTS: Jenkins (1982:273) considered conspecificity of *tenuis* with *fuliginosa* but stated that present evidence is not sufficient; in case of conspecificity, *tenuis* would be the earliest name for the group. See Appendix I for date of publication.
- Crocidura thalia* Dippenaar, 1980. Ann. Transvaal Mus., 32:138-147.
TYPE LOCALITY: Ethiopia, NW Bale Province, Gedeb Mtns, SE Dodola, 2,600 m (06°55'N, 39°10'E).
DISTRIBUTION: Forest and moorland of the Ethiopian highlands on both sides of the Rift Valley.
STATUS: IUCN - Insufficiently known.
COMMENTS: Previous to its description, *thalia* was known as *C. luna macmillani* (e.g., Hutterer, 1981c) or *C. fumosa*; see Yalden (1988), who studied the altitudinal distribution.

Crocidura theresae Heim de Balsac, 1968. Mammalia, 32:398.

TYPE LOCALITY: Guinea, Nzerekore.

DISTRIBUTION: Guinea savanna from Ghana to Guinea.

COMMENTS: May be a subspecies of *foxi*, but *theresae* from Ivory Coast are distinctly smaller and grayer.

Crocidura thomensis (Bocage, 1887). J. Sci. Math. Phys. Nat., Lisboa, 11:212.

TYPE LOCALITY: Sao Tome and Principe, São Tomé Isl.

DISTRIBUTION: Endemic to São Tomé.

STATUS: IUCN - Insufficiently known.

COMMENTS: For description of the species and designation of a neotype, see Heim de Balsac and Hutterer (1982).

Crocidura turba Dollman, 1910. Ann. Mag. Nat. Hist., ser. 8, 5:176.

TYPE LOCALITY: "Chilui Island, Lake Bangweolo", = Chilubi Isl, Zambia.

DISTRIBUTION: Angola, Zambia, Zaire, Malawi, Tanzania, Kenya, Uganda, Cameroon.

SYNONYMS: *angolae*.

COMMENTS: Includes *angolae*; see Heim de Balsac and Meester (1977:24-25). Range not exactly known, due to confusion with *zaodon* (= *nigrofuscus*).

Crocidura ultima Dollman, 1915. Ann. Mag. Nat. Hist., ser. 8, 15:517.

TYPE LOCALITY: "Jombeni Range, Nyeri District", Kenya.

DISTRIBUTION: Known only from the type locality.

COMMENTS: Dippenaar (1980:126), following Allen (1939:46), recognized *ultima* as a full species within the *littoralis-monax* group.

Crocidura usambarae Dippenaar, 1980. Ann. Transvaal Mus., 32:128.

TYPE LOCALITY: Tanzania, Western Usambara Mtns, Shume, 16 mi N. Lushoto.

DISTRIBUTION: Magamba, Shume (Usambara Mtns), perhaps also Ngozi Crater, SW Tanzania.

STATUS: IUCN - Insufficiently known.

Crocidura viaria (I. Geoffroy, 1834). In Zool. Voy. de Belanger Indes-Orient., p. 127.

TYPE LOCALITY: "Senegal", restricted to region between Dakar and St. Luis by Hutterer (1984).

DISTRIBUTION: Sahelian and Sudan savanna from S Morocco to Senegal and east to Sudan, Ethiopia and Kenya; perhaps further south.

SYNONYMS: *bolivari*, *hindei*, *suahelae* (?), *tamrinensis*.

COMMENTS: Revised by Hutterer (1984); Possibly includes *suahelae*, which may alternatively belong to *zaphiri*. A member of the *flavescens* species group (Maddalena, 1990).

Crocidura voi Osgood, 1910. Field Mus. Nat. Hist. Publ., Zool. Ser., 10:18.

TYPE LOCALITY: Kenya, "Voi, British East Africa".

DISTRIBUTION: Sudan savanna from Kenya and Somalia to Ethiopia and Sudan; single records from Nigeria and Mali.

SYNONYMS: *aridula*, *butleri*, *percivali* (see Hutterer, 1986a).

Crocidura whitakeri de Winton, 1898. Proc. Zool. Soc. Lond., 1897:954 [1898].

TYPE LOCALITY: Morocco, between Morocco City and Mogador, Sierzet.

DISTRIBUTION: Atlantic and Mediterranean parts of Morocco, Algeria and Tunisia; one record from coastal Egypt.

SYNONYMS: *essaouiranensis*, *mesatanensis*, *matruhensis*, *zaianensis* (see Hutterer, 1987, 1991).

COMMENTS: Range in Morocco mapped by Aulagnier and Thévenot (1987); in Algeria by Rzebik-Kowalska (1988).

Crocidura wimmeri Heim de Balsac and Aellen, 1958. Rev. Suisse Zool., 65:952.

TYPE LOCALITY: Ivory Coast, Adiopodoume.

DISTRIBUTION: S Ivory Coast.

STATUS: IUCN - Insufficiently known. Rare and very localized in distribution.

COMMENTS: Has been assigned to *nimbae*; but see Hutterer (1983a). Records outside Ivory Coast are based on misidentifications; specimen recorded from Cameroon and Gabon refer to *batesi*; see Brosset (1988).

- Crocidura xanthippe* Osgood, 1910. Field Mus. Nat. Hist. Publ., Zool. Ser., 10:19.
TYPE LOCALITY: Kenya, "Voi, British East Africa".
DISTRIBUTION: Nyiru, Voi, Tsavo (SE Kenya); Usambara Mtns (Tanzania).
COMMENTS: Status uncertain; probably related to *hirta*. Not to be confused with *Crocidura xanthippe* Bate, 1937, a Pleistocene shrew from Palestine.
- Crocidura yankariensis* Hutterer and Jenkins, 1980. Bull. Brit. Mus. (Nat. Hist.) Zool., 39:305.
TYPE LOCALITY: Nigeria, Bauchi State, 16 km E of Yankari Game Reserve boundary, Futuk [9°50'N, 10°55'E].
DISTRIBUTION: Sudan savanna zone in Cameroon, Nigeria, Sudan, Ethiopia, Kenya, and Somalia.
COMMENTS: Previously confused with *somalica*; see Hutterer and Jenkins (1983).
- Crocidura zaphiri* Dollman, 1915. Ann. Mag. Nat. Hist., ser. 8, 15:509.
TYPE LOCALITY: Ethiopia, "Charada Forest, Kaffa".
DISTRIBUTION: Kaffa Prov. (S Ethiopia); Kaimosi, Kisumu (Kenya).
SYNONYMS: *simiolus*.
COMMENTS: Includes *simiolus*; see Osgood (1936:224). May also include *mutessae* and *suahelae* (here questionably listed in *viaria*), in which case it would be a widely distributed species; see Hutterer and Yalden (1990:70).
- Crocidura zarudnyi* Ognev, 1928. [Mammals of Eastern Europe and Northern Asia], 1:341.
TYPE LOCALITY: Iran, Baluchistan (border).
DISTRIBUTION: SE Iran, SE Afghanistan, SW Pakistan (Spitzenberger, 1971).
SYNONYMS: *streetorum*, *tatiana*.
COMMENTS: The species was first named *tatiana* by Ognev (1921), but later (1928) replaced by *zarudnyi*; Ognev argued that *tatiana* was preoccupied by *tatiana* Dollman, 1915 (now a synonym of the African *olivieri*). Strictly following the International Code of Zoological Nomenclature (1985, art. 58), this is not the case, and *zarudnyi* would be an unjustified replacement name. However, since the species has always been called *zarudnyi* it would be justified to present the case to the commission in favor of stability. The definition of *zarudnyi* follows Spitzenberger (1971) and Hassinger (1970), but not Jenkins (1976) who included *arispa* which is now regarded as part of *serezkyensis*; see under that species. As Spitzenberger (1971) pointed out, *zarudnyi* has a shorter rostrum and a heavier mandible than both *pergrisea* and *serezkyensis*. The status of *streetorum* is not clear although it is included here as suggested by Hassinger (1970). The distribution and morphology of *pergrisea*, *serezkyensis*, and *zarudnyi* should be carefully studied in the Hindukush, Karakoram and Pamir where their ranges may overlap.
- Crocidura zimмери* Osgood, 1936. Field Mus. Nat. Hist. Publ., Zool. Ser., 20:223.
TYPE LOCALITY: Zaire, Katanga Prov., near Bukama, "Lualaba River, Katobwe".
DISTRIBUTION: Environs of Upemba National Park, Zaire.
COMMENTS: A large and striking species which is known only by the type series.
- Crocidura zimmermanni* Wettstein, 1953. Z. Säugetierk., 17:12.
TYPE LOCALITY: Greece, Crete, Ida Mtns, Nida plateau.
DISTRIBUTION: Highlands of the island of Crete.
STATUS: IUCN - Rare.
COMMENTS: Formerly regarded as a subspecies of *russula* but differs in morphology and karyotype; see Vesmanis and Kahmann (1978), Vogel (1986), and Pieper (1990).
- Diplomesodon* Brandt, 1852. Beitr. Kenntn. Russ. Reiches, 17:299.
TYPE SPECIES: *Sorex pulchellus* Lichtenstein, 1823.
COMMENTS: Subfamily Crocidurinae; see Repenning (1967:15).
- Diplomesodon pulchellum* (Lichtenstein, 1823). In Eversmann, Reise von Orenburg nach Bokhara, Berlin, p. 124.
TYPE LOCALITY: Kazakhstan, eastern bank of Ural River, sands "Bolshie Barsuki".
DISTRIBUTION: W and S Kazakhstan, Uzbekistan, Turkmenistan.
SYNONYMS: *pallidus*.
COMMENTS: Biology and distribution reviewed by Heptner (1939), who also specified the type locality.

Feroculus Kelaart, 1852. Prodr. Faun. Zeylanica, p. 31.

TYPE SPECIES: *Sorex macropus* Blyth, 1851 (= *Sorex feroculus* Kelaart, 1850).

COMMENTS: Repenning (1967:15) placed *Feroculus* in the subfamily Crocidurinae.

Feroculus feroculus (Kelaart, 1850). J. Ceylon Branch Asiat. Soc., 2(5):211.

TYPE LOCALITY: Sri Lanka, central mountains at 6,000 ft., Nuwara Eliya.

DISTRIBUTION: Primary swamps and forests in the central highlands of Sri Lanka.

SYNONYMS: *macropus*, *newera*, *newera-ellia*.

COMMENTS: A rare and little-known species; available information summarized by Phillips (1980).

Myosorex Gray, 1838. Proc. Zool. Soc. Lond., 1837:124 [1838].

TYPE SPECIES: *Sorex varius* Smuts, 1832.

COMMENTS: Subfamily status uncertain. Repenning (1967) grouped *Myosorex* in the Crocidurinae; Reumer's (1987) Crocidosoricinae would fit as well. Kretzoi (1965) based the tribe Myosoricini on this genus; the name is available for any taxonomic unit above the genus level. Generic status sometimes questioned; but see Meester (1954). *Surdisorex* and *Congosorex* are often included as subgenera but are treated here as full genera, following Thomas (1906b), Hollister (1918), Meester (1953), Heim de Balsac (1966b), and my own studies. Partial reviews of *Myosorex* were provided by Heim de Balsac (1967, 1968b), Heim de Balsac and Lamotte (1956), and Meester and Dippenaar (1978). The formerly listed *Myosorex preussi* (Matschie, 1893), described from "Mount Cameroun", is not listed here, because a recent examination of the type series has shown that the type series was based on mismatched parts of three different genera (*Crocidura*, *Sorex*, *Sylvisorex*), and that *preussi* does not represent a biological species. Species of conservation concern are listed in Nicoll and Rathbun (1990:21).

Myosorex babaulti Heim de Balsac and Lamotte, 1956. Mammalia, 20:150.

TYPE LOCALITY: Zaire, "Kivu".

DISTRIBUTION: Mountains west and east of Lake Kivu, including Idjwi Isl (Zaire, Rwanda, Burundi).

COMMENTS: Formerly included in *blarina*; but see Dieterlen and Heim de Balsac (1979).

Myosorex blarina Thomas, 1906. Ann. Mag. Nat. Hist., ser. 7, 18:139.

TYPE LOCALITY: Uganda, Ruwenzori East, Mubuku Valley, 10,000 ft.

DISTRIBUTION: Montane forest at Mt. Ruwenzori (Uganda, Zaire).

Myosorex cafer (Sundevall, 1846). Ofv. Kongl. Svenska Vet.-Akad. Forhandl. Stockholm, 3:119.

TYPE LOCALITY: South Africa, "E Caffraria interiore et Port-Natal".

DISTRIBUTION: South Africa, eastern escarpment and north to the Transvaal; extreme W Mozambique and E Zimbabwe, in higher elevations above 1,000 m.

SYNONYMS: *swinyi*.

COMMENTS: Meester (1958) described the geographic variation of the species. Heim de Balsac and Meester (1977) included *affinis*, *sclateri*, *swinyi*, *talpinus* and *tenuis* in *cafer*, while Wolhuter (in Smithers, 1983:3) and Dippenaar et al. (1983) regarded *sclateri* and *tenuis* as distinct, partly based on new karyotype information. Although no additional data have yet been published, this view is provisionally accepted here as it better reflects existing variation within the southern African representatives of the genus.

Myosorex eisentrauti Heim de Balsac, 1968. Bonn. Zool. Beitr., 19:20.

TYPE LOCALITY: Equatorial Guinea, Bioko, Pic Santa Isabel, 2400 m.

DISTRIBUTION: Montane forest of Bioko (Fernando Po).

STATUS: IUCN - Insufficiently known.

COMMENTS: The forms *okuensis* and *rumpii* were included in *eisentrauti* by Heim de Balsac and Meester (1977); both are regarded as distinct species in this account.

Myosorex geata (Allen and Loveridge, 1927). Proc. Boston Soc. Nat. Hist., 38:417.

TYPE LOCALITY: Tanzania, Uluguru Mtns, Nyingwa.

DISTRIBUTION: Forests of the Tanzania mountain arc.

STATUS: IUCN - Insufficiently known.

COMMENTS: Formerly in *Crocidura*; see Heim de Balsac (1967:610).

Myosorex longicaudatus Meester and Dippenaar, 1978. Ann. Transvaal Mus., 31:30.

TYPE LOCALITY: South Africa, Cape Province, 14 km NNE Knysna, Diepwalle State Forest Station, 33°57'S, 23°10'E.

DISTRIBUTION: Escarpment forests of the SE Cape Province, South Africa.

STATUS: IUCN - Insufficiently known.

Myosorex okuensis Heim de Balsac, 1968. Bonn. Zool. Beitr., 19:20.

TYPE LOCALITY: Cameroon, Bamenda Highlands, "Oku-See, 2100 m".

DISTRIBUTION: Forested mountains of the Bamenda plateau, Cameroon (Lake Manenguba, Lake Oku, Mt. Lefo).

COMMENTS: Formerly included in *eisentrauti* (see Heim de Balsac and Meester, 1977), but cranially very distinct.

Myosorex rumpii Heim de Balsac, 1968. Bonn. Zool. Beitr., 19:20.

TYPE LOCALITY: Cameroon, "Rumpi-Hills, 1100 mètres".

DISTRIBUTION: Known only from the type locality.

COMMENTS: The holotype and only known specimen is so unique (Heim de Balsac, 1968b, fig. 4) that it is considered to represent a valid species. Heim de Balsac (1968b) himself was uncertain about the status of this taxon; while he formally named it *M. eisentrauti rumpii*, he labeled all figures and the map with "*Myosorex rumpii*".

Myosorex schalleri Heim de Balsac, 1966. C.R. Acad. Sci. Paris, 263:889.

TYPE LOCALITY: E Zaire, Itombwe Mtns, "Nzombe (Mwenga)".

DISTRIBUTION: Known only from the type locality.

STATUS: IUCN - Insufficiently known.

COMMENTS: Provisionally named by Heim de Balsac (1966b); full description by Heim de Balsac (1967). The type locality was later erroneously shifted to the "Albert N. P." (Heim de Balsac and Meester, 1977); Nzombe is located in the Itombwe Mountains (Hutterer, 1986c).

Myosorex sclateri Thomas and Schwann, 1905. Abstr. Proc. Zool. Soc. Lond., 1905(15):10.

TYPE LOCALITY: South Africa, Natal, Zululand, Ngoye hills, 250 m.

DISTRIBUTION: Wet habitats in Kwazulu (South Africa).

SYNONYMS: *affinis*, *talpinus*.

COMMENTS: Provisionally regarded as a distinct species by Wolhuter (in Smithers, 1983:3); occurs in sympatry with *cafer* and has a different karyotype. Meester et al. (1986) included *sclateri* in *cafer*.

Myosorex tenuis Thomas and Schwann, 1905. Proc. Zool. Soc. Lond., 1905:131-132.

TYPE LOCALITY: South Africa, Transvaal, near Wakkerstroom, Zuurbron.

DISTRIBUTION: Transvaal (South Africa) and possibly W Mozambique.

COMMENTS: Provisionally regarded as a distinct species by Wolhuter (in Smithers, 1983:3) because of sympatry with *cafer* and a different karyotype. Meester et al. (1986) included *tenuis* in *cafer*.

Myosorex varius (Smuts, 1832). Enumer. Mamm. Capensium, p. 108.

TYPE LOCALITY: South Africa, Cape of Good Hope, Algoa Bay (Port Elizabeth).

DISTRIBUTION: South Africa, from NW Cape Province to E Transvaal; Lesotho and Orange Free State.

SYNONYMS: *capensis*, *herpestes*, *pondoensis*, *transvaalensis* (see Heim de Balsac and Meester, 1977).

COMMENTS: Revised by Meester (1958).

Paracrocidura Heim de Balsac, 1956. Rev. Zool. Bot. Afr., 54:137.

TYPE SPECIES: *Paracrocidura schoutedeni* Heim de Balsac, 1956.

COMMENTS: Subfamily status uncertain. Revised by Hutterer (1986c).

Paracrocidura graueri Hutterer, 1986. Bonn. Zool. Beitr., 37:81.

TYPE LOCALITY: "Urwald hinter den Randbergen des Nord-Westufers des Tanganjika" = Sibatwa, 2,000 m, Itombwe Mtns, Zaire.

DISTRIBUTION: Known only from the type locality.

STATUS: IUCN - Insufficiently known. *P. graueri* is of conservation concern (Nicoll and Rathbun, 1990).

COMMENTS: Known only from the holotype which was collected in 1908.

Paracrocridura maxima Heim de Balsac, 1959. Rev. Zool. Bot. Afr., 59:26.

TYPE LOCALITY: Zaire, Tshibati.

DISTRIBUTION: Zaire, Rwanda, Uganda.

STATUS: IUCN - Insufficiently known. *P. maxima* is of conservation concern (Nicoll and Rathbun, 1990).

COMMENTS: Regarded as a full species by Hutterer (1986c:79).

Paracrocridura schoutedeni Heim de Balsac, 1956. Rev. Zool. Bot. Afr., 54:137.

TYPE LOCALITY: Zaire, Kasai, Lubondaie (75 km south of Luluabourg), Tshimbulu (Dibaya).

DISTRIBUTION: Lowland primary forest in S Cameroon, Gabon, Congo Republic, Zaire, and Central African Republic.

