

AMERICAN MUSEUM *Novitates*

PUBLISHED BY THE AMERICAN MUSEUM OF NATURAL HISTORY
CENTRAL PARK WEST AT 79TH STREET, NEW YORK, NY 10024

Number 3248, 29 pp., 1 table

November 5, 1998

Mammal Species of the World: Additional Data on Insular Mammals

JOSEP ANTONI ALCOVER,^{1,2} XAVIER CAMPILLO,³ MARTA MACIAS,³
AND ANTÒNIA SANS¹

ABSTRACT

A catalog of recent mammalian species from oceanic and oceanic-like islands is presented. Our list covers the taxa that were found by the first human settlers on oceanic and oceanic-like islands worldwide. In a first section (catalog) we list 95 species described before 1993 that were not considered by Wilson and Reeder (1993) (14 Xenarthra, 5 Chiroptera, 4 Insectivora, 18 Primates, 6 Carnivora, 2 Bibymalagasias, 3 Proboscidea, 13 Artiodactyla, and 30 Rodentia). In addition, we tabulate some 41–46 or more recently extinct

mammals (1 Diprotodontia, 1 Peramelemorphia, 4 Xenarthra, 2 Insectivora, 1 Chiroptera, 2 Primates, 2 or more Proboscidea, 4 Artiodactyla, and 24–29 Rodentia) that remain undescribed from such islands. The tentative list of all the endemic mammals from oceanic and oceanic-like islands of the world is presented as appendix 1, which includes at least 11 living species of insular mammals described after 1993 and another 15–16 living species (3–4 Insectivora, 2 Chiroptera, 10 Rodentia) still undescribed.

INTRODUCTION

“A checklist of species is an invaluable tool for both researchers and the interested public.” Wilson and Reeder (1993) have published a catalog of Recent Mammals of the World. This enormous and useful work

facilitates global analyses of the biodiversity of mammals.

Numerous mammalian species have become extinct in historic or prehistoric times, solely or primarily due to the direct or indi-

¹ Institut Mediterrani d'Estudis Avançats, Carretera de Valldemossa km 7,5, Ciutat de Mallorca, Balears (Spain).

² Research Associate, Department of Mammalogy, American Museum of Natural History.

³ Servei de Documentació, Universitat de les Illes Balears, Carretera de Valldemossa km 7,5, 07071 Ciutat de Mallorca, Balears (Spain).

rect influence of the human species, *Homo sapiens* (see Anderson, 1984; Martin, 1984; Horton, 1984; Murray, 1984, 1991). These mammals ought to be included in catalogs of recent mammals, to permit a more accurate perception of the scope of mammalian biodiversity. This should lead to improved knowledge of the extent of human impact on Mammals (see Alcover et al., in press).

The incorporation of recently extinct species in faunal catalogs is not unusual. In the case of mammals, examples can be found in Nowack and Paradiso (1983), Anderson and Jones (1984), as well as Wilson and Reeder (1993). The last catalog includes a series of island and continental species that have recently disappeared (e.g., *Lagorchestes asomatus*, *Macropus greyi*, *Onychogalea lunata*, and others). However, there are many taxa that do not appear on these lists.

The first part of this paper is a catalog that deals mainly with the species recently vanished from oceanic and oceanic-like islands that do not appear in the Wilson and Reeder (1993) catalog. Such islands are characterized by impoverished, unbalanced terrestrial faunas, compared with those of the closest mainlands, as well as by numerous endemic taxa (Alcover and McMin, 1994). Wilson and Reeder (1993) considered the "existing or recently extinct species (possible alive during the precedent 500 years)" as recent. However, the choice of species is ambiguous; authors of certain groups include some that became extinct over 500 years ago, some for which the only existing evidence indicates that they died out more than 2000 years ago, and others for which the only available evidence is from archaeological sites (e.g., *Canariomys tamarani*, *Malpaisomys insularis*, *Papagomys theodorverhoeveni*, *Spelaeomys florensis*, *Solomys spriggsarum*, *Coryphomys buhleri*, and *Melomys spechti*; see Musser and Carleton, 1993). The treatment of species exterminated a few thousand years ago because of human impact is not consistent, since several of those species are not mentioned at all.

In order to make treatment consistent, a list of additional insular mammalian species is presented in this paper. It covers taxa that were found by the first human settlers on oceanic and oceanic-like islands worldwide,

and that were omitted by some of the authors in Wilson and Reeder (1993). The species are presented in the format of Wilson and Reeder (1993), to render their inclusion in a future edition easier. Page references for original descriptions of a few taxa have been omitted, because we were unable to obtain a few of those publications.

Although there is not undisputable evidence of contact with humans for some of the species presented here, we regarded all mammalian species living on islands during the late Pleistocene or Holocene to have survived until the arrival of humans. This same criterion has been followed by some of the authors in the Wilson and Reeder (1993) catalog (e.g., Hutterer, with the treatment of *Neophontes*, and Woods, with the treatment of *Heptaxodontidae*). In the few cases where there is concrete evidence of prehuman extinction, we have omitted the species in question. Climatic changes that may have had an important impact on continental faunas are thought to have had a lesser effect on insular assemblages, due to the damping influence of oceans. Although our criteria for admitting species is perhaps overly inclusive, we believe that in most instances inclusion is likely to be correct.

The list does not include species from islands that were connected to the mainlands during the last glaciation (e.g., Great Britain, Ireland, Palawan), except for a few continental islands that contain faunas exhibiting a grossly disharmonic, truly oceanic character (e.g., Falkland Islands, Wrangel Island).

Some living species of island mammals have been described since 1993 (*Phalanger alexandrae*, *Microgale soricoides*, *Microgale gymnorhyncha*, *Crocidura musseri*, *Melonycteris fardoulisi*, *Emballonura serii*, *Tadarida tomensis*, *Melomys matambuui*, *Uromys emmae*, *Uromys boeadii* and *Monticolomys koopmani*; see Flannery and Boeadi, 1996; Jenkins, 1993; Jenkins et al. 1996; Ruedi, 1995; Flannery, 1993, 1994; Juste and Ibañez, 1993; Groves and Flannery, 1994; Flannery et al., 1994; Carleton and Goodman, 1996). Other living species have not been described yet (*Microgale* sp., *Crocidura* spp., *Pteralopex* sp., *Nyctophilus* sp., *Melomys* sp., *