SYNONYMS: *camerunensis*.

COMMENTS: A subspecies *camerunensis* was named by Heim de Balsac (1968b), based on a specimen from Mt. Cameroon.

Ruwenzorisorex Hutterer, 1986. Z. Säugetierk., 51:260.

TYPE SPECIES: *Sylvisorex suncoides* Osgood, 1936.

COMMENTS: Subfamily uncertain. New data on the brain structure support generic separation; see Stephan et al. (1991).

Ruwenzorisorex suncoides (Osgood, 1936). Field Mus. Nat. Hist. Publ., Zool. Ser., 20:217.

TYPE LOCALITY: Zaire, western slope of Ruwenzori Mountains, Kalongi.

DISTRIBUTION: Montane forest in W Zaire, Uganda, Rwanda, and Burundi.

STATUS: IUCN - Indeterminate. Very localized; listed in Nicoll and Rathbun (1990:21).

COMMENTS: The species has also been found in Burundi (Kerbis, pers. comm.).

Scutisorex Thomas, 1913. Ann. Mag. Nat. Hist., ser. 8, 11:321.

TYPE SPECIES: *Sylvisorex somereni* Thomas, 1910.

COMMENTS: Subfamily Crocidurinae; see Repenning (1967:15).

Scutisorex somereni (Thomas, 1910). Ann. Mag. Nat. Hist., ser. 8, 6:113.

TYPE LOCALITY: Uganda, near Kampala, Kyetume.

DISTRIBUTION: Tropical rainforest of the Zaire Basin and adjacent mountains in Uganda, Rwanda, and Burundi.

SYNONYMS: *congicus*.

COMMENTS: Includes *congicus*; see Heim de Balsac and Meester (1977:7).

Solisorex Thomas, 1924. Spolia Zeylan., 13:94.

TYPE SPECIES: *Solisorex pearsoni* Thomas, 1924.

COMMENTS: Subfamily Crocidurinae; see Repenning (1967:15).

Solisorex pearsoni Thomas, 1924. Spolia Zeylan., 13:94.

TYPE LOCALITY: Sri Lanka, Central Province, near Nuwara Eliya, Hakgala.

DISTRIBUTION: Central highlands of Sri Lanka.

STATUS: Species rare and little-known.

COMMENTS: Inhabits "virgin forest" in the mountains of C Sri Lanka (Phillips, 1980).

Suncus Ehrenberg, 1832. In Hemprich and Ehrenberg, Symb. Phys. Mamm., 2:k.

TYPE SPECIES: *Suncus sacer* Ehrenberg, 1832 (= *Sorex murinus* Linnaeus, 1766).

SYNONYMS: *Pachyura*, *Paradoxodon*, *Plerodus*, *Podihik*, *Sunkus*.

COMMENTS: Subfamily Crocidurinae; see Repenning (1967:15). Occasionally regarded as part of *Crocridura* (e.g. Lekagul and McNeely, 1977:35), but accepted as a full genus by most authors. Includes *Pachyura*, *Paradoxodon*, and *Plerodus*; see Meester and Lambrechts (1971), who revised the southern African species.

Suncus ater Medway, 1965. J. Malay. Branch R. Asiat. Soc., 36:38.

TYPE LOCALITY: Malaysia, Sabah, Gunong (= Mt.) Kinabalu, Lumu-Lumu, 5,500 ft. (1,676 m).

DISTRIBUTION: Known only from the type locality.

COMMENTS: Reviewed by Medway (1977:16-17).

Suncus dayi (Dobson, 1888). Ann. Mag. Nat. Hist., ser. 6, 1:428.

TYPE LOCALITY: India, Cochin, Trichur.

DISTRIBUTION: S India.

STATUS: Rare.

COMMENTS: A very distinct species resembling *Sylvisorex morio*.

Suncus etruscus (Savi, 1822). Nuovo Giorn. de Letterati, Pisa, 1:60.

TYPE LOCALITY: Italy, Pisa.

DISTRIBUTION: S Europe and N Africa (Morocco, Algeria, Tunisia, Egypt); Arabian Peninsula and Asia Minor to Iraq, Turkmenistan, Afghanistan, Pakistan, Nepal, Bhutan, Burma, Thailand and Yunnan (China); also India and Sri Lanka. West and East African records (Guinea, Nigeria, Ethiopia) are doubtful and need confirmation.

SYNONYMS: *assamensis*, *atratus*, *bactrianus*, *hodgsoni*, *kura*, *macrotis*, *melanodon*, *micronyx*, *nanula*, *nilgirica*, *nitidofulva*, *nudipes*, *pachyurus*, *perrotteti*, *pygmaeoides*, *pygmaeus*, *suaveolens*, *travancorensis*.

COMMENTS: European and Asian range reviewed by Spitzenberger (1970, 1990c); N African distribution mapped by Vesmanis (1987). Heim de Balsac and Meester (1977) discussed the African records south of the Sahara. Probably includes *Podihik kura*; see Nowak and Paradiso (1983:141). The records east of Afghanistan, particularly from S India (*macrotis*, *nilgirica*) are only tentatively included; Corbet (1978c:31) expressed doubt on the conspecificity of the Indian forms. Many authors included *fellowesgordoni*, *hosei*, *madagascariensis*, and *malayanus* in *etruscus*, however, in the present list they are all treated as valid species.

Suncus fellowesgordoni Phillips, 1932. Spolia Zeylan., 17:124.

TYPE LOCALITY: Sri Lanka, Central Province, Ohiya, West Haputale Estate (6,000 ft.).

DISTRIBUTION: Central highlands of Sri Lanka.

COMMENTS: Although usually included in *S. etruscus*, this taxon represents a species endemic to Sri Lanka. *Podihik kura* Deraniyagala, 1958, which was included in this species by Phillips (1980), does not represent *fellowesgordoni*, but is more similar to *etruscus*.

Suncus hosei (Thomas, 1893). Ann. Mag. Nat. Hist., ser. 6, 11:343.

TYPE LOCALITY: Sarawak, Bakong River.

DISTRIBUTION: Lowland forest of Borneo and Sarawak.

COMMENTS: Often included in *etruscus* (e.g. Medway, 1977) but represents a distinct forest species.

Suncus infinitesimus (Heller, 1912). Smithsonian. Misc. Coll., 60(12):5.

TYPE LOCALITY: Kenya, Laikipia Plateau, Rumruti, 7,000 ft. (2,134 m).

DISTRIBUTION: South Africa to Kenya; Central African Republic; Cameroon.

SYNONYMS: *chriseos*, *ubanguiensis*.

COMMENTS: Includes *chriseos* and *ubanguiensis*; see Heim de Balsac and Meester (1977).

Gureev (1979:383) listed *chriseos* as a distinct species without comment.

Suncus lixus (Thomas, 1898). Proc. Zool. Soc. Lond., 1897:930 [1898].

TYPE LOCALITY: Malawi, Nyika Plateau (between 10 and 11° S and 33°40' to 34°10'E).

DISTRIBUTION: Savanna zones of Kenya, Tanzania, Malawi, Zaire, Zambia, Angola, Botswana, and Transvaal (South Africa).

SYNONYMS: *aequatoria*, *gratula*.

COMMENTS: Includes *aequatoria* and *gratula*; see Heim de Balsac and Meester (1977). Gureev (1979:383) listed *gratulus* as a distinct species without comment.

Suncus madagascariensis (Coquerel, 1848). Ann. Sci. Nat., Zool. (Paris), (3)9:194, pl. 11, fig. 1.

TYPE LOCALITY: Madagascar, Nossi-Bé.

DISTRIBUTION: Madagascar and Comores Isls.

STATUS: Unresolved.

SYNONYMS: *coquerelii*.

COMMENTS: This species is often included in *etruscus* but treated as a full species in most reports on the fauna of Madagascar (e.g., Eisenberg and Gould, 1984).

Suncus malayanus (Kloss, 1917). J. Nat. Hist. Soc. Siam, 2:282.

TYPE LOCALITY: Thailand, "Bang Nara, Patani, Peninsular Siam".

DISTRIBUTION: Malaysian peninsula.

COMMENTS: Commonly included in *etruscus* but inhabits tropical forest and does not fit morphologically with the diagnosis of that species; *malayanus* is therefore regarded as a species, as was done by Corbet and Hill (1991:36).

Suncus mertensi Kock, 1974. Senckenbergiana Biol., 55:198.

TYPE LOCALITY: Indonesia, "Rana Mese, Flores".

DISTRIBUTION: Flores Isl, Indonesia.

COMMENTS: A distinct, long-tailed forest shrew.

Suncus montanus (Kelaart, 1850). J. Ceylon Br. Asiat. Soc., 2:211.

TYPE LOCALITY: Sri Lanka, "Nuwara Eliya, Pidurutalagala".

DISTRIBUTION: Forested highlands in Sri Lanka and S India.

SYNONYMS: *ferrugineus*, *kelaarti*, *niger*.

COMMENTS: Commonly included in *murinus* (Ellerman and Morrison-Scott, 1966:66), but represents a much smaller and always blackish species of primary forest habitats. Listed as a species by Corbet and Hill (1991:36). The Indian populations may represent a valid subspecies (*niger*).

Suncus murinus (Linnaeus, 1766). Syst. Nat., 12th ed., 1:74.

TYPE LOCALITY: Indonesia, Java.

DISTRIBUTION: Afghanistan, Pakistan, India, Sri Lanka, Nepal, Bhutan, Burma, China, Taiwan, Japan, continental and peninsular Indomalayan Region; introduced into Guam, the Maldive Islands, and probably many other islands; introduced in historical times into coastal Africa (Egypt to Tanzania), Madagascar, the Comores, Mauritius, and Réunion, and into coastal Arabia (Iraq, Bahrain, Oman, Yemen, Saudi Arabia).

SYNONYMS: *albicauda*, *albinus*, *andersoni*, *auriculata*, *beddomei*, *blanfordii*, *blythii*, *caeruleus*, *caerulescens*, *caeruleus*, *celebensis*, *ceylanica*, *crassicaudus*, *duvernoyi*, *edwardsiana*, *fulvocinerea*, *fuscipes*, *geoffroyi*, *giganteus*, *griffithii*, *heterodon*, *indicus*, *kandianus*, *kroonii*, *kuekenthali*, *leucura*, *luzoniensis*, *malabaricus*, *mauritiana*, *media*, *melanodon*, *microtis*, *mulleri*, *muschata*, *myosurus*, *nemorivagus*, *nitidofulva*, *occultidens*, *palawanensis*, *pealana*, *pilorides*, *riukiuana*, *rubicunda*, *sacer*, *saturationis*, *semmelinckii*, *semmeliki*, *serpentarius*, *sindensis*, *soccatus*, *sonneratii*, *swinhoei*, *temminckii*, *tytleri*, *unicolor*, *viridescens*, *waldemarii*.

COMMENTS: A very variable species with a number of genetically distinct populations which almost behave like semispecies (Hasler et al., 1977; Yamagata et al., 1987; Yoshida, 1985). A number of laboratory strains have been established (Oda et al., 1985). Much of the present distribution is the result of human agency (Hutterer and Tranter, 1990). Includes *albicauda*, *auriculata*, *crassicaudus*, *duvernoyi*, *leucura*, *mauritiana*, *sacer*, and *geoffroyi*; see Heim de Balsac and Meester (1977). Includes *edwardsiana* (formerly in *Crocidura*), *luzoniensis*, *occultidens*, and *palawanensis*; see Heaney et al. (1987).

Suncus remyi Brosset, Dubost and Heim de Balsac, 1965. Biologia Gabonica, 1:170.

TYPE LOCALITY: Gabon, Makokou.

DISTRIBUTION: Two localities in rainforest of NE Gabon, Belinga and Makokou.

STATUS: IUCN - Insufficiently known. Very localized, listed in Nicoll and Rathbun (1990:21).

COMMENTS: Ecology described by Brosset (1988). One of the smallest shrews; species not recorded again since its description.

Suncus stoliczkanus (Anderson, 1877). J. Asiat. Soc. Bengal, 46:270.

TYPE LOCALITY: India, Bombay.

DISTRIBUTION: Deserts and arid country in Pakistan, Nepal, India, and Bangladesh.

SYNONYMS: *bidiana*, *leucogenys*, *subfulva*.

Suncus varilla (Thomas, 1895). Ann. Mag. Nat. Hist., ser. 6, 16:54.

TYPE LOCALITY: South Africa, Cape Prov., East London.

DISTRIBUTION: Savannahs from the Cape (South Africa) to Zimbabwe, Zambia, Tanzania, E Zaire, Malawi; an isolated record from Nigeria.

SYNONYMS: *meesteri*, *minor*, *natalensis*, *orangiae*, *tulbaghensis*, *warreni* (see Heim de Balsac and Meester, 1977:6).

COMMENTS: Closely associated with termite mounds (Lynch, 1986). Gureev (1979:383) listed *orangiae* and *warreni* as distinct species without comment. Common in the Pleistocene of Kenya (Butler and Greenwood, 1979).

Suncus zeylanicus Phillips, 1928. *Spolia Zeylan.*, 14:313.

TYPE LOCALITY: Sri Lanka, "Gonagama Estate, Kitulgala, 900 ft."

DISTRIBUTION: Highlands of Sri Lanka.

COMMENTS: Phillips (1980) stressed that *zeylanicus* differs distinctly from *murinus* in the flesh, particularly by its long and almost naked tail, and that it lives in primary forest. However, its relation to *montanus* has still to be studied.

Surdisorex Thomas, 1906. *Ann. Mag. Nat. Hist.*, ser. 7, 18:223.

TYPE SPECIES: *Surdisorex norae* Thomas, 1906.

COMMENTS: This genus is commonly included in *Myosorex* but was retained as a full genus by Hollister (1918), Meester (1953), and Heim de Balsac (1966b). Subfamily uncertain; see under *Myosorex*.

Surdisorex norae Thomas, 1906. *Ann. Mag. Nat. Hist.*, ser. 7, 18:223.

TYPE LOCALITY: Kenya, east side of Aberdare Range, near Nyeri.

DISTRIBUTION: Aberdare Range (Kenya).

COMMENTS: Formerly in *Myosorex*; see Heim de Balsac and Meester (1977). Ecology and distribution described by Duncan and Wrangham (1971).

Surdisorex polulus Hollister, 1916. *Smithson. Misc. Coll.*, 66(1):1.

TYPE LOCALITY: Kenya, west side of Mt. Kenya, 10,700 ft. (3,261 m).

DISTRIBUTION: Mount Kenya (Kenya).

COMMENTS: Included in genus *Myosorex* and regarded as a subspecies of *norae* by Heim de Balsac and Meester (1977); however, both species form a quite distinct clade. For ecology and distribution see Duncan and Wrangham (1971).

Sylvisorex Thomas, 1904. *Abstr. Proc. Zool. Soc. Lond.*, 1904(10):12.

TYPE SPECIES: *Crocidura morio* Gray, 1862.

COMMENTS: Subfamily Crocidurinae; see Repenning (1967:15). The genus was regarded as part of *Suncus* by Smithers and Tello (1976), but was retained by Ansell (1978); it may be polyphyletic and its relation to *Suncus* requires further study. Jenkins (1984) figured and discussed most of the species listed.

Sylvisorex granti Thomas, 1907. *Ann. Mag. Nat. Hist.*, ser. 7, 19:118.

TYPE LOCALITY: Uganda, Ruwenzori East, Mubuku Valley, 10,000 ft. (3,048 m).

DISTRIBUTION: Mountain forests of C (Zaire, Uganda, Rwanda) and E Africa (Kenya, Tanzania); an isolated population in Cameroon.

SYNONYMS: *camerunensis*, *mundus*.

COMMENTS: The westernmost population may represent a distinct species, *camerunensis*; see Hutterer et al. (1987b).

Sylvisorex howelli Jenkins, 1984. *Bull. Brit. Mus. (Nat. Hist.) Zool.*, 47:65.

TYPE LOCALITY: Tanzania, Uluguru Mtns, Morningside.

DISTRIBUTION: Usambara and Uluguru Mtns (Tanzania).

STATUS: IUCN - Insufficiently known.

SYNONYMS: *usambarensis*.

COMMENTS: Includes *usambarensis*, which may represent a distinct species; see Hutterer (1986b).

Sylvisorex isabellae Heim de Balsac, 1968. *Bonn. Zool. Beitr.*, 19:31.

TYPE LOCALITY: Equatorial Guinea, Bioko (Fernando Po), "Pic Santa Isabel, Refugium, 2000 m."

DISTRIBUTION: Bioko; a similar form occurs in the Bamenda Highlands, Cameroon.

COMMENTS: Included in *morio* by Heim de Balsac and Meester (1977), but represents a distinctly smaller species.

Sylvisorex johnstoni (Dobson, 1888). *Proc. Zool. Soc. Lond.*, 1887:577 [1888].

TYPE LOCALITY: Cameroon, Rio del Rey.

DISTRIBUTION: Lowland forest of the Zaire Basin, SW Cameroon, Gabon, Bioko, Congo Republic, Zaire, Uganda, Tanzania, Burundi.

SYNONYMS: *dieterleni*.

COMMENTS: Species reviewed by Hutterer (1986b); recently found in the Congo Republic (Dowsett and Granjon, 1991) and Burundi (Kerbis, pers. comm.).

Sylvisorex lunaris Thomas, 1906. Ann. Mag. Nat. Hist., ser. 7, 18:139.

TYPE LOCALITY: Uganda, "Mubuku Valley, Ruwenzori East, 12,000 ft." (3,810 m).

DISTRIBUTION: The high mountain zone of C Africa up to 4,500 m; Ruwenzori (Uganda, Zaire), Virunga Volcanoes (Rwanda), and on both sides of Lake Kivu (Zaire, Burundi).

SYNONYMS: *ruandae*.

COMMENTS: Includes *ruandae* but not *oriundus*; both were listed as distinct species by Gureev (1979:380-381).

Sylvisorex megalura (Jentink, 1888). Notes Leyden Mus., 10:48.

TYPE LOCALITY: Liberia, Junk River, Schieffelinville.

DISTRIBUTION: Tropical forest zone of Africa from Upper Guinea to Ethiopia and south to Mozambique and Zimbabwe.

SYNONYMS: *angolensis*, *gemmeus*, *infuscus*, *irene*, *phaeopus*, *sheppardi*, *sorella*, *sorelloides* (see Heim de Balsac and Meester, 1977:7-8).

COMMENTS: *S. megalura* is the most common species of the genus, and enters forested savannas; range mapped by Hutterer et al. (1987b). Gureev (1979:381) listed *sorella* as a distinct species without comment. Some geographic variation exists, the Central African forest populations being smallest and darkest.

Sylvisorex morio (Gray, 1862). Proc. Zool. Soc. Lond., 1862:180.

TYPE LOCALITY: "Cameroon Mountains".

DISTRIBUTION: Confined to Mount Cameroon (Cameroon).

COMMENTS: Does not include *isabellae*; see under that species.

Sylvisorex ollula Thomas, 1913. Ann. Mag. Nat. Hist., ser. 8, 11:321.

TYPE LOCALITY: "Cameroons, Bitye, Ja River, 2,000 feet" (610 m).

DISTRIBUTION: S Cameroon and adjacent Nigeria; Gabon; S Zaire.

STATUS: IUCN - Insufficiently known. *S. ollula* is of conservation concern (Nicoll and Rathbun, 1990:21).

COMMENTS: The largest species of the genus; discussed in some detail by Dieterlen and Heim de Balsac (1979).

Sylvisorex oriundus Hollister, 1916. Bull. Am. Mus. Nat. Hist., 35:672.

TYPE LOCALITY: Zaire, Medje.

DISTRIBUTION: NE Zaire.

COMMENTS: Often included in *ollula* but as regarded distinct by Dieterlen and Heim de Balsac (1979), a view supported by personal examination of the holotype.

Sylvisorex vulcanorum Hutterer and Verheyen, 1985. Z. Säugetierk., 50:266.

TYPE LOCALITY: Rwanda, "Karisoke (0°28'S., 29°29'E., 3100 m), Parc National des Volcans".

DISTRIBUTION: High altitude rainforest of E Zaire, Uganda, Rwanda, and Burundi.

STATUS: *S. vulcanorum* is of conservation concern (Nicoll and Rathbun, 1990:21).

COMMENTS: One of the smallest species in the genus; rather similar to *S. granti*.

Subfamily Soricinae Fischer von Waldheim, 1817. Mem. Soc. Imp. Nat. Moscow, 5:372.

COMMENTS: The recognition of two subfamilies within the Soricidae is mainly based on Repenning (1967), and has been widely accepted; see George (1986), but see also comments under family. Reumer (1984) modified the tribal subdivision. Work in progress, however, raises doubt on the validity of current concepts.

Anourosorex Milne-Edwards, 1872. Rech. Hist. Nat. Mamm., p. 264.

TYPE SPECIES: *Anourosorex squamipes* Milne-Edwards, 1872.

SYNONYMS: *Pygmura*.

COMMENTS: Tribe Neomyini (Repenning, 1967:61) or Anourosoricini. Reumer (1984:17) placed the genus in the tribe Amblycoptini Kormos, 1926, but this is antedated by

Anourosoricini Anderson, 1879. Specific taxonomy is in need of revision. For the fossil history, see Zheng (1985) and Storch and Qiu (1991).

Anourosorex squamipes Milne-Edwards, 1872. Rech. Hist. Nat. Mamm., p. 264.

TYPE LOCALITY: China, Sichuan Prov., probably Moupin (= Baoxing).

DISTRIBUTION: Shaanxi and Hubei, south to Yunnan (China); Taiwan; N and W Burma; Assam (India) and Bhutan; North Vietnam; Thailand.

SYNONYMS: *assamensis*, *capito*, *capnias*, *schmidi*, *yamashinai*.

COMMENTS: Includes *schmidi* and *yamashinai* as subspecies; see Petter (1963b) and Jameson and Jones (1977).

Blarina Gray, 1838. Proc. Zool. Soc. Lond., 1837:124 [1838].

TYPE SPECIES: *Corsira* (*Blarina*) *talpoides* Gray, 1838 (= *Sorex talpoides* Gapper, 1830 = *Sorex brevicaudus* Say, 1823).

SYNONYMS: *Anotus*, *Blaria*, *Brachysorex*, *Corsia*; *Talposorex* Pomel (not Lesson).

COMMENTS: Tribe Blarinini (Repenning, 1967:37). Reviewed by George et al. (1982, 1986).

Blarina brevicauda (Say, 1823). In Long, Account Exped. Pittsburgh to Rocky Mtns, 1:164.

TYPE LOCALITY: USA, Engineer cantonment, west bank of the Missouri R.; restricted to Nebraska, Washington Co., approximately 2 miles east Ft. Calhoun by Jones (1964:68).

DISTRIBUTION: S Canada west to C Saskatchewan and east to SE Canada, south to Nebraska and N Virginia (USA).

SYNONYMS: *aloga*, *angusta*, *angusticeps*, *churchi*, *compacta*, *costaricensis*, *dekayi*, *fossilis*, *hooperi*, *kirtlandi*, *manitobensis*, *micrurus*, *ozarkensis*, *pallida*, *simplicidens*, *talpoides*, *telmalestes*.

COMMENTS: Includes *telmalestes* (see review by George et al., 1986, Mammalian Species, 261), which Hall (1981:57) listed as a distinct species.

Blarina carolinensis (Bachman, 1837). J. Acad. Nat. Sci. Philadelphia, 7:366.

TYPE LOCALITY: USA, "in the upper and maritime districts of South Carolina".

DISTRIBUTION: S Illinois east to N Virginia, and south through E Texas and N Florida (USA).

SYNONYMS: *peninsulae*, *shermani*.

COMMENTS: For specific status see Genoways and Choate (1972) and Tate et al. (1980). Hall (1981:54) listed *carolinensis* as a subspecies of *brevicauda*. The Florida population (*peninsulae*) may represent a valid species (George et al., 1982).

Blarina hylophaga Elliot, 1899. Field Columb. Mus. Publ., Zool. Ser., 1:287.

TYPE LOCALITY: USA, Oklahoma, Murray Co., Dougherty.

DISTRIBUTION: USA: S Nebraska and SW Iowa south to S Texas; east to Missouri and NW Arkansas; Oklahoma; extending into Louisiana.

SYNONYMS: *mimina*, *plumbea*.

COMMENTS: Original spelling *hulophaga* Elliot, 1899, corrected to *hylophaga* by Elliot (1905). Formerly included in *carolinensis*, but separated as a distinct species by George et al. (1981).

Blarinella Thomas, 1911. Proc. Zool. Soc. Lond., 1911:166.

TYPE SPECIES: *Sorex quadraticauda* Milne-Edwards, 1872.

COMMENTS: Tribe Soricini; see Repenning (1967:61). The genus is known from the Late Miocene of China (Storch and Qiu, 1991), and was also recorded from the Pleistocene of Europe (Reumer, 1984).

Blarinella quadraticauda (Milne-Edwards, 1872). Rech. Hist. Nat. Mamm., p. 261.

TYPE LOCALITY: China, Sichuan, "Moupin, Thibet oriental".

DISTRIBUTION: Montane taiga forest of Gansu, Shaanxi, Sichuan, and Yunnan (China).

SYNONYMS: *griselda*.

COMMENTS: Includes *griselda*; see Ellerman and Morrison-Scott (1951) and Hoffmann (1987).

Blarinella wardi Thomas, 1915. Ann. Mag. Nat. Hist., ser. 8, 15:336.

TYPE LOCALITY: "Hpimaw, Upper Burma, about 26°N., 98°35'E. Alt. 8000'."

DISTRIBUTION: Upper Burma and Yunnan (China).

COMMENTS: Included in *quadraticauda* by Ellerman and Morrison-Scott (1951) and subsequent authors, but the species has a much smaller and narrower skull (see measurements in Hoffmann, 1987:134) and is therefore regarded as distinct. Differences were also recognized by Corbet (1978c:26).

Chimarrogale Anderson, 1877. J. Asiat. Soc. Bengal, 46:262.

TYPE SPECIES: *Crossopus himalayicus* Gray, 1842.

SYNONYMS: *Chimmarogale*, *Crossogale*.

COMMENTS: Tribe Neomyini; see Repenning (1967:61). Because of the presence of white teeth the genus was occasionally included in subfamily Crocidurinae, but since Repenning (1967), overwhelming evidence has been accumulated showing that *Chimarrogale* is a soricine shrew (Vogel and Besancon, 1979; Mori et al., 1991). Gureev (1971:226) included *Chimarrogale* in his subtribe Nectogalina within the Blarinini, while Reumer (1984:14) included it in the tribe Soriculini; see comments under genus *Neomys*. Includes *Crossogale*; see Harrison (1958), who also revised the genus. His arrangement was found to be more realistic than the present practice of lumping all forms together in one or two species.

Chimarrogale hantu Harrison, 1958. Ann. Mag. Nat. Hist., ser. 13, 1:282.

TYPE LOCALITY: "banks of a stream at low altitude (under 1,000 ft.) in the Ulu Langat Forest Reserve, Selangor, Malaya, about 20 km. east of Kuala Lumpur."

DISTRIBUTION: Tropical forest of the Malaysian peninsula.

COMMENTS: Included in *himalayica* by Medway (1977) and other authors but retained by Jones and Mumford (1971). The species differs considerably in its morphology and ecology from the species which inhabit the Himalayan region. The photograph of a live animal in Nowak (1991:156) depicts this species.

Chimarrogale himalayica (Gray, 1842). Ann. Mag. Nat. Hist., [ser. 1], 10:261.

TYPE LOCALITY: "India", Punjab, Chamba.

DISTRIBUTION: Kashmir through SE Asia to Indochina; C and S China; Taiwan.

SYNONYMS: *leander*, *varennei*.

COMMENTS: Corbet (1978c) included *leander*, *platycephala*, *varennei*, and probably *hantu* in *himalayica*. Gureev (1979) listed *leander*, *hantu*, *platycephala*, and *varennei* as distinct species without comment; both views are only partially accepted here. Species reviewed by Jones and Mumford (1971) and Hoffmann (1987).

Chimarrogale phaeura Thomas, 1898. Ann. Mag. Nat. Hist., ser. 7, 2:246.

TYPE LOCALITY: Malaysia, Sabah, "Saiap, Mount Kina Balu".

DISTRIBUTION: Streams in tropical forest of Borneo island.

COMMENTS: Medway (1977) considered *phaeura* as a subspecies of *himalayica* but Corbet (1978c) and Jones and Mumford (1971) maintained *styani* and *phaeura* as separate species. Ellerman and Morrison-Scott (1966:87) included *sumatrana* in this species, but Gureev (1979:458) listed it as a distinct species, a view followed here.

Chimarrogale platycephala (Temminck, 1842). Fauna Japon., 1(Mamm.), p. 23, pl. V, fig. 1.

TYPE LOCALITY: Japan, Kyushu, near Nagasaki and Bungo.

DISTRIBUTION: Most of the Japanese Islands.

COMMENTS: Included in *himalayica* since Ellerman and Morrison-Scott (1951), but retained as a separate species by Harrison (1958), Hutterer and Hürter (1981), Hoffmann (1987), and Corbet and Hill (1991). Arai et al. (1985) reported on clinal size variation in Japan. For date of publication see Holthuis and Sakai (1970).

Chimarrogale styani De Winton, 1899. Proc. Zool. Soc. Lond., 1899:574.

TYPE LOCALITY: China, "Yangl-iu-pa, N.W. Sechuen [= Sichuan]."

DISTRIBUTION: Shensi and Sichuan (China), and N Burma.

COMMENTS: Certainly a distinct species, and regarded as such by Jones and Mumford (1971), Corbet (1978c), and Hoffmann (1987). Occurs nearly sympatrically with *himalayica* in N Burma.

Chimarrogale sumatrana (Thomas, 1921). Ann. Mag. Nat. Hist., ser. 9, 7:244.

TYPE LOCALITY: Indonesia, Sumatra, "Pager Alam, Padang Highlands".

DISTRIBUTION: Streams in tropical forest of Sumatra.

COMMENTS: Regarded as a race of *phaeura* by Ellerman and Morrison-Scott (1966:87), but considered distinct by Harrison (1958) and Gureev (1979).

Cryptotis Pomel, 1848. Arch. Sci. Phys. Nat. Geneve, 9:249.

TYPE SPECIES: *Sorex cinereus* Bachman, 1837 (= *Sorex parvus* Say, 1823).

SYNONYMS: *Brachysorex*, *Soriciscus*, *Xenosorex*.

COMMENTS: Tribe Blarinini; see Repenning (1967:37). Revised in part by Choate (1970) and Choate and Fleharty (1974); the South American species still call for a thorough study. Gureev (1979:433-437) listed many species which Choate (1970) considered synonyms. Formerly included *C. surinamensis* which was transferred to *Sorex araneus* by Husson (1963).

Cryptotis avia G. M. Allen, 1923. Proc. New England Zool. Club, 8:37.

TYPE LOCALITY: "El Verjón, in the Andes east of Bogotá, Colombia."

DISTRIBUTION: E Cordillera of Colombia.

COMMENTS: Accepted as a species by Choate and Fleharty (1974).

Cryptotis endersi Setzer, 1950. J. Washington Acad. Sci., 40:300.

TYPE LOCALITY: "Cylindro, above 4000 ft., Bocas del Toro, Panamá."

DISTRIBUTION: Known only from the type locality; status discussed by Choate (1970:285).

COMMENTS: Considered a relict species by Choate (1970).

Cryptotis goldmani (Merriam, 1895). N. Am. Fauna, 10:25.

TYPE LOCALITY: "mountains near Chilpancingo, Guerrero, Mexico" (altitude 10,000 ft).

DISTRIBUTION: Highlands of Estado de México, Jalisco and Oaxaca to Chiapas (Mexico), and WC Guatemala.

SYNONYMS: *alticola*, *euryrhynchis*, *fossor*, *frontalis*, *griseoventris*, *guerrerensis*, *machetes*.

COMMENTS: Choate (1970) recognized two distinct subspecies, *alticola* and *goldmani*.

Cryptotis goodwini Jackson, 1933. Proc. Biol. Soc. Washington, 46:81.

TYPE LOCALITY: "Calel, altitude 10200 feet, Guatemala."

DISTRIBUTION: S Guatemala, W El Salvador, and S Mexico.

COMMENTS: Reviewed by Choate and Fleharty (1974, Mammalian Species, 44) who included the species in the *mexicana* group (*mexicana*, *goldmani*, *goodwini*); recorded from Mexico by Hutterer (1980).

Cryptotis gracilis Miller, 1911. Proc. Biol. Soc. Washington, 24:221.

TYPE LOCALITY: "head of Larí River, Talamanca [= Limon], Costa Rica", near base of Pico Blanco.

DISTRIBUTION: SE Costa Rica and W Panama.

SYNONYMS: *jacksoni*.

COMMENTS: Includes *jacksoni*; considered a relict species by Choate (1970). Specimens from Honduras previously included in *gracilis* were described as a new species, *C. hondurensis* by Woodman and Timm (1992).

Cryptotis hondurensis Woodman and Timm, 1992. Proc. Biol. Soc. Washington, 105:2.

TYPE LOCALITY: "Honduras: Francisco Morazán Department; 12 km WNW of El Zamorano, W slope of Cerro Uyuca [= Cerro Oyuca; ca. 14°05'N, 87°06'W], 1680 m."

DISTRIBUTION: Pine, mixed pine, and oak forests on highlands east of Tegucigalpa, Honduras; possibly also in adjacent regions of Guatemala, El Salvador, and Nicaragua.

COMMENTS: Formerly included in *gracilis*, see comments therein.

Cryptotis magna (Merriam, 1895). N. Am. Fauna, 10:28.

TYPE LOCALITY: "Totontepec, Oaxaca" (altitude 6800 ft), Mexico.

DISTRIBUTION: NC Oaxaca (Mexico).

COMMENTS: Reviewed by Robertson and Rickart (1975, Mammalian Species, 61). A relict species, according to Choate (1970).

Cryptotis meridensis Thomas, 1898. Ann. Mag. Nat. Hist., ser. 7, 1:457.

TYPE LOCALITY: Venezuela, "Merida, alt. 2165 m."

DISTRIBUTION: Cordillera de Merida, and mountains near Caracas, Venezuela, see Tello (1979).

COMMENTS: This species was commonly included in *thomasi* (Handley, 1976; Eisenberg, 1989) but is much larger and has a more robust dentition. Choate (pers. comm., 1983) and Hutterer (1986d) therefore considered *meridensis* a valid species.

Cryptotis mexicana (Coues, 1877). Bull. U.S. Geol. Geogr. Surv. Terr., 3:652.

TYPE LOCALITY: "Xalapa, Mexico" [= Jalapa, ca. 1520 m, Veracruz].

DISTRIBUTION: Humid upper tropical zone from Tamaulipas to Chiapas (Mexico); altitudinal range 520 to 3200 m.

SYNONYMS: *madrea*, *nelsoni*, *obscura*, *peregrina*, *phillipsii*.

COMMENTS: *Notiosorex* (*Xenosorex*) *phillipsii* is a synonym of *Cryptotis mexicana*; see Choate (1969). Reviewed by Choate (1973, Mammalian Species, 28), who recognized four subspecies, *mexicana*, *nelsoni*, *obscura*, and *peregrina*.

Cryptotis montivaga (Anthony, 1921). Am. Mus. Novit., 20:5.

TYPE LOCALITY: "Bestion, Prov. del Azuay, Ecuador; altitude 10,000 ft." [3,000 m].

DISTRIBUTION: Andean zone of S Ecuador.

Cryptotis nigrescens (J. A. Allen, 1895). Bull. Am. Mus. Nat. Hist., 7:339.

TYPE LOCALITY: "San Isidro (San José), Costa Rica".

DISTRIBUTION: Tropical lowland of Yucatan Peninsula and highlands of Guerrero, Chiapas and Las Margaritas (Mexico), also highlands of Guatemala, El Salvador, Honduras, Costa Rica, and Panama.

SYNONYMS: *mayensis*, *merriami*, *merus*, *micrura*, *tersus*, *zeteki*.

COMMENTS: There are three distinct subspecies (*nigrescens*, *mayensis*, and *merriami*; see Choate, 1970); N. Woodman and R. Timm (pers. comm.) believe the latter two are valid species.

Cryptotis parva (Say, 1823). In Long, Account Exped. Pittsburgh to Rocky Mtns, 1:163.

TYPE LOCALITY: "Engineer Cantonment," west bank of Missouri River; restricted by Jones (1964:68) to USA, Nebraska, Washington Co., approximately 2 mi. east Ft. Calhoun.

DISTRIBUTION: Extreme SE Canada through EC and SW USA, Mexico and Central America south to Panama.

SYNONYMS: *berlandieri*, *celatus*, *cinereus*, *elasson*, *exilipes*, *eximius*, *floridana*, *harlani*, *macer*, *nayaritensis*, *micrurus*, *olivaceus*, *orophila*, *pergracilis*, *pueblensis*, *soricina*, *tropicalis*.

COMMENTS: Reviewed by Whitaker (1974, Mammalian Species, 43), who recognized 9 subspecies, 5 of which occur in Middle America (Choate, 1970). Handley (pers. comm., 1989) suggested that *floridana* may be a distinct taxon; if this proves correct, then the other southern subspecies should be restudied.

Cryptotis squamipes (J. A. Allen, 1912). Bull. Am. Mus. Nat. Hist., 31:93.

TYPE LOCALITY: "crest of Western Andes (alt. 10,340 ft.), 40 miles west of Popayan, Cauca, Colombia."

DISTRIBUTION: S Cordillera Occidental of Colombia and Ecuador.

Cryptotis thomasi (Merriam, 1897). Proc. Biol. Soc. Washington, 11:227.

TYPE LOCALITY: "Plains of Bogota, Colombia (on G. O. Child's estate, near city of Bogota, alt. about 9000 ft)."

DISTRIBUTION: Cordillera Oriental of Colombia, Ecuador, and N Peru.

SYNONYMS: *equatoris*, *medellinius*, *osgoodi*.

Megsorex Hibbard, 1950. Contrib. Mus. Paleontol. Univ. Michigan, 8:129.

TYPE SPECIES: *Notiosorex gigas* Merriam, 1897.

COMMENTS: Tribe Neomyini; see Repenning (1967) and George (1986).

Megsorex gigas (Merriam, 1897). Proc. Biol. Soc. Washington, 11:227.

TYPE LOCALITY: Mexico, Jalisco, near San Sebastián, mountains at Milpillas.

DISTRIBUTION: Nayarit to Oaxaca (Mexico).

COMMENTS: Formerly included in *Notiosorex* and still done so by Hall (1981:65); but Repenning (1967:56) and Armstrong and Jones (1972a, Mammalian Species, 16) considered *Megsorex* a distinct genus; a view supported by George (1986) on the basis of allozyme data.

Nectogale Milne-Edwards, 1870. C.R. Acad. Sci. Paris, 70:341.

TYPE SPECIES: *Nectogale elegans* Milne-Edwards, 1870.

COMMENTS: Subfamily Soricinae; see Vogel and Besancon (1979); tribe Neomyini; see Repenning (1967:45). Gureev (1971:226) placed *Nectogale* in a new subtribe *Nectogalina* within the *Blarinini*, a view not followed by other authors.

Nectogale elegans Milne-Edwards, 1870. C.R. Acad. Sci. Paris, 70:341.

TYPE LOCALITY: China, Sichuan, "Moupin" (= Baoxing).

DISTRIBUTION: Cold mountain streams across the Himalayas and in W and C China; Tibet (Xizang Aut. Region), Nepal, Sikkim (India), Bhutan, N Burma, and Yunnan, Sichuan and Shaanxi (China).

SYNONYMS: *sikhimensis*.

COMMENTS: Includes *sikhimensis*, see Ellerman and Morrison-Scott (1951) and Hoffmann (1987). Species highly adapted for a semi-aquatic life (Hutterer, 1985).

Neomys Kaup, 1829. Skizz. Entwickel.-Gesch. Nat. Syst. Europ. Thierwelt, 1:117.

TYPE SPECIES: *Sorex daubentonii* Erxleben, 1777 (= *Sorex fodiens* Pennant, 1771).

SYNONYMS: *Crossopus*, *Hydrogale*, *Leucorrhynchus*, *Pinalea*.

COMMENTS: Type genus of tribe Neomyini Repenning, 1967, for which Reumer (1984:14) used *Soriculini* Kretzoi, 1965. However, both are antedated by Neomyini Matschie, 1909.

Neomys anomalus Cabrera, 1907. Ann. Mag. Nat. Hist., ser. 7, 20:214.

TYPE LOCALITY: Spain, "San Martin de la Vega, Jarama River, Madrid Prov."

DISTRIBUTION: Temperate woodlands of Europe, from Portugal to Poland and east to Voronezh, Russia. Records from N Asia Minor and Iran uncertain.

SYNONYMS: *amphibius*, *josti*, *milleri*, *mokrzeckii*, *rhenanus*, *soricoides* (see Spitzenberger, 1990b).

COMMENTS: *Sorex amphibius* Brehm, 1826 is probably an earlier name for the species (von Knorre, pers. comm.), although it has to be treated as a *nomen oblitum*.

Neomys fodiens (Pennant, 1771). Synopsis Quadrupeds, p. 308.

TYPE LOCALITY: Germany, Berlin.

DISTRIBUTION: Most of Europe including the British Isles and eastwards to Lake Baikal, Yenise River (Russia), Tien Shan (China), and NW Mongolia; disjunct in Sakhalin Isl and adjacent Siberia, Jilin (China), and N Korea.

SYNONYMS: *albus*, *aquaticus*, *argenteus*, *bicolor*, *brachyotus*, *canicularius*, *carinatus*, *ciliatus*, *collaris*, *constrictus*, *dagestanicus*, *daubentonii*, *eremita*, *fimbriatus*, *fluviatilis*, *griseogularis*, *hermanni*, *hydrophilus*, *ignotus*, *intermedius*, *limchjnhunii*, *lineatus*, *linneana*, *liricaudatus*, *longobarda*, *macrourus*, *minor*, *musculus*, *naias*, *natans*, *newtoni*, *niethammeri*, *nigripes*, *orientalis*, *orientis*, *pennantii*, *psilurus*, *remifer*, *rivalis*, *sowerbyi*, *stagnatilis*, *stresemanni*, *teres*, *watasei*.

COMMENTS: Includes *teres*, *orientis*, and *watasei* as possible subspecies (Ognev, 1928; Hoffmann, 1987; Yudin, 1989). Many of the listed synonyms have never been properly studied and identified; recently, Lehmann (1983) referred *constrictus* to *Crocidura russula*. The form *niethammeri* from NE Spain may represent a valid species (López-Fuster et al., 1990).

Neomys schelkovnikovi Satunin, 1913. Trud. Obsch. Izuch. Chernomorsk. Poberezh., 3:24.

TYPE LOCALITY: "Svanetiya," = Georgia, Mestiiskii r-n., Ushkul (see Pavlinov and Rossolimo, 1987:29).

DISTRIBUTION: Caucasus (Armenia, Azerbaijan, Georgia); and perhaps adjacent Turkey and Iran.

SYNONYMS: *balkaricus*, *leptodactylus*.

COMMENTS: Left *incertae sedis* by Ellerman and Morrison-Scott (1951), but given specific rank by most recent Russian authors. Reviewed by Sokolov and Tembotov (1989).

Notiosorex Coues, 1877. Bull. U.S. Geol. Geogr. Surv. Terr., 3:646.

TYPE SPECIES: *Sorex (Notiosorex) crawfordi* Coues, 1877.

COMMENTS: Tribe Neomyini; see Repenning (1967:45). Reumer (1984:14) created a new tribe *Notiosoricini* to include *Notiosorex*, but George (1986:160) could find no evidence to support this separation. Hall (1981:65) included also *Megasorex gigas*, but Repenning

(1967:56), Armstrong and Jones (1972), and George (1986) considered *Megasorex* a distinct genus. *Notiosorex* (*Xenosorex*) *phillipsii* is a synonym of *Cryptotis mexicana*; see Choate (1969). Lindsay and Jacobs (1985) described an extinct species from Pliocene sediments of Chihuahua, Mexico.

Notiosorex crawfordi (Coues, 1877). Bull. U.S. Geol. Geogr. Surv. Terr., 3:631.

TYPE LOCALITY: USA, Texas, El Paso Co., 2 mi. above El Paso, "near Fort Bliss, New Mexico (Practically El Paso Texas)." (Merriam, 1895b:32).

DISTRIBUTION: SW and SC USA to Baja California and N and C Mexico.

SYNONYMS: *evotis*.

COMMENTS: Includes *evotis*; see Armstrong and Jones (1971a). Reviewed by Armstrong and Jones (1972b, Mammalian Species, 17).

Sorex Linnaeus, 1758. Syst. Nat., 10th ed., 1:53.

TYPE SPECIES: *Sorex araneus* Linnaeus, 1758.

SYNONYMS: *Amphisorex*, *Atophyrax*, *Corsira*, *Eurosorex*, *Homalurus*, *Microsorex*, *Musaraneus*, *Neosorex*, *Ognevia*, *Otisorex*, *Oxyrhin*, *Soricidus*, *Stroganovia*.

COMMENTS: Type genus of Soricidae. The systematic relationships of a large number of Holarctic species were studied by George (1988); her proposals for subgeneric allocation are mainly followed here. Keys and/or reviews are available for the species of various geographical areas: Canada (van Zyll de Jong, 1983a); North and Middle America (Junge and Hoffmann, 1981; Carraway, 1990); China (Hoffmann, 1987); Siberia (Yudin, 1989); and Europe (Niethammer and Krapp, 1990). *Microsorex* was formerly regarded as a full genus, then reduced to a subgenus of *Sorex* by Diersing (1980b), and is now regarded as a synonym of subgenus *Otisorex* (see George, 1988). The subgenus *Amphisorex* (type species *Sorex hermanni* Duvernoy, 1834) was alternatively listed under *Sorex* and *Neomys* by Miller (1912a), Ellermann and Morrison-Scott (1951), and Corbet (1978c). Miller (1912a) stated that the type of *Sorex hermanni* consisted of a skin of *Sorex araneus* and a skull of *Neomys fodiens*. To avoid further confusion, I herewith designate the skin of *Sorex hermanni* Duvernoy, 1834 as the lectotype, thus making *hermanni* a synonym of *araneus*, and *Amphisorex* a synonym of *Sorex*. Besides subgenera a number of species groups have been distinguished such as the *araneus-arcticus* group (Meylan and Hausser, 1973; Hausser et al., 1985), the *cinereus* group (van Zyll de Jong, 1991b), and the *vagrans* group (Carraway, 1990), the boundaries and contents of which are still highly controversial. Old World species of *Sorex* were reviewed by Dannelid (1991b) who provided a phylogenetic hypothesis of relationships.

Sorex alaskanus Merriam, 1900. Proc. Washington Acad. Sci., 2:18.

TYPE LOCALITY: USA, "Point Gustavus, Glacier Bay, Alaska".

DISTRIBUTION: Known only from the type locality.

COMMENTS: Subgenus *Sorex*. The species was tentatively included in *palustris* by Junge and Hoffmann (1981), but retained as a species by Hall (1981), Jones et al. (1982), and George (1988); a view supported by the skull figures and measurements given by Jackson (1928). Apparently the species has not been collected again since 1899.

Sorex alpinus Schinz, 1837. Neue Denkschr. Allgem. Schweiz. Gesell. Naturwiss. Neuchatel, 1:13.

TYPE LOCALITY: Switzerland, Canton Uri, St. Gotthard Pass.

DISTRIBUTION: Montane forests of C Europe; including Pyrenees, Carpathians, Tatra, Sudeten, Harz, and Jura Mtns.

SYNONYMS: *hercynicus*, *intermedius*, *longobarda*, *tatricus*.

COMMENTS: Subgenus *Sorex* or *Homalurus*; see Hutterer (1982b). Reviewed by Spitzenberger (1990a).

Sorex araneus Linnaeus, 1758. Syst. Nat., 10th ed., 1:53.

TYPE LOCALITY: "in Europe cryptis"; restricted to Uppsala, Sweden by Thomas (1911a:143).

DISTRIBUTION: C, E, and N Europe including the British Isls (with some isolated populations in France, Italy and Spain), east to Siberia.

SYNONYMS: *alticola*, *antinorii*, *bergensis*, *bohemicus*, *bolkayi*, *carpathicus*, *castaneus*, *concinus*, *crassicaudatus*, *csikii*, *daubentonii*, *eleonorae*, *grantii*, *hermanni*, *huelleri*, *ignotus*, *iochanseni*, *labiosus*, *macrotrichus*, *marcius*, *melanodon*, *mollis*, *monsivairani*, *nigra*,

nuda, *ryphaeus*, *pallidus*, *personatus*, *petrovi*, *peucinius*, *preussi*, *pulcher*, *pyrenaicus*, *pyrrhonota*, *quadricaudatus*, *rhinolophus*, *silanus*, *surinamensis*, *tetragonurus*, *uralensis*, *vulgaris*, *wettsteini*.

COMMENTS: Type species of subgenus *Sorex*. *S. araneus* is the preferred Palearctic species for studies in ecology and evolution; see Hausser et al. (1990) and Hausser (1991) for reviews. The species is well known for its Robertsonian chromosome polymorphism (Meylan, 1964) and for the tendency to establish local karyotype races (Hausser et al., 1985; Searle, 1984; Zima and Král, 1984b); in Switzerland, two karyotype races occur which behave like parapatric species (Hausser et al., 1986). Includes *Blarina pyrrhonota* Jentink, 1910, a name assigned to *Cryptotis surinamensis* by Cabrera (1958); however, Husson (1963) showed that the locality information was incorrect and that it was based on a *Sorex araneus*. The holotype skin (skull lost) of *Sylvisorax preussi* Matschie, formerly thought to represent an endemic *Myosorex* of Mt. Cameroon (Heim de Balsac, 1968b), is a *Sorex araneus* and is therefore included as a synonym. *Sorex isodon marchicus*, recently described from E Germany (Passarge, 1984), is also tentatively included in *araneus* as no clear characters are known to distinguish it from the latter.

Sorex arcticus Kerr, 1792. Animal Kingdom, p. 206.

TYPE LOCALITY: Canada, Ontario, settlement on Severn River (now Fort Severn), Hudson Bay.

DISTRIBUTION: Yukon and Northwest Territory to Quebec, Nova Scotia, and New Brunswick (Canada); North Dakota, South Dakota, Minnesota, and Wisconsin (USA).

SYNONYMS: *laricorum*, *maritimensis*, *pachyurus*, *richardsonii*, *spagnicola*.

COMMENTS: Subgenus *Sorex*. Palearctic species currently referred to *arcticus* (Gromov and Baranova, 1981:18) represent *tundrensis* (Junge et al., 1983; Ivanitskaya et al., 1986); see also Sokolov and Orlov (1980) and Hoffmann (1985a). Van Zyll de Jong (1983b) and Volobouev and van Zyll de Jong (1988) suggested that *maritimensis* may be an independent species.

Sorex arizonae Diersing and Hoffmeister, 1977. J. Mammal., 58:329.

TYPE LOCALITY: USA, "upper end of Miller Canyon, 15 mi S [= 10 mi S, 4 3/4 mi E] Fort Huachuca [near spring at lower edge of Douglas fir zone, Huachuca Mts.] Cochise County, Arizona".

DISTRIBUTION: Mountains of SE Arizona and SW New Mexico (USA; see Conway and Schmitt, 1978 and Hoffmeister, 1986); Chihuahua (Mexico; see Caire et al., 1978).

COMMENTS: Referred to unnamed subgenus by George (1988). Close to *emarginatus* (see Diersing and Hoffmeister, 1977).

Sorex asper Thomas, 1914. Ann. Mag. Nat. Hist., ser. 8, 13:565.

TYPE LOCALITY: "Thian-shan [Tien-shan], Tekes Valley". Note on type specimen tag says "Jigalong" (= Dzhergalan?, see Hoffmann, 1987:119); Narynko'skii r-n., Alma-Ata Obl., Kazakhstan.

DISTRIBUTION: Tien Shan Mountains (Kazakhstan and Sinkiang, China).

COMMENTS: Subgenus *Sorex*. Type locality discussed by Hoffmann (1987) and Pavlinov and Rossolimo (1987). Does not include *excelsus* as suggested by Corbet (1978c); see under that species. Reviewed by Hoffmann (1987), who discussed the relationship between *asper* and *tundrensis*.

Sorex bairdii Merriam, 1895. N. Am. Fauna, 10:77.

TYPE LOCALITY: USA, "Astoria, [Clatsop Co.], Oregon".

DISTRIBUTION: NW Oregon (USA).

SYNONYMS: *permiliensis*.

COMMENTS: Subgenus *Otisorex*. This taxon has been alternatively referred to *obscurus*, *vagrans*, and *monticolus*, but was recently given specific rank by Carraway (1990). Includes *permiliensis* as a valid subspecies.

Sorex bedfordiae Thomas, 1911. Abstr. Proc. Zool. Soc. Lond., 1911(90):3.

TYPE LOCALITY: "Omi-san, Sze-chwan" [= China, Sichuan, Emei Shan].

DISTRIBUTION: Montane forests of S Gansu and W Shensi to Yunnan (China); adjacent Burma and Nepal.

SYNONYMS: *gomphus*, *fumeolus*, *nepalensis*, *wardii*.

COMMENTS: Subgenus *Sorex*. Formerly a subspecies of *cylindricauda* but recognized as a full species by Corbet (1978c) and Hoffmann (1987).

Sorex bendirii (Merriam, 1884). Trans. Linnean Soc. New York, 2:217.

TYPE LOCALITY: USA, "Klamath Basin, Oregon" = Oregon, Klamath Co., 1 mile (1.6 km) from Williamson River, 18 miles (29 km) SE of Fort Klamath.

DISTRIBUTION: A narrow coastal area from NW California to Washington (USA); a few records from SE British Columbia (Canada).

SYNONYMS: *albiventer*, *palmeri*.

COMMENTS: Originally described in the monotypic genus *Atophyrax* Merriam; now in subgenus *Otisorex*. Reviewed by Pattie (1973, Mammalian Species, 27).

Sorex buchariensis Ognev, 1921. Ann. Mus. Zool. Acad. Sci. St. Petersburg, 22:320.

TYPE LOCALITY: Tadzhikistan, Pamir Mountains, Davan-su River Valley, "Gornaya Bukhara, drevyaya morena lednika Oshanina, dol. p. Davan-Su (khrebet' Petra Velikavo)" [Montane Bukhara, ancient moraine of Oshanin glacier, Peter the Great range].

DISTRIBUTION: Pamir Mtns (Tadzhikistan).

COMMENTS: Referred to subgenus *Eurosorex* by Yudin (1989). Considered a subspecies of *thibetanus* by Dolgov and Hoffmann (1977) and Hoffmann (1987), but retained as a distinct species by Ivanitskaya et al. (1977), Hutterer (1979), Zaitsev (1988), and Yudin (1989). The karyotype of two specimen from Tadzhikistan was similar to that of *volnuchini* (Ivanitskaya et al., 1977).

Sorex caecutiens Laxmann, 1788. Nova Acta Acad. Sci. Petropoli, 1785, 3:285 [1788].

TYPE LOCALITY: Russia, Buryatskaya ASSR, SW shore of Lake Baikal (Pavlinov and Rossolimo, 1987:17).

DISTRIBUTION: Taiga and tundra zones from E Europe to E Siberia, south to C Ukraine, N Kazakhstan, Altai Mtns, Mongolia, Gansu and NE China, to Korea and Sakhalin.

SYNONYMS: *altaicus*, *annexus*, *araneoides*, *buxtoni*, *centralis*, *koreni*, *lapponicus*, *macropygmaeus*, *karpinskii*, *pleskei*, *rozanovi*, *tasicus*, *tungussensis*.

COMMENTS: Subgenus *Sorex*. This species still offers many unsolved problems, along with the species of the *tundrensis* and *arcticus* groups. Names like *annexus*, *canculus*, *granarius*, and *shintoi* have been included in *caecutiens* in the past but are presently included in other species or treated as separate species; see Hoffmann (1987) for a discussion of problems. The European range was reviewed by Sulkava (1990).

Sorex camtschatica Yudin, 1972. Teriologiya, 1:48.

TYPE LOCALITY: Russia, "Kamchatka, Kambal'naya Bay".

DISTRIBUTION: Russia, S Kamchatka Peninsula.

COMMENTS: Subgenus *Otisorex*. Formerly included in *cinereus* (van Zyll de Jong, 1982) but now recognized as a full species (Ivanitskaya and Kozlovskii, 1983; van Zyll de Jong, 1991b).

Sorex cansulus Thomas, 1912. Ann. Mag. Nat. Hist., ser. 8, 10:398.

TYPE LOCALITY: China, Gansu, "46 miles south-east of SE Taochou" (= Lintan).

DISTRIBUTION: Known only from the type locality.

COMMENTS: Subgenus *Sorex*, related to *tundrensis*. The species was recognized by Hoffmann (1987); no specimens other than the type series are known.

Sorex cinereus Kerr, 1792. Animal Kingdom, p. 206.

TYPE LOCALITY: Canada, Ontario, Fort Severn.

DISTRIBUTION: North America throughout Alaska and Canada and southward along the Rocky and Appalachian Mtns to 45°.

SYNONYMS: *acadicus*, *cooperi*, *fimbripes*, *fontinalis*, *forsteri*, *hollisteri*, *idahoensis*, *frankstounensis*, *lesueurii*, *miscix*, *nigriculus*, *ohionensis*, *personatus*, *platyrhinus*, *streatori*.

COMMENTS: Type species of subgenus *Otisorex*. Does not occur in Siberia as previously suggested; the taxa *haydeni*, *jacksoni*, *ugyunak*, *portenkovii*, *leucogaster*, *beringianus* and *camtschatica* have been included previously but are now considered as separate species; see comments under these taxa and Junge and Hoffmann (1981, and references cited therein), van Zyll de Jong (1982, 1991b), van Zyll de Jong and Kirkland (1989), and Pavlinov and Rossolimo (1987). *S. fontinalis* was separated from *cinereus* by Kirkland (1977), Junge and Hoffmann (1981), and Jones et al. (1992), but

is considered, together with *lesueurii*, as a subspecies (van Zyll de Jong and Kirkland, 1989). However, George's (1988) data indicate it is a sister taxon to both *cinereus* and *haydeni*.

Sorex coronatus Millet, 1828. Faune de Maine-et-Loire, I, p. 18.

TYPE LOCALITY: France, Main-et-Loire, Blou.

DISTRIBUTION: W Europe from The Netherlands and NW Germany to France and Switzerland, south to N Spain; also in Jersey (Channel Isls), Liechtenstein and westernmost tip of Austria.

SYNONYMS: *euronotus*, *fretalis*, *gemellus*, *personatus*, *santonus*.

COMMENTS: Subgenus *Sorex*. A sibling species of *araneus* (Meylan and Hausser, 1978), characterized mainly by the karyotype. Its distribution broadly overlaps with that of *araneus* in Germany. Revised by Hausser (1990).

Sorex cylindricauda Milne-Edwards, 1872. Nouv. Arch. Mus. Hist. Nat. Paris, Bull. for 1871, 7:92 [1872].

TYPE LOCALITY: China, Sichuan, Moupin (= Baoxing).

DISTRIBUTION: Montane forests of N Sichuan.

COMMENTS: Subgenus *Sorex*. Revised by Hoffmann (1987).

Sorex daphaenodon Thomas, 1907. Proc. Zool. Soc. Lond., 1907:407.

TYPE LOCALITY: Russia, Sakhalin Isl, "Dariné, 25 miles [40 km] N.W. of Korsakoff, Saghalien".

DISTRIBUTION: Ural Mountains to the Kolyma River (Siberia); Sakhalin Isl; Kamchatka Peninsula; Paramushir Isl (N Kuriles); Jilin and Nei Mongol Aut. Region (China).

SYNONYMS: *orii*, *sanguinidens*, *scaloni*.

COMMENTS: Type species of subgenus *Stroganovia*, see Yudin (1989), who recognized three subspecies, *daphaenodon*, *sanguinidens*, and *scaloni*.

Sorex dispar Batchelder, 1911. Proc. Biol. Soc. Washington, 24:97.

TYPE LOCALITY: USA, "Beede's (sometimes called Keene Heights), in the township of Keene, Essex county, New York". Redescribed by Martin (1966:131) as 0.6 mi S, 0.5 mi E St. Huberts, Essex Co., New York, lat. 44°09', long. 73°46'.

DISTRIBUTION: Appalachian Mtns from North Carolina to Maine; S New Brunswick, Nova Scotia (Canada).

SYNONYMS: *blitchi*; *macrurus* (Batchelder, not of Lehmann).

COMMENTS: Subgenus *Otisorex*. For comparison with *gaspensis* see Kirkland and Van Deusen (1979). Reviewed by Kirkland (1981, Mammalian Species, 155).

Sorex emarginatus Jackson, 1925. Proc. Biol. Soc. Washington, 38:129.

TYPE LOCALITY: "Sierra Madre, near Bolanos, altitude 7,600 feet, State of Jalisco, Mexico".

DISTRIBUTION: Durango, Zacatecas, and Jalisco (Mexico).

COMMENTS: Referred to unnamed subgenus by George (1988:456). Findley (1955b) considered this a subspecies of *oreopolus*; however, *oreopolus* belongs to subgenus *Otisorex* (Diersing and Hoffmeister, 1977). For biological and distributional information, see Alvarez and Polaco (1984) and Matson and Baker (1986).

Sorex excelsus G. M. Allen, 1923. Am. Mus. Novit., 100:4.

TYPE LOCALITY: "summit of Ho-shan (=Xue Shan), Pae-tai, 30 miles (48 km) south of Chung-tien (=Zhongdian), Yunnan, China, altitude 13000 feet."

DISTRIBUTION: Yunnan and Sichuan (China), and possibly Nepal.

COMMENTS: Subgenus *Sorex*. Considered as a possible subspecies of *asper* (Corbet, 1978c) but retained as a full species related to *tundrensis* by Hoffmann (1987) who also suggested that a specimen from Nepal recorded by Agrawal and Chakraborty (1971) may represent *excelsus*.

Sorex fumeus G. M. Miller, 1895. N. Am. Fauna, 10:50.

TYPE LOCALITY: USA, "Peterboro [Madison Co.], New York."

DISTRIBUTION: S Ontario, S Quebec, New Brunswick, and Nova Scotia (Canada); all of New England and Appalachian Mtns and adjacent areas to NE Georgia (USA).

SYNONYMS: *umbrosus*.

COMMENTS: Subgenus *Otisorex*. Reviewed by Owen (1984, *Mammalian Species*, 215). Overlaps in distribution and may be easily confused with *arcticus* in part of its range (Junge and Hoffmann, 1981).

Sorex gaspensis Anthony and Goodwin, 1924. *Am. Mus. Novit.*, 109:1.

TYPE LOCALITY: Canada, "Mt. Albert, Gaspé Peninsula, Quebec, 2000 feet elevation".

DISTRIBUTION: Gaspé Peninsula, N New Brunswick, Nova Scotia, and Cape Breton Isl (Canada).

COMMENTS: Subgenus *Otisorex*. For comparison with *dispar*, see Kirkland and Van Deusen (1979). Reviewed by Kirkland (1981, *Mammalian Species*, 155).

Sorex gracillimus Thomas, 1907. *Proc. Zool. Soc. Lond.*, 1907:408.

TYPE LOCALITY: Russia, Sakhalin Isl, "Dariné, 25 miles [40 km] N.W. of Korsakoff, Saghalien".

DISTRIBUTION: SE Siberia from S shore of the Sea of Okhotsk to N Korea and probably Manchuria; Sakhalin Isl; Hokkaido (Japan).

SYNONYMS: *hyojironis*.

COMMENTS: Subgenus *Sorex*. This species has long been included in *minutus* but its specific status is now widely accepted on the basis of penial (Dolgov and Lukanova, 1966) and cranial (Hutterer, 1979) morphology, karyotype (Orlov and Bulatova, 1983), and allozyme data (George, 1988). The inclusion of *hyojironis* follows Corbet (1978c) and is tentative.

Sorex granarius Miller, 1910. *Ann. Mag. Nat. Hist.*, ser. 8, 6:458.

TYPE LOCALITY: "La Granja, Segovia, Spain".

DISTRIBUTION: NW Iberian Peninsula (Portugal and Spain).

COMMENTS: Subgenus *Sorex*, group *araneus*. Afforded specific rank by Hausser et al. (1975); reviewed by Hausser (1990).

Sorex haydeni Baird, 1857. *Mammalia, in Repts. U.S. Expl. Surv.*, 8(1):29.

TYPE LOCALITY: USA, "Fort Union, Nebraska" (later Fort Buford, now Mondak, Montana, near Buford, Williams Co., North Dakota).

DISTRIBUTION: SE Alberta, S Saskatchewan, SW Manitoba (Canada); NW Montana southeast to Kansas, east to W and S Minnesota (USA).

COMMENTS: Subgenus *Otisorex*. Formerly included in but now separated from *cinereus* by van Zyll de Jong (1980) and Junge and Hoffmann (1981); both species are closely related (George, 1988). *S. haydeni* occurs in grassy habitats while *S. cinereus* prefers forest and woodland (van Zyll de Jong, 1980).

Sorex hosonoi Imaizumi, 1954. *Bull. Natl. Sci. Mus. Tokyo*, 35:94.

TYPE LOCALITY: "Tokiwa Mura (Maneki, about 900 m altitude, foot of Mt. Gaki, Japan Alps), Kita-Azumi Gun, Nagano Pref., Central Honsyû [= Honshu], Japan".

DISTRIBUTION: Montane forests of C Honshu (Japan).

SYNONYMS: *shiroumanus*.

COMMENTS: Subgenus *Sorex*. Imaizumi (1970b) reported that *hosonoi* occurs sympatrically with *shinto* and therefore should be considered as separate species (Corbet, 1978c).

Sorex hoyi Baird, 1857. *Mammalia, in Repts. U.S. Expl. Surv.*, 8(1):32.

TYPE LOCALITY: USA, "Racine, Wisconsin."

DISTRIBUTION: N taiga zone of Alaska, Canada and the USA, with S outliers in the montane forests of the Appalachian and Rocky Mtns.

SYNONYMS: *alnorum*, *eximius*, *intervectus*, *montanus*, *thompsoni*, *washingtoni*, *winnemana*.

COMMENTS: Formerly in *Microsorex*, which is a synonym of subgenus *Otisorex*, according to George (1988). Includes *thompsoni* (Diersing, 1980b). Reviewed by Long (1974, *Mammalian Species*, 33) and Junge and Hoffmann (1981).

Sorex hydrodromus Dobson, 1889. *Ann. Mag. Nat. Hist.*, ser. 6, 4:373.

TYPE LOCALITY: USA, Alaska, "Unalaska Islands, Aleutian Islands" (probably in error, presumably from St. Paul, Pribilof Isls).

DISTRIBUTION: Known only from St. Paul in the Pribilof Isls, Bering Sea.

SYNONYMS: *pribilofensis*.

COMMENTS: Subgenus *Otisorex*. There is some discrepancy in the literature on the correct name for this species. Dobson's *hydrodromus* has priority, but because of an

apparently incorrect type locality information and further inconsistencies in the original description, Hoffmann and Peterson (1967) proposed to suppress *hydromodromus* in favour of *pribilofensis* Merriam, 1895, a suggestion followed by van Zyll de Jong (1991b). However, Yudin (1969), Baranova et al. (1981), Hall (1981), Junge and Hoffmann (1981), and Honacki et al. (1982) retained *hydromodromus*, while Gureev (1979) listed both *hydromodromus* and *pribilofensis* as species. As the holotype of *hydromodromus* still exists in the St. Petersburg Museum, there seems to be no reason for not following the rule of priority.

Sorex isodon Turov, 1924. C.R. Acad. Sci. Paris, p. 111.

TYPE LOCALITY: Russia, Siberia, NE of Lake Baikal, Barguzinsk taiga, River Sosovka.

DISTRIBUTION: SE Norway and Finland through Siberia to the Pacific coast; Kamchatka; Sakhalin Isl; Kurile Isls; probably also NE China and Korea.

SYNONYMS: *gravesi*, *princeps*, *ruthenus*.

COMMENTS: Subgenus *Sorex*. Probably not conspecific with *sinalis* as suggested by Corbet (1978c) and Dolgov (1985); see Siivonen (1965) and Hoffmann (1987). Because the well established name *isodon* is antedated by *gravesi*, Hoffmann (1987) suggested that *isodon* be declared the valid name; the case needs to be submitted to the International Commission on Zoological Nomenclature. The species was reviewed by Sulkava (1990). The recently described *isodon marchicus* (Passarge, 1984) is provisionally included in *araneus*; see comments under that species.

Sorex jacksoni Hall and Gilmore, 1932. Univ. California Publ. Zool., 38:392.

TYPE LOCALITY: USA, "Sevoonga, 2 miles east of North Cape, St. Lawrence Island, Bering Sea, Alaska."

DISTRIBUTION: Known only from St. Lawrence Isl (Bering Sea).

COMMENTS: Subgenus *Otisorex*. Placed in the *arcticus* species group by Hall and Gilmore (1932) and in the *cinereus* species group by Hoffmann and Peterson (1967). Separated from *cinereus* by Junge and Hoffmann (1981). Van Zyll de Jong (1982) included *leucogaster* (= *beringianus*), *portenkoi*, and *ugyunak* in this species, but van Zyll de Jong (1991b) retained all three as distinct.

Sorex kozlovi Stroganov, 1952. Byull. Moscow Ova. Ispyt. Prir. Otd. Biol., 57:21.

TYPE LOCALITY: "Tibet" (= Qinghai), Dze-Chyu (Zi Qu) River, tributary of Mekong River (= Lancang Jiang).

DISTRIBUTION: Known only from the type locality.

COMMENTS: Type species of subgenus *Eurosorex* Stroganov, 1952. Known from a single specimen, until near-topotype (National Museum of Natural History - 449080) obtained in 1987. Regarded as a subspecies of *thibetanus* by some authors (Dolgov and Hoffmann, 1977; Hoffmann, 1987) or included in *buchariensis* by others (Corbet, 1978c; Gureev, 1979). Hutterer (1979) recognized inconsistencies in the various published figures and descriptions of the same holotype specimen and regarded *kozlovi* as a doubtful taxon; see also under *buchariensis* and *thibetanus*.

Sorex leucogaster Kuroda, 1933. Bull. Biogeogr. Soc. Japan, 3,3:155.

TYPE LOCALITY: Russia, Paramushir Isl; given by Ellerman and Morrison-Scott (1951:48) as "Nasauki, Amamu-shiru, 200 ft., North Kurile Islands".

DISTRIBUTION: Probably confined to Paramushir Isl, south of Kamchatka Peninsula.

SYNONYMS: *beringianus*.

COMMENTS: Subgenus *Otisorex*. Formerly included in *cinereus* or *gracillimus* (Corbet, 1978c); includes *beringianus* Yudin, 1967. On the status, authorship and valid date of publication see Pavlinov and Rossolimo (1987). Related to *jacksoni* and *ugyunak* (van Zyll de Jong, 1982, 1991b).

Sorex longirostris Bachman, 1837. J. Acad. Nat. Sci. Philadelphia, 7:370.

TYPE LOCALITY: USA, "in the swamps of Santee [River], South Carolina"; restricted to Hume Plantation (Cat Island in the mouth of Santee River) by Jackson (1928:85).

DISTRIBUTION: SE USA (except S Florida) west to Louisiana, Arkansas, Missouri, Illinois, and Indiana.

STATUS: U.S. ESA - Threatened as *Sorex longirostris fisheri*.

SYNONYMS: *bachmani*, *eionis*, *fisheri*, *wagneri*.

COMMENTS: Subgenus *Otisorex*. As pointed out by Junge and Hoffmann (1981), this species is inappropriately named because it has one of the shortest rostra of North American *Sorex*. Junge and Hoffmann (1981) also suggested that shrews of the Great Dismal Swamp described as *fisheri* and traditionally included in *longirostris* as a subspecies are much larger and may represent a valid species. Reviewed by French (1980, Mammalian Species, 143). Part of range mapped in detail by Pagels and Handley (1989) and Pagels et al. (1982).

Sorex lyelli Merriam, 1902. Proc. Biol. Soc. Washington, 15:75.

TYPE LOCALITY: USA, "Mt. Lyell, Tuolumne Co., California".

DISTRIBUTION: Altitudes above 2000 m in the Sierra Nevada, California (USA).

COMMENTS: Subgenus *Otisorex*; member of the *cinereus* species group. Related to *milleri*, according to van Zyll de Jong (1991b).

Sorex macrodon Merriam, 1895. N. Am. Fauna, 10:82.

TYPE LOCALITY: "Orizaba, Veracruz, Mexico (altitude 4,200 feet)."

DISTRIBUTION: Veracruz, in mountains from 4000-9500 ft (1676-2896 m) and Puebla (Mexico). See Heaney and Birney (1977).

COMMENTS: Subgenus *Otisorex*. Similar to, and possibly conspecific with, *veraepacis* (see Junge and Hoffmann, 1981).

Sorex merriami Dobson, 1890. Monogr. Insectivora, pt. 3 (Soricidae), fasc. 1, pl. 23.

TYPE LOCALITY: USA, "Fort Custer, Montana" = Bighorn Co., Little Bighorn River, ca. 1 mile above Fort Custer (= Hardin).

DISTRIBUTION: Xeric habitats in EC Washington to N and E California, Arizona, north-eastward to Nebraska, Wyoming and Montana (USA).

SYNONYMS: *leucogenys*.

COMMENTS: Referred to unnamed subgenus by George (1988:456). Reviewed by Armstrong and Jones (1971b, Mammalian Species, 2).

Sorex milleri Jackson, 1947. Proc. Biol. Soc. Washington, 60:131.

TYPE LOCALITY: "Madera Camp, altitude 8,000 feet, Carmen Mountains, Coahuila, Mexico".

DISTRIBUTION: Restricted to the Sierra Madre Oriental of Coahuila and Nuevo Leon, Mexico.

COMMENTS: Subgenus *Otisorex*. Controversial opinions on the systematic status of *milleri* exist; Findley (1955a) regarded it as a morphologically distinct relict population allied to *cinereus* and accepted its specific status, as did Hall (1981) and Junge and Hoffmann (1981); while van Zyll de Jong and Kirkland (1989) suggested that *milleri* may not merit full specific status.

Sorex minutissimus Zimmermann, 1780. Geogr. Gesch. Mensch. Vierf. Thiere, 2:385.

TYPE LOCALITY: "Yenisei"; given by Stroganov (1957:176) as "iz raiona sela Kiiskow chto na r. Kie (nyne g. Mariinsk Kemerovskoi oblasti)" [= Russia, Kemerovsk. Obl., Mariinsk (= Kiiskoe), bank of Kiia River (near Yenesei River)]; Restricted by Pavlinov and Rossolimo (1987:23) to "Krasnoyarskii kr., Krasnoyarsk."

DISTRIBUTION: Taiga zone from Norway, Sweden and Estonia to E Siberia; Sakhalin; Hokkaido, and perhaps Honshu (Japan); Mongolia; China; South Korea.

SYNONYMS: *abnormis*, *barabensis*, *burneyi*, *czekanovskii*, *caudata*, *exilis*, *hawkeri*, *ishikawai*, *karelicus*, *minimus*, *neglectus*, *perminutus*, *stroganovi*, *tscherskii*, *tschuktschorum*, *ussuriensis*.

COMMENTS: Subgenus *Sorex* or *Eurosorex*. Yoshiyuki (1988a) recognized nine subspecies.

Sorex minutus Linnaeus, 1766. Syst. Nat., 12th ed., 1:73.

TYPE LOCALITY: "Yenisei"; restricted by Pavlinov and Rossolimo (1987:15) to "Krasnoyarskii kr., Krasnoyarsk." According to Ellerman and Morrison-Scott (1951:47), Linnaeus' name is based on Laxmann's ms. of *Sibir. Briefe*, and the type locality is Barnaul, Russia.

DISTRIBUTION: Europe to Yenesei River and Lake Baikal, south to Altai and Tien Shan Mtns; populations of Nepal and China have been alternatively identified as *minutus* or *thibetanus*; populations of Turkey and the Caucasus as *minutus* or *volnuchini*; populations of Kashmir and N Pakistan as *minutus*, *planiceps*, or *thibetanus*.

SYNONYMS: *abnormis*, *barabensis*, *becki*, *canaliculatus*, *carpetanus*, *exiguus*, *exilis*, *gmellini*, *gymnurus*, *heptapotamicus*, *hibernicus*, *insulaebellae*, *kastchenkoi*, *lucanius*, *melanderi*, *minimus*, *pumilio*, *pumilus*, *pygmaeus*, *rusticus*, *stroganovi*, *tschuktschorum*.

COMMENTS: Subgenus *Sorex*. Formerly included *gracillimus*, which is now accepted as specifically distinct; see comments therein. Corbet (1978c) included also *planiceps* and *thibetanus*; but see Dolgov and Hoffmann (1977) and Hutterer (1979). May include *volnuchini*, see comments therein. The European populations of *minutus* were revised by Hutterer (1990).

Sorex mirabilis Ognev, 1937. Byull. Moscow Ova. Ispyt. Prir. Otd. Biol., 46(5):268.

TYPE LOCALITY: Russia, Primorskii Krai, Ussuriiskii r-n., Kamenka River (specified by Pavlinov and Rossolimo, 1987).

DISTRIBUTION: N Korea, NE China, and Ussuri region (Russia).

SYNONYMS: *kutscheruki*.

COMMENTS: Placed in monotypic subgenus *Ognevia* by Heptner and Dolgov (1967), who demonstrated that *mirabilis* is not conspecific with *pacificus*, as had been suggested earlier (Bobrinskii et al., 1965). Hutterer (1982b) suggested a closer relationship with *Sorex* (*Homalurus*) *alpinus* because of shared derived features of genital morphology.

Sorex monticolus Merriam, 1890. N. Am. Fauna, 3:43.

TYPE LOCALITY: USA, "San Francisco Mountain, Coconino Co., Arizona...altitude 3,500 meters (11,500 feet)".

DISTRIBUTION: Montane boreal and coastal coniferous forest and alpine areas from Alaska to California and New Mexico, east to Montana, Wyoming, and Colorado (USA) and to W Manitoba (Canada); Chihuahua, Durango (Mexico).

SYNONYMS: *alascensis*, *calvertensis*, *dobsoni*, *durangae*, *elassodon*, *glacialis*, *insularis*, *isolatus*, *longicauda*, *longiquus*, *malitiosus*, *melanogenys*, *mixtus*, *neomexicanus*, *obscurus*, *obscuroides*, *prevostensis*, *shumaginensis*, *setosus*; *similis* (Merriam, not of Hensel), *soperi*.

COMMENTS: Subgenus *Otisorex*. Includes *obscurus* and *durangae*, which were previously included in *vagrans* and *saussurei* respectively; see Hennings and Hoffmann (1977) and map in Junge and Hoffmann (1981); other synonyms follow van Zyll de Jong (1983a) and George and Smith (1991). Related to *pacificus* (see George, 1988).

Sorex nanus Merriam, 1895. N. Am. Fauna, 10:81.

TYPE LOCALITY: USA, "Estes Park [Larimer Co.], Colorado".

DISTRIBUTION: Rocky Mountains from Montana to New Mexico; South Dakota; Arizona (USA).

COMMENTS: Subgenus *Otisorex*. Very similar to, and perhaps conspecific with, *tenellus*, see review by Hoffmann and Owen (1980, Mammalian Species, 131); but George (1988) retained both as distinct species.

Sorex oreopolus Merriam, 1892. Proc. Biol. Soc. Washington, 7:173.

TYPE LOCALITY: "Sierra de Colima, Jalisco, Mexico (altitude 10,000 feet) [3,048 m]".

DISTRIBUTION: Jalisco (Mexico); perhaps east to Puebla and Veracruz (Mexico).

SYNONYMS: *orizabae*.

COMMENTS: Subgenus *Otisorex*. Contrary to Findley (1955b), this species does not include *emarginatus* or *ventralis*, which Diersing and Hoffmeister (1977) placed in the subgenus *Sorex*. *S. orizabae* was included in *vagrans* by Hennings and Hoffmann (1977:8) but later included in *oreopolus* by Junge and Hoffmann (1981:43).

Sorex ornatus Merriam, 1895. N. Am. Fauna, 10:79.

TYPE LOCALITY: USA, "San Emigdio Canyon, Mt. Piños [Kern Co.], California".

DISTRIBUTION: California coastal ranges from N of San Francisco Bay to N part and S tip of Baja California; Santa Catalina Isl.

SYNONYMS: *californicus*, *juncensis*, *lagunae*, *oreinus*, *relictus*, *salarius*, *salicornicus*, *sinuosus*, *willetti*.

COMMENTS: Subgenus *Otisorex*. Reviewed by Owen and Hoffmann (1983, Mammalian Species, 212), who recognized 9 subspecies. For further distributional information see Williams (1979) and Junge and Hoffmann (1981); for karyotype and allozyme data see Brown and Rudd (1981) and George (1988).

Sorex pacificus Coues, 1877. Bull. U.S. Geol. Geogr. Surv. Terr., 3(3):650.

TYPE LOCALITY: USA, "Fort Umpqua [mouth Umpqua River, Douglas County], Oregon."

DISTRIBUTION: Forests of coastal Oregon (USA).

SYNONYMS: *cascadensis*, *yaquinae*.

COMMENTS: Subgenus *Otisorex*. Not conspecific with *mirabilis*; see Yudin (1969) and Hoffmann (1971). Related to *monticolus*; see Findley (1955b), Junge and Hoffmann (1981), and George (1988). Reviewed by Carraway (1985, Mammalian Species, 231), who later (1990) removed *sonomae* from synonymy; see comments under that species.

Sorex palustris Richardson, 1828. Zool. J., 3:517.

TYPE LOCALITY: Canada, "marshy places, from Hudson's Bay to the Rocky Mountains."; not specified.

DISTRIBUTION: Montane and boreal areas of North America below the tree line from Alaska to the Sierra Nevada, Rocky and Appalachian Mtns.

SYNONYMS: *acadicus* (Allen, not of Gilpin), *albibarbis*, *brooksi*, *gloveralleni*, *hydrobadistes*, *labradorensis*, *navigator*, *punctulatus*, *turneri*.

COMMENTS: Formerly placed in genus *Neosorex* Baird; now in *Sorex* (*Otisorex*). Reviewed by Beneski and Stinson (1987, Mammalian Species, 296), who recognized 9 subspecies. They did not include *alaskanus* as suggested by Junge and Hoffmann (1981:28) and Hall (1981:43); George (1988) also treated *alaskanus* as distinct.

Sorex planiceps Miller, 1911. Proc. Biol. Soc. Washington, 24:242.

TYPE LOCALITY: India, "Dachin, Khistwar, Kashmir (altitude, 9000 feet)".

DISTRIBUTION: Kashmir (India) and N Pakistan.

COMMENTS: Considered a subspecies of *thibetanus* by Dolgov and Hoffmann (1977) and Hoffmann (1987), but retained by Hutterer (1979) because of larger skull measurements. The problem still remains unresolved.

Sorex portenkoi Stroganov, 1956. Proc. Inst. Biol. W. Siberian Branch Acad. Sci. USSR, Zool., 1:11-14.

TYPE LOCALITY: Russia, Koryaksk. Auv. Okr. "bliz pos Anadyr', poberejhe Anadyrsk limana [near Anadyr' settlement, shore of Anadyr' estuary]."

DISTRIBUTION: NE Siberia.

COMMENTS: Subgenus *Otisorex*. Originally described as a subspecies of *cinereus* and treated as such by Yudin (1972) and Okhotina (1977), then included in *ugyunak* (Ivanitskaya and Kozlovskii, 1985), but recently recognized as a distinct species by Zaitsev (1988), and van Zyll de Jong (1991b), who, however, pointed out its close relationship to *jacksoni* and *ugyunak*.

Sorex preblei Jackson, 1922. J. Washington Acad. Sci., 12:263.

TYPE LOCALITY: USA, "Jordan Valley, altitude 4,200 feet, Malheur County, Oregon."

DISTRIBUTION: Columbia Plateau of Washington, Oregon and Nevada to W Great Plains of Montana, Utah, Wyoming, and Colorado (specimen 74262 in the National Museum of Natural History) (USA). For reviews of distributional records, see Tomasi and Hoffmann (1984) and Long and Hoffmann (1992).

COMMENTS: Subgenus *Otisorex*.

Sorex raddei Satunin, 1895. Arch. Naturgesch., 1:109.

TYPE LOCALITY: Georgia, near Kutais.

DISTRIBUTION: Transcaucasia and N Turkey.

SYNONYMS: *batis*, *caucasicus*.

COMMENTS: Subgenus *Sorex*; externally similar to *alpinus*. Includes *batis* (Corbet, 1978c) and *caucasicus* which in turn now must be called *satunini* (see comments therein and Pavlinov and Rossolimo, 1987).

Sorex roboratus Hollister, 1913. Smithson. Misc. Coll., 60(24):2.

TYPE LOCALITY: Russia, Gorno-Altai A.O., "5 mi S Dapuchu [Altai Mtns, Tapucha]".

DISTRIBUTION: Russia east of River Ob to Ussuri River, south to Altai Mtns, N Mongolia, and Primorsk Krai.

SYNONYMS: *aranoides*, *dukelskiae*, *jacutensis*, *platycranius*, *tomensis*, *turuchanensis*, *thomasi*, *vir*.

COMMENTS: Subgenus *Sorex*. Formerly known as *vir* but *roboratus* has priority (Hoffmann, 1985a; Zaitsev, 1988). Taxonomy and distribution revised by Hoffmann (1985a).

Sorex sadonis Yoshiyuki and Imaizumi, 1986. Bull. Natl. Sci. Mus. Tokyo, ser. A (Zool.), 12:185.

TYPE LOCALITY: Japan, "Ikari, Sawada-machi, Sado-gun, Sado Island, alt. 20m".

DISTRIBUTION: Sado Isl (Japan).

COMMENTS: Subgenus presumably *Sorex*; Yoshiyuki and Imaizumi (1986) assigned the species to "the *caecutiens-arcticus* section of the *minutus* group." It thus resembles the taxa *annexus*, *cansulus*, and *shinto* of E Asia; see comments under *caecutiens*.

Sorex samniticus Altobello, 1926. Bol. Inst. Zool. Univ. Roma, 3:102.

TYPE LOCALITY: Italy, Campobasso Prov., Molise, 700 m.

DISTRIBUTION: Italy.

SYNONYMS: *garganicus*.

COMMENTS: Subgenus *Sorex*. Formerly included in *araneus*; considered a distinct species by Graf et al. (1979). Reviewed by Hausser (1990).

Sorex satunini Ognev, 1922. Ann. Zool. Mus. Russ. Acad. Sci., 22:311.

TYPE LOCALITY: Turkey, Kars, Goele, "Gel'skaya kotlovina [depression], Mvuzaret".

DISTRIBUTION: N Turkey and Caucasus.

COMMENTS: Subgenus *Sorex*. Formerly referred to as *caucasicus* Satunin, which is now synonymized with *raddei* Satunin; see Pavlinov and Rossolimo (1987) and Zaitsev (1988). Sokolov and Tembotov (1989), who reviewed the distribution in Caucasus, used *caucasicus* for this species. Considered a distinct species by Graf et al. (1979).

Sorex saussurei Merriam, 1892. Proc. Biol. Soc. Washington, 7:173.

TYPE LOCALITY: "Sierra de Colima, Jalisco, Mexico, (altitude 8000 feet)".

DISTRIBUTION: Coahuila and Durango to Chiapas (Mexico); Guatemala.

SYNONYMS: *cristobalensis*, *godmani*, *oaxacae*, *salvini*, *veraecrucis*.

COMMENTS: Referred to unnamed subgenus by George (1988:456). Populations from Guatemala provisionally included by Junge and Hoffmann (1981) may be distinct and should be carefully studied.

Sorex sclateri Merriam, 1897. Proc. Biol. Soc. Washington, 11:228.

TYPE LOCALITY: "Tumbala, Chiapas, Mexico (alt. 5000 ft.)"

DISTRIBUTION: Known only from the type locality.

COMMENTS: Referred to unnamed subgenus by George (1988:456).

Sorex shinto Thomas, 1905. Abstr. Proc. Zool. Soc. Lond., 1905(23):19.

TYPE LOCALITY: "Makado, near Nohechi, N Hondo [Honshu, Japan]".

DISTRIBUTION: Honshu, Shikoku, and Hokkaido (Japan).

SYNONYMS: *chouei*, *saevus*, *shikokensis*.

COMMENTS: Subgenus *Sorex*. Included in *caecutiens* by Abe (1967) and Corbet (1978c), but Imaizumi (1970b) treated *shinto* as a separate species, a view supported by Pavlinov and Rossolimo (1987), and by the allozyme data of George (1988).

Sorex sinalis Thomas, 1912. Ann. Mag. Nat. Hist., ser. 8, 10:398.

TYPE LOCALITY: China, Shaanxi, "45 miles S.E. of Feng-siang-fu [Feng Xian], Shen-si, 10,500'".

DISTRIBUTION: C and W China.

COMMENTS: Subgenus *Sorex*. Formerly regarded as conspecific with *isodon*; see Corbet (1978c) and Hoffmann (1987) for discussion and specific boundaries.

Sorex sonomae Jackson, 1921. J. Mammal., 2:162.

TYPE LOCALITY: USA, "Sonoma Country side of Gualala River, Gualala, California".

DISTRIBUTION: Pacific coast from Oregon to N California (USA).

SYNONYMS: *tenelliodus*.

COMMENTS: Subgenus *Otisorex*. Includes *tenelliodus* as a distinct subspecies; revised by Carraway (1990).

Sorex stizodon Merriam, 1895. N. Am. Fauna, 10:98.

TYPE LOCALITY: "San Cristobal, Chiapas, Mexico, [9,000 ft.= 2,743 m]".

DISTRIBUTION: Known only from the type locality.

COMMENTS: Referred to unnamed subgenus by George (1988:456). Similar to *ventralis* (Junge and Hoffmann, 1981).

Sorex tenellus Merriam, 1895. N. Am. Fauna, 10:81.

TYPE LOCALITY: USA, "summit of Alabama Hills near Lone Pine, Owens Valley [Inyo Co.], Calif[ornia, about 45000 ft]."

DISTRIBUTION: Mountains of WC Nevada and EC California (USA).

SYNONYMS: *myops*.

COMMENTS: Subgenus *Otisorex*. Similar to *nanus* with which it may form an allospecies (Hoffmann and Owen, 1980, Mammalian Species, 131), but George (1988) retained both as separate species on the basis of allozyme frequencies.

Sorex thibetanus Kastschenko, 1905. Izv. Tomsk. Univ., 27:93.

TYPE LOCALITY: "Tsaidam" [NE Tibet].

DISTRIBUTION: Himalayas and NE Tibet.

COMMENTS: The pygmy shrews of the Himalayas are the subject of controversy. The original description of *thibetanus* (as a subspecies of *minutus*) is not very helpful and the holotype in the Tomsk Academy was considered to be lost (Yudin, pers. comm. 1977 to the author); Hutterer (1979) therefore regarded *thibetanus* as a *nomen dubium*. Dolgov and Hoffmann (1977) and later Hoffmann (1987) used *thibetanus* to define a Himalayan species in which they included *buchariensis*, *kozlovi*, *planiceps*, and specimens from Nepal and China reported as *minutus* by various authors. Hutterer (1979) instead recognized three species, *buchariensis*, *planiceps*, and *minutus* as occurring in the Himalayas and regarded *kozlovi* and *thibetanus* as indeterminate. Zaitsev (1988) pointed out differences between *buchariensis* and *thibetanus*. Surprisingly, the holotype of *thibetanus* turned up in the Zoological Museum of Moscow (Baranova et al., 1981) and Hoffmann (1987) reported on its measurements. These did not solve the problem but instead matched well with *minutus*. The controversy still remains unresolved and can be solved presumably only with new material and a more complete data set. Provisionally all the mentioned forms are listed separately.

Sorex trowbridgii Baird, 1857. Mammalia, in Repts. U.S. Expl. Surv., 8(1):13.

TYPE LOCALITY: USA, "Astoria [mouth of the Columbia River, Clatsop Co.], Oregon".

DISTRIBUTION: Coastal ranges from Washington (including Destruction Isl) to California (USA); SW British Columbia (Canada).

SYNONYMS: *destructioni*, *humboldtensis*, *mariposae*, *montereyensis*.

COMMENTS: Referred to unnamed subgenus by George (1988:456). Reviewed by George (1989, Mammalian Species, 337).

Sorex tundrensis Merriam, 1900. Proc. Washington Acad. Sci., 2:16.

TYPE LOCALITY: USA, "St. Michaels, Alaska."

DISTRIBUTION: Sakhalin Isl; Siberia, from the Pechora River to Chukotka, south to the Altai Mtns; Mongolia and NE China; Alaska (USA); Yukon, Northwest Territories (Canada).

SYNONYMS: *amasari*, *baikalensis*, *borealis*, *centralis*, *irkutensis*, *jenissejensis*, *margarita*, *middendorfi*, *parvicaudatus*, *petschorae*, *schnitnikovi*, *sibiriensis*, *transrypheus*, *ultimus*.

COMMENTS: Subgenus *Sorex*. Youngman (1975) provided evidence that *tundrensis* is specifically distinct from *arcticus*. Palearctic populations formerly referred to *arcticus* were included in *tundrensis* by Junge et al. (1983). Hoffmann (1987) and van Zyll de Jong (1991b) discussed additional aspects of its taxonomy and distribution. Kozlovskii (1976) found *irkutensis* and *sibiriensis* to be karyotypically distinct; possibly two sibling species occur throughout the Palearctic range. Meylan and Hausser (1991) described a karyotype from Canada that is "identical" to some in Siberia.

Sorex ugyunak Anderson and Rand, 1945. Canadian Field Nat., 59:62.

TYPE LOCALITY: "Tuktuk (Tuktuyaktok), northeast side of Mackenzie River delta, south of Token Point, Mackenzie District, Northwest Territories, Canada."

DISTRIBUTION: Mainland tundra west of Hudson Bay (Canada), and N Alaska (USA).

COMMENTS: Subgenus *Otisorex*. Formerly included in *cinereus*, but van Zyll de Jong (1976, 1991b) provided arguments for a specific distinction of *ugyunak*; the taxon appears related to *jacksoni* and *portenkovii*. See Junge and Hoffmann (1981) and van Zyll de Jong (1983a) for further information.

Sorex unguiculatus Dobson, 1890. Ann. Mag. Nat. Hist., ser. 6, 5:155.

TYPE LOCALITY: Russia, "Saghalien [Sakhalin] Island; Nikolajewsk, at the mouth of the Amur River." Ognev (1928:204) and Ellerman and Morrison-Scott (1951:52) both restricted the type locality to Sakhalin Isl.

DISTRIBUTION: Pacific coast of Siberia from Vladivostok to the Amur, and the islands of Sakhalin (Russia) and Hokkaido (Japan); from Corbet (1978c).

SYNONYMS: *yessoensis*.

COMMENTS: Subgenus *Sorex*. The inclusion of *yessoensis* follows Abe (1967). Skaren (1964) suggested a relationship with *obscurus* (= *monticolus*) but this was rejected by Siivonen (1965) and Hoffmann (1971).

Sorex vagrans Baird, 1857. Mammalia, in Repts. U.S. Expl. Surv., 8(1):15.

TYPE LOCALITY: USA, "Shoalwater Bay, W.T. [= Willapa Bay, Pacific Co., Washington]."

DISTRIBUTION: Riparian and montane areas of the N Great Basin and Columbia Plateau, north to S British Columbia and Vancouver Island (Canada); east to W Montana, W Wyoming, and Wasatch Mtns (Utah); C Nevada to Sierra Nevada (California).

SYNONYMS: *amoenus*, *halicoetes*, *nevadensis*, *nigriculus*, *paludivagus*, *parvidens*, *shastensis*, *sukleyi*, *trigonirostris*, *vancouverensis*.

COMMENTS: Subgenus *Otisorex*. Findley's (1955b) wide concept of the *vagrans* group was substantially modified by Hennings and Hoffmann (1977) and Junge and Hoffmann (1981).

Sorex ventralis Merriam, 1895. N. Am. Fauna, 10:75.

TYPE LOCALITY: "Cerro San Felipe, Oaxaca, Mexico (altitude 1000 feet)."

DISTRIBUTION: NW Puebla to Oaxaca (Mexico).

COMMENTS: Referred to unnamed subgenus by George (1988:456). Similar to *saussurei* but smaller; see Junge and Hoffmann (1981), who allocated the species to subgenus *Sorex*. Hall (1981) included *ventralis* in *oreopolus*.

Sorex veraepacis Alston, 1877. Proc. Zool. Soc. Lond., 1877:445.

TYPE LOCALITY: "Coban (Vera Paz) [Alta Verapaz], Guatemala."

DISTRIBUTION: Montane forests of C Guerrero, Puebla, and Veracruz, south through the highlands of Oaxaca and Chiapas (Mexico), to SW Guatemala.

SYNONYMS: *chiapensis*; *caudatus* (Merriam, not of Horsfield), *mutabilis*, *teculyas*.

COMMENTS: Subgenus *Otisorex*. May be conspecific with *macrodon* (see Junge and Hoffmann, 1981:43).

Sorex volnuchini Ognev, 1922. Ann. Mus. Zool. Akad. St. Petersbourg, 22:322.

TYPE LOCALITY: Ukraine, Krasnodarskii kr., Adygeiskaya A.O. [middle course], r. Kisha (see Pavlinov and Rossolimo, 1987).

DISTRIBUTION: S Ukraine and Caucasus; possibly Turkey and N Iran.

COMMENTS: Subgenus *Sorex*. Formerly included in *minutus* but specimens from Caucasus have a slightly different karyotype (2n=40, NF=60) which led Kozlovskii (1973) and Sokolov and Tembotov (1989) to regard *volnuchini* as a full species. The karyotype of *S. buchariensis* is very similar (Ivanitskaya et al., 1977). Morphologically, *volnuchini* is not distinguishable from *minutus*; also, the karyotype of topotypical specimens needs to be studied to clarify the status of *volnuchini*.

Soriculus Blyth, 1854. J. Asiatic Soc. Bengal, 23:733.

TYPE SPECIES: *Corsira nigrescens* Gray, 1842.

SYNONYMS: *Chodsigoa*, *Episoriculus*.

COMMENTS: Subfamily Soricinae, tribe Neomyini; see Repenning (1967:45). Reumer (1984:14) claimed that *Soriculini* Kretzoi, 1965, has priority over Neomyini Repenning, 1965, however, Neomyini Matschie, 1909, has priority over both. Includes *Chodsigoa* and *Episoriculus* as subgenera; see Ellerman and Morrison-Scott (1951) and Corbet (1978c:24); but also see Repenning (1967:52) and Jameson and Jones (1977:474-475), who considered *Episoriculus* a distinct genus. Gureev (1979:450-452) erroneously listed *Chodsigoa* as a subgenus of *Notiosorex*. Genus reviewed by Hoffmann (1985b).

Soriculus caudatus (Horsfield, 1851). Cat. Mamm. Mus. E. India Co., p. 135.

TYPE LOCALITY: "Sikkim", no exact locality.

DISTRIBUTION: Kashmir to N Burma and SW China.

SYNONYMS: *gracilicauda*, *sacratulus*, *soluensis*, *umbrinus*.

COMMENTS: Subgenus *Episoriculus*. Includes *sacratulus* and *umbrinus* as subspecies; see Gruber (1969) and Hoffmann (1985b).

Soriculus fumidus Thomas, 1913. Ann. Mag. Nat. Hist., ser. 8, 11:216.

TYPE LOCALITY: Taiwan, Chiai Hsien, "Mt. Arisan (= Alishan); Central Formosa. Alt. 8,000".

DISTRIBUTION: Montane forests of Taiwan.

SYNONYMS: *sodalis*.

COMMENTS: Subgenus *Episoriculus*. Formerly included in *caudatus* by Ellerman and Morrison-Scott (1951:59), but see Jameson and Jones (1977:474) and Hoffmann (1985b), who included *sodalis* in *fumidus*. Additional specimens now suggest that *sodalis* may prove distinct (Hoffmann, in litt.).

Soriculus hypsibius de Winton, 1899. Proc. Zool. Soc. Lond., 1899:574.

TYPE LOCALITY: China, Sichuan, "Yang-liu-pa".

DISTRIBUTION: SW and C China, Yunnan, Sichuan and Shaanxi; apparently disjunct population (*larvarum*) in Hebei.

SYNONYMS: *berezowski*, *larvarum*.

COMMENTS: Type species (as *berezowski*) of subgenus *Chodsigoa*. Does not include *parva* and *lamula*; see Hoffmann (1985b).

Soriculus lamula (Thomas, 1912). Ann. Mag. Nat. Hist., ser. 8, 10:399.

TYPE LOCALITY: China, Gansu, "40 miles S.E. of Tao-chou [Lintan]. Alt. 9500".

DISTRIBUTION: C China, from Yunnan, Sichuan, and Gansu to Fujian.

SYNONYMS: *parva*.

COMMENTS: Subgenus *Chodsigoa*. Includes *parva* as a subspecies. Formerly in *hypsibius* but occurs sympatrically with that species; see Hoffmann (1985b).

Soriculus leucops (Horsfield, 1855). Ann. Mag. Nat. Hist., ser. 2, 16:111.

TYPE LOCALITY: "Nepal."

DISTRIBUTION: C Nepal, Sikkim and Assam to S China, N Burma and N Vietnam.

SYNONYMS: *baileyi*, *gruberi*.

COMMENTS: Subgenus *Episoriculus*. Includes *baileyi* as a subspecies; see Hoffmann (1985b).

Soriculus macrurus Blanford, 1888. Fauna Brit. India, 1:231.

TYPE LOCALITY: "Darjeeling, India."

DISTRIBUTION: C Nepal to W and S China and to N Burma and Vietnam.

SYNONYMS: *irene*, *leucops*.

COMMENTS: Subgenus *Episoriculus*. Formerly confused with *leucops*, but shown to be a distinct species by Hoffmann (1985b).

Soriculus nigrescens (Gray, 1842). Ann. Mag. Nat. Hist., [ser. 1], 10:261.

TYPE LOCALITY: "India", West Bengal, Darjeeling.

DISTRIBUTION: Middle altitudes of the Himalaya from Tibet and Nepal to Assam and SW China.

SYNONYMS: *caurinus*, *centralis*, *pahari*, *radulus* (see Ellerman and Morrison-Scott, 1951).

COMMENTS: Subgenus *Soriculus*. The form *radulus* is distinctly smaller (Hoffmann, 1985b).

Soriculus parca (G. M. Allen, 1923). Am. Mus. Novitates, 100:6.

TYPE LOCALITY: "Ho-mu-shu Pass, Western Yunnan, China, 8000 feet."

DISTRIBUTION: SW China, N Burma and Thailand and N Vietnam.

SYNONYMS: *furva*, *lowei*.

COMMENTS: Formerly included in *smithii*, but retained as a separate species by Hoffmann (1985b), with *lowei* and *furva* as tentative subspecies.

Soriculus salenskii Kastschenko, 1907. Ann. Mus. Zool. Acad. Sci. St. Petersburg, 10:253.

TYPE LOCALITY: China, Sichuan, "Lun-ngan'-fu" (= Liangfu).

DISTRIBUTION: Known only from the type locality in N Sichuan.

COMMENTS: Subgenus *Chodsigoa*. Related to *smithii*.

Soriculus smithii (Thomas, 1911). Abstr. Proc. Zool. Soc. Lond., 1911(90):4.

TYPE LOCALITY: China, Sichuan, "Ta-tsien-lu".

DISTRIBUTION: C Sichuan to W Shaanxi (China).

COMMENTS: Subgenus *Chodsigoa*. Regarded as a subspecies of *salenskii* by Ellerman and Morrison-Scott (1951:60), but as a separate species by Corbet (1978c:24). Formerly included *parca* and *furva*; but see Hoffmann (1985b).

Family Talpidae Fischer von Waldheim, 1817. Mem. Soc. Imp. Nat., Moscow, 5:372.

SYNONYMS: Desmanidae.

COMMENTS: Subfamily systematics very provisional. Cabrera (1925) proposed a division into five subfamilies, three of which are applied here, following Yates (1984), among others. Scalopinae and Condylurinae are tentatively treated as tribes, following Hutchison (1968). *Desmana* and *Galemys* are sometimes placed in a separate family, Desmanidae; see Bobrinskii et al. (1965). Family reviewed by Gureev (1979); see also Gorman and Stone (1990). Relationships of recent moles discussed by Ziegler (1971). Systematics of North American forms reviewed by Yates and Greenbaum (1982); of Palearctic forms by Corbet (1978c); of Siberian forms by Yudin (1989); and of Japanese forms by Abe (1988). Phylogeny of Urotrichini discussed by Storch and Qiu (1983).

Subfamily Desmaninae Thomas, 1912. Ann. Mag. Nat. Hist., ser. 8, 9:397.

COMMENTS: Sometimes regarded as a separate family; see Barabasz-Nikiforow (1975).

Hutchinson (1974) concluded that Desmaninae and Talpidae were separated since the Eocene. Reviewed by Rümke (1985).

Desmana Gùldenstaedt, 1777. Beschäft. Berliner Ges. Naturforsch. Fr., 3:108.TYPE SPECIES: *Castor moschatus* Linnaeus, 1758.*Desmana moschata* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:59.

TYPE LOCALITY: "Habitat in Russiae aquosis."

DISTRIBUTION: Republics of the former USSR; Don, Volga, and S. Ural rivers and their tributaries; introduced into Tachan and Tartas rivers (Ob basin) and Dnepr River.

STATUS: IUCN - Vulnerable.

Galemys Kaup, 1829. Skizz. Entwickel.-Gesch. Nat. Syst. Europ. Thierwelt, 1:119.TYPE SPECIES: *Mygale pyrenaica* E. Geoffroy, 1811.*Galemys pyrenaicus* (E. Geoffroy, 1811). Ann. Mus. Hist. Nat. Paris, 17:193.

TYPE LOCALITY: France, "Les montagnes pres de Tarbes (Hautes-Pyrenees)".

DISTRIBUTION: Streams of the Pyrenees and the northern mountains of the Iberian Peninsula (France, Spain and Portugal).

STATUS: IUCN - Vulnerable.

SYNONYMS: *rufulus*.COMMENTS: Includes *rufulus* as a possible subspecies; reviewed by Palmeirim and Hoffmann (1983, Mammalian Species, 207) and Juckwer (1990).**Subfamily Talpinae** Fischer von Waldheim, 1817. Mem. Soc. Imp. Nat., Moscow, 5:372.

SYNONYMS: Condylurinae, Scalopinae, Urotrichinae.

COMMENTS: Includes Condylurini, Scalopini, Scaptonychini, Urotrichini and Talpini as tribes; see Hutchison (1968) and Storch and Qiu (1983). Some of these are sometimes regarded as subfamilies; see comments under family. Generic and specific limits are highly controversial, particularly in the *Talpa* group. No data-based consensus has yet been reached on the taxonomy of many Palearctic and East Asiatic moles.

Condylura Illiger, 1811. Prodr. Syst. Mamm. Avium, p. 125.TYPE SPECIES: *Sorex cristatus* Linnaeus, 1758.

COMMENTS: Tribe Condylurini. Reviewed by Peterson and Yates (1980). Recorded from the Pliocene of Europe; see Skoczen (1976).

Condylura cristata (Linnaeus, 1758). Syst. Nat., 10th ed., 1:53.

TYPE LOCALITY: USA, Pennsylvania.

DISTRIBUTION: Georgia and NW South Carolina (USA) to Nova Scotia and Labrador (Canada); Great Lakes region to SE Manitoba.

SYNONYMS: *longicaudata*, *macroura*, *nigra*, *parva*, *prasinatus*, *radiata*.COMMENTS: Includes *parva* as a subspecies; see review by Peterson and Yates (1980, Mammalian Species, 129).

Euroscaptor Miller, 1940. J. Mammal., 21:443.

TYPE SPECIES: *Talpa klossi* Thomas, 1929.

COMMENTS: Tribe Talpini. Corbet (1978c:32), and subsequent work, included *Euroscaptor* in *Talpa* while Russian and Japanese authors retained it as a genus; most recently Abe et al. (1991). Species allocations and limits are tentative.

Euroscaptor grandis Miller, 1940. J. Mammal., 21:444.

TYPE LOCALITY: China, Sichuan, "Mount Omei, alt. 5000 feet", = Omei-Shan.

DISTRIBUTION: N and S Bakbo and Cha-pa (Vietnam); S China.

COMMENTS: Often included in *Talpa*; but see Gureev (1979:272). Regarded as a synonym of [*E. micrura longirostris* by Ellerman and Morrison-Scott (1966:40).

Euroscaptor klossi (Thomas, 1929). Ann. Mag. Nat. Hist., ser. 10, 3:206.

TYPE LOCALITY: Thailand, Tonkin.

DISTRIBUTION: Highlands of Thailand, Laos and Peninsular Malaysia.

COMMENTS: Corbet (1978c:33) and Corbet and Hill (1991:38) included *klossi* in *micrura*; but see Yoshiyuki (1988b). May include *malayana* which Harrison (1974:57) included in *micrura*.

Euroscaptor longirostris (Milne-Edwards, 1870). C.R. Acad. Sci. Paris, 70:341.

TYPE LOCALITY: China, Sichuan, Moupin.

DISTRIBUTION: S China.

COMMENTS: Formerly included in *micrura* by Ellerman and Morrison-Scott (1966:40) and Corbet (1978c:35). In the *Euroscaptor* group of *Talpa*; see Gureev (1979:272).

Euroscaptor micrura (Hodgson, 1841). Calcutta J. Nat. Hist., 2:221.

TYPE LOCALITY: Nepal, C and N hills.

DISTRIBUTION: E Himalaya; doubtfully in Peninsular Malaysia.

COMMENTS: Does not include *klossi*; see Yoshiyuki (1988b). Does not include *malayana*, which Harrison (1974:57) included in *micrura*.

Euroscaptor mizura (Gunther, 1880). Proc. Zool. Soc. Lond., 1880:441.

TYPE LOCALITY: Japan, Honshu, "In the neighbourhood of Yokohama".

DISTRIBUTION: Mountains of Honshu (Japan).

SYNONYMS: *hiwaensis*, *othai*.

COMMENTS: Imaizumi (1970b) and Abe et al. (1991) included this species in the genus *Euroscaptor*, while Corbet (1978c) placed it in *Talpa*. Three populations have been named, of which *othai* represents "probably a distinct species", according to Imaizumi (1970b); a view supported by Yoshiyuki (1988b).

Euroscaptor parvidens Miller, 1940. J. Mammal., 21:203.

TYPE LOCALITY: Vietnam, Di Linh, Blao Forest Station.

DISTRIBUTION: Known from type locality and Rakho on the Chinese border.

COMMENTS: Ellerman and Morrison-Scott (1966:40) included this species in [*E. micrura leucura*]. Corbet (1978c:33) mentioned *leucura* as a species, but Gureev (1979:274) also listed *parvidens* in the *Euroscaptor* group of *Talpa*, where Miller (1940b:444) put his species soon after description. Corbet and Hill (1991:38) did not list *parvidens* and one may assume that they included it in *micrura*.

Mogera Pomel, 1848. Arch. Sci. Phys. Nat. Geneve, 9:246.

TYPE SPECIES: *Talpa wogura* Temminck, 1842.

COMMENTS: Tribe Talpini. Formerly included in *Talpa* by Corbet (1978c); but see Imaizumi (1970b), Gureev (1979), Yudin (1989), and Abe et al. (1991).

Mogera etigo Yoshiyuki and Imaizumi, 1991. Bull. Natl. Sci. Mus. Tokyo, Ser. A (Zool.), 17:101.

TYPE LOCALITY: "Inugaeshi-shinden, Shirone-shi, Echigo Plain, Niigata Prefecture, Chubu District, Honshu, Japan."

DISTRIBUTION: Echigo Plain, Honshu, C Japan.

COMMENTS: Previously included in *tokudae*; but this was restricted to Sado Isl by Yoshiyuki and Imaizumi (1991).

Mogera insularis Swinhoe, 1863. Proc. Zool. Soc. Lond., 1862:356 [1863].

TYPE LOCALITY: "Formosa (China)" = Taiwan.

DISTRIBUTION: Taiwan, Hainan, SE China.

SYNONYMS: *latouchei*.

COMMENTS: Includes *latouchei*; see Corbet and Hill (1991c:38). Included in *Talpa* [*Euroscaptor*] *micrura* by Ellerman and Morrison-Scott (1951:40); but see Corbet (1978c:33).

Mogera kobeae Thomas, 1905. Ann. Mag. Nat. Hist., ser. 7, 15:487.

TYPE LOCALITY: Japan, Hondo, Kobe.

DISTRIBUTION: Kyushu, Shikoku and southern part of Honshu, Japan.

COMMENTS: Included in *Talpa robusta* by Ellerman and Morrison-Scott (1966) and Corbet (1978c); but retained as a separate species by Abe (1970), Yoshiyuki (1986), and Yoshiyuki and Imaizumi (1991).

Mogera minor Kuroda, 1936. [Botany and Zoology], Tokyo, 4(1), p. 74.

TYPE LOCALITY: Japan, Honshu, Tochigi Pref., Shiobara.

DISTRIBUTION: Honshu, Japan.

SYNONYMS: *imaizumii*.

COMMENTS: Included in *Talpa* [*Euroscaptor*] *micrura* by Ellerman and Morrison-Scott (1966); but retained as a separate species by Yoshiyuki (1986). Renamed *Talpa wogura imaizumii* by Kuroda (1957) for presumed homonymy with *Talpa europaea* var. *minor*.

Mogera robusta Nehring, 1891. Sitzb. Ges. Naturf. Fr. Berlin, 6:95.

TYPE LOCALITY: Russia, Vladivostok.

DISTRIBUTION: Korea to NE China and adjacent Siberia.

SYNONYMS: *coreana*.

COMMENTS: Includes *coreana*; see Corbet (1978c). European authors often include *kobeae* and *tokudae*; however, Japanese authors (Imaizumi 1970b; Yoshiyuki 1988b) treat these as separate species. Formerly included in *Talpa*; but see Imaizumi (1970b), Gureev (1979), and Gromov and Baranova (1981).

Mogera tokudae Kuroda, 1940. [A monograph of Japanese mammals ...], Tokyo and Osaka, p. 196.

TYPE LOCALITY: Japan, Sado Isl.

DISTRIBUTION: Restricted to Sado Isl, Japan according to Yoshiyuki and Imaizumi (1991).

COMMENTS: Overlooked by Ellerman and Morrison-Scott (1966); included in *Talpa robusta* by Corbet (1978c); but retained as a separate species by Yoshiyuki (1986) and Abe et al. (1991).

Mogera wogura (Temminck, 1842). In Siebold, Fauna Japonica, 1(Mamm.), 1:19.

TYPE LOCALITY: Japan, Yokohama, Honshu; restricted by Thomas (1905b).

DISTRIBUTION: Japan (Honshu, Kyushu, Tane, Amakusa, Tsushima and other Isls.).

COMMENTS: For a taxonomic discussion see Corbet (1978c:35).

Nesoscaptor Abe, Shiraishi and Arai, 1991. J. Mammal. Soc. Japan, 15:48.

TYPE SPECIES: *Nesoscaptor uchidai* Abe, Shiraishi and Arai, 1991.

COMMENTS: Tribe Talpini.

Nesoscaptor uchidai Abe, Shiraishi and Arai, 1991. J. Mammal. Soc. Japan, 15:53.

TYPE LOCALITY: Japan, Ryukyu Isls, Senkaku Isls, west coast of Uotsuri-jima.

DISTRIBUTION: Known only from the type locality.

Neurotrichus Günther, 1880. Proc. Zool. Soc. Lond., 1880:441.

TYPE SPECIES: *Urotrichus gibbsii* Baird, 1858.

COMMENTS: Tribe Urotrichini; see Storch and Qiu (1983:100).

Neurotrichus gibbsii (Baird, 1857). Mammalia, in Repts. U.S. Expl. Surv., 8(1):76.

TYPE LOCALITY: USA, Washington, Pierce Co., "Naches Pass, 4,500 ft." (1,372 m).

DISTRIBUTION: SW British Columbia (Canada) to WC California (USA).

SYNONYMS: *hyacinthinus*, *major*, *minor*.

COMMENTS: Hall (1981:67) listed *hyacinthinus* and *minor* as subspecies. Reviewed by Carraway and Verts (1991b, Mammalian Species, 387).

- Parascalops* True, 1894. Diagnoses New N. Am. Mamm., p. 2. (preprint of Proc. U.S. Natl. Mus., 17:242).
TYPE SPECIES: *Scalops breweri* Bachman, 1842.
COMMENTS: Tribe Scalopini. Reviewed by Hallett (1978).
- Parascalops breweri* (Bachman, 1842). Boston J. Nat. Hist., 4:32.
TYPE LOCALITY: "Martha's Vineyard."; restricted to "E. North America" by Hall and Kelson (1959).
DISTRIBUTION: NE United States and SE Canada.
COMMENTS: Reviewed by Hallett (1978, Mammalian Species, 98).
- Parascaptor* Gill, 1875. Bull. U.S. Geol. Geogr. Surv. Terr., 1, 2:110.
TYPE SPECIES: *Talpa leucura* Blyth, 1850.
COMMENTS: Tribe Talpini. Included in *Talpa* by Corbet and Hill (1991:38); but retained as a genus by Abe et al. (1991).
- Parascaptor leucura* (Blyth, 1850). J. Asiat. Soc. Bengal, 19:215, pl. 4.
TYPE LOCALITY: India, Assam, Khasi Hills, Cherrapunji.
DISTRIBUTION: Burma, Assam (India), and Yunnan (China).
COMMENTS: Formerly included in *T. micrura*; see Ellerman and Morrison-Scott (1951:40); but also see Corbet (1978c:33).
- Scalopus* Desmarest, 1804. Tabl. Meth. Hist. Nat., in Nouv. Dict. Hist. Nat., 24:14.
TYPE SPECIES: *Sorex aquaticus* Linnaeus, 1758.
SYNONYMS: *Talpasorex* Lesson (not Schinz).
COMMENTS: Tribe Scalopini. Reviewed by Yates and Schmidly (1978). Commonly cited from "É. Geoffroy, 1803. Cat. Mamm. Mus. d'Hist. Nat., p. 77", but this work was never published (see Appendix I).
- Scalopus aquaticus* (Linnaeus, 1758). Syst. Nat., 10th ed., 1:53.
TYPE LOCALITY: E USA; fixed by Jackson (1915:33) to Pennsylvania, Philadelphia.
DISTRIBUTION: N Tamaulipas and N Coahuila (Mexico) through E USA to Massachusetts and Minnesota.
SYNONYMS: *aereus*, *alleni*, *anastasae*, *argentatus*, *australis*, *bassi*, *caryi*, *cryptus*, *cupreata*, *howelli*, *inflatus*, *intermedius*, *machrinoides*, *machrinus*, *montanus*, *nanus*, *parvus*, *pennsylvanica*, *porteri*, *pulcher*, *sericea*, *texanus*, *virginianus*.
COMMENTS: Includes *inflatus* and *montanus*; see Yates and Schmidly (1977). Yates and Schmidly (1978, Mammalian Species, 105) listed sixteen subspecies. Gureev (1979:254) listed *aereus* and *inflatus* as distinct species without comment. Hall (1981:72) included *aereus* and *inflatus* in *aquaticus*.
- Scapanulus* Thomas, 1912. Ann. Mag. Nat. Hist., ser. 8, 10:396.
TYPE SPECIES: *Scapanulus oweni* Thomas, 1912.
COMMENTS: Tribe Scalopini; see Storch and Qiu (1983:118).
- Scapanulus oweni* Thomas, 1912. Ann. Mag. Nat. Hist., ser. 8, 10:397.
TYPE LOCALITY: China, Kansu, "23 miles (37 km) S.E. of Tao-chou, 9000" (2,743 m).
DISTRIBUTION: Montane forest in C China: Kansu, Shensi and Sichuan.
- Scapanus* Pomel, 1848. Arch. Sci. Phys. Nat. Geneve, 9:247.
TYPE SPECIES: *Scalops townsendii* Bachman, 1839.
COMMENTS: Tribe Scalopini. Revised by Jackson (1915:54-76) and Hutchison (1987).
- Scapanus latimanus* (Bachman, 1842). Boston J. Nat. Hist., 4:34.
TYPE LOCALITY: Probably Santa Clara, Santa Clara Co., California, USA; *fide* Osgood (1907:52).
DISTRIBUTION: SC Oregon (USA) to N Baja California (Mexico).
SYNONYMS: *alpinus*, *anthonyi*, *californicus*, *campi*, *caurinus*, *dilatatus*, *grinnelli*, *insularis*, *minusculus*, *monoensis*, *occultus*, *parvus*, *sericatus*, *truei*.
COMMENTS: Hall (1981:69-70) listed 12 subspecies.
- Scapanus orarius* True, 1896. Proc. U.S. Natl. Mus., 19:52.
TYPE LOCALITY: USA, Washington, Pacific Co., Shoalwater Bay (= Willapa Bay).

- DISTRIBUTION: SW British Columbia (Canada) to NW California, WC Idaho, N Oregon, C and SE Washington (USA).
SYNONYMS: *schefferi*, *yakimensis*.
COMMENTS: Includes *schefferi* as a subspecies; see Hartman and Yates (1985, Mammalian Species, 253).
- Scapanus townsendii* (Bachman, 1839). J. Acad. Nat. Sci. Philadelphia, 8:58.
TYPE LOCALITY: USA, Washington, Clark Co., vicinity of Vancouver.
DISTRIBUTION: SW British Columbia (Canada) to NW California (USA).
- Scaptochirus* Milne-Edwards, 1867. Ann. Sci. Nat. Zool. (Paris), 7:375.
TYPE SPECIES: *Scaptochirus moschatus* Milne-Edwards, 1867.
COMMENTS: Tribe Talpini. Included in *Talpa* by Corbet (1978c:36) and Corbet and Hill (1991:38). Retained a genus by Abe et al. (1991) and Gureev (1979:282).
- Scaptochirus moschatus* Milne-Edwards, 1867. Ann. Sci. Nat. Zool. (Paris), 7:375.
TYPE LOCALITY: "En Mongolie"; Swanhwafu, 100 mi. (161 km) NW of Peking, China.
DISTRIBUTION: NE China: Hopei, Shantung, Shansi, Shensi.
SYNONYMS: *dauidianus* (?).
COMMENTS: Included in *micrura* by Ellerman and Morrison-Scott (1966:40); but see Corbet (1978c:36). Grulich (1982) pointed out that *Scaptochirus dauidianus* Milne-Edwards, 1884, so far regarded as a synonym of *moschatus*, may be an earlier name for *Talpa streeti* Lay, 1965.
- Scaptonyx* Milne-Edwards, 1872. In David, Nouv. Arch. Mus. Hist. Nat. Paris, Bull. 7, p. 92.
TYPE SPECIES: *Scaptonyx fusicauda* Milne-Edwards, 1872.
COMMENTS: Tribe Scaptonychini; see Van Valen (1967).
- Scaptonyx fusicaudus* Milne-Edwards, 1872. In David, Nouv. Arch. Mus. Hist. Nat. Paris, Bull. 7, p. 92.
TYPE LOCALITY: "Frontière du Kokonoor", vicinity of Kukunor (Lake), China.
DISTRIBUTION: N Burma; S China, Tsinghai, Shensi, Sichuan and Yunnan.
SYNONYMS: *affinis*, *fusicaudatus* (sic).
COMMENTS: Includes *affinis*; see Ellerman and Morrison-Scott (1966:35).
- Talpa* Linnaeus, 1758. Syst. Nat., 10th ed., 1:52.
TYPE SPECIES: *Talpa europaea* Linnaeus, 1758.
SYNONYMS: *Asioscalops*.
COMMENTS: Includes *Asioscalops* which was retained as a full genus by Yudin (1989:60). Schwarz (1948), Corbet (1978c:36), and Corbet and Hill (1991:38) included *Euroscaptor*, *Parascaptor*, *Mogera*, and *Scaptochirus*; but these are retained here as full genera, see Abe et al. (1991) and Gureev (1979:256-285). For phylogenetic considerations based on morphology, see Stein (1960) and Grulich (1971); based on allozyme variation, see Filippucci et al. (1987). For a review of European species, see Niethammer and Krapp (1990).
- Talpa altaica* Nikolsky, 1883. Trans. Soc. Nat. St. Petersburg, 14:165.
TYPE LOCALITY: Siberia, Altai Mtns, Valley of Tourak.
DISTRIBUTION: Taiga zone of Siberia between Ob and Lena rivers; south to N Mongolia.
COMMENTS: Placed by Yudin (1989:52) in genus *Asioscalops*; but see Corbet (1978c:33). Kratochvíl and Král (1972) provided karyological evidence for a separation of *altaica* from the remaining *Talpa* species.
- Talpa caeca* Savi, 1822. Nuovo Giorn. de Letterati, Pisa, 1:265.
TYPE LOCALITY: Italy, Pisa.
DISTRIBUTION: S Europe and (doubtfully) Asia Minor; Alps, Apennines, Balkan, Thrazia.
SYNONYMS: *augustana*, *beaucournui*, *dobyi*, *hercegovinensis*, *olympica*, *steini* (see Niethammer, in Niethammer and Krapp, 1990).
COMMENTS: Relationships to the Caucasus moles (*caucasica*, *levantis*) unsolved.
- Talpa caucasica* Satunin, 1908. Mitt. Kaukas. Mus., 4:5.
TYPE LOCALITY: Russia, Stavropol Krai, Stavropol.
DISTRIBUTION: NW Caucasus.

COMMENTS: Included in *europaea* by Ellerman and Morrison-Scott (1951), but considered a distinct species by Gromov et al. (1963). Reviewed by Sokolov and Tembotov (1989).

Talpa europaea Linnaeus, 1758. Syst. Nat., 10th ed., 1:52.

TYPE LOCALITY: Sweden, Kristianstad, Engelholm.

DISTRIBUTION: Temperate Europe including Britain to the Ob and Irtysh rivers (Russia) in the east.

SYNONYMS: *cinerea*, *brauneri*, *ehiki*, *frisius*, *kratochvili*, *pancici*, *uralensis*, *velessiensis*.

COMMENTS: Does not include *altaica*, *caucasica*, *romana*, and *stankovici*; see comments under these species. Does include *cinerea* as a subspecies, and the names above as synonyms; see Niethammer (in Niethammer and Krapp, 1990).

Talpa levantis Thomas, 1906. Ann. Mag. Nat. Hist., ser. 7, 17:416.

TYPE LOCALITY: Turkey, Trabzon, Scalita (= Altyn Dereh).

DISTRIBUTION: Bulgaria, Thracia and N Anatolia (Turkey), and adjacent Caucasus.

SYNONYMS: *minima*, *orientalis*, *talyschensis*, *transcaucasica*.

COMMENTS: On specific status, see Grulich (1972) and Felten et al. (1973). Reviewed by Sokolov and Tembotov (1989). European records by Vohralík (1991).

Talpa occidentalis Cabrera, 1907. Ann. Mag. Nat. Hist., ser. 7, 20:212.

TYPE LOCALITY: C Spain, Guadarrama Mtns, 1200-1300 m, "La Granja, Segovia".

DISTRIBUTION: W and C Iberian Peninsula (Portugal, Spain).

COMMENTS: Formerly regarded as a subspecies of *caeca*, but see Ramalhinho (1985) and Filippucci et al. (1987).

Talpa romana Thomas, 1902. Ann. Mag. Nat. Hist., ser. 7, 10:516.

TYPE LOCALITY: Italy, Ostia near Rome.

DISTRIBUTION: Apennines, Italy, and extreme SE France; a historical record from Sicily.

SYNONYMS: *adamoi*, *aenigmatica*, *brachycrania*, *montana*, *wittei* (see Niethammer, in Niethammer and Krapp, 1990).

COMMENTS: Does not include *stankovici*, see comments therein.

Talpa stankovici V. Martino and E. Martino, 1931. J. Mammal., 12:53.

TYPE LOCALITY: Yugoslavia, Pelister Mtns, "Magarevo Mts., Perister, S. Serbia (Macedonia). Alt. 1000 m."

DISTRIBUTION: European Balkan, Greece including Corfu Isl, S Yugoslavia, probably Albania.

COMMENTS: Formerly included in *romana*; specific status supported by Filippucci et al. (1987). Reviewed by Niethammer (in Niethammer and Krapp, 1990).

Talpa streeti Lay, 1965. Fieldiana Zool., 44:227.

TYPE LOCALITY: Iran, Kurdistan, Hezar Darreh.

DISTRIBUTION: N Iran.

SYNONYMS: *streetorum*.

COMMENTS: Grulich (1982) claimed that *Scaptochirus davidianus* Milne-Edwards, 1884, is the earliest valid name for this species.

Urotrichus Temminck, 1841. Het. Instit. K. Ned. Inst., p. 212.

TYPE SPECIES: *Urotrichus talpoides* Temminck, 1841.

SYNONYMS: *Dymecodon*.

COMMENTS: Tribe Urotrichini; see Storch and Qiu (1983:100). Includes *Dymecodon*; see Ellerman and Morrison-Scott (1951:33-34). See also Imaizumi (1970b:123) who considered *Dymecodon* a distinct genus.

Urotrichus pilirostris (True, 1886). Proc. U.S. Natl. Mus., 9:97.

TYPE LOCALITY: Japan, Honshu, Enoshima (Yenosima), at mouth of Bay of Yeddo.

DISTRIBUTION: Montane forests of Honshu, Shikoku, Kyushu (Japan).

COMMENTS: Formerly included in *Dymecodon*; see Corbet (1978c:37).

Urotrichus talpoides Temminck, 1841. Het. Instit. K. Ned. Inst., p. 215.

TYPE LOCALITY: Japan, Kyushu, Nagasaki.

DISTRIBUTION: Grassland and forest of Honshu, Shikoku, Kyushu (Japan); Dogo Isl, N Tsushima Isl (Japan).

SYNONYMS: *adversus*, *centralis*, *hondoensis*, *minutus*.

COMMENTS: Includes *adversus*, *centralis*, *hondonis* and *minutus* as subspecies; see Imaizumi (1970b:128).

Subfamily Uropsilinae Dobson, 1883. Monogr. Insectivora, 2:126-172.

Uropsilus Milne-Edwards, 1871. In David, Nouv. Arch. Mus. Hist. Nat. Paris, Bull. 7, pp. 92-93.

TYPE SPECIES: *Uropsilus soricipes* Milne-Edwards, 1871.

SYNONYMS: *Nasillus*, *Rhynchonax*.

COMMENTS: Includes *Nasillus* and *Rhynchonax*; see Ellerman and Morrison-Scott (1966:31) and Corbet and Hill (1980:33); but also see Gureev (1979:201-204), who listed *Rhynchonax* and *Nasillus* as distinct genera. Reviewed by Hoffmann (1984).

Uropsilus andersoni (Thomas, 1911). Abstr. Proc. Zool. Soc. Lond., 1911(100):49.

TYPE LOCALITY: China, Sichuan, "Omi-san" = Emei-Shan.

DISTRIBUTION: Central Sichuan (China).

COMMENTS: Formerly included in *soricipes*, but see Hoffmann (1984).

Uropsilus gracilis (Thomas, 1911). Abstr. Proc. Zool. Soc. Lond., 1911(100):49.

TYPE LOCALITY: China, Sichuan, near Nan-chwan (Nanchuan), Mt. Chin-fu-san (Jingfu Shan).

DISTRIBUTION: Sichuan and Yunnan (China) and N Burma.

SYNONYMS: *atronates*, *nivatus*.

COMMENTS: Formerly included in *soricipes*; but see Hoffmann (1984).

Uropsilus investigator (Thomas, 1922). Ann. Mag. Nat. Hist., ser. 9, 10:393.

TYPE LOCALITY: China, Yunnan, Kui-chiang-Salween divide at 28°N, 11,000 ft.

DISTRIBUTION: Yunnan (China).

COMMENTS: Hoffmann (1984) included *investigator* in *gracilis* but on morphological and distributional grounds Wang and Yang (1989) and Storch (pers. comm.) concluded that both are sympatric in Yunnan and must therefore be regarded as distinct species.

Uropsilus soricipes Milne-Edwards, 1871. In David, Nouv. Arch. Mus. Hist. Nat. Paris, Bull. 7, p. 92.

TYPE LOCALITY: China, Sichuan, Moupin.

DISTRIBUTION: C Sichuan (China).

COMMENTS: Formerly included *andersoni*, *gracilis*, and *investigator*, according to Ellerman and Morrison-Scott (1966), but see Hoffmann (1984). Gureev (1979) listed these as distinct species without comment.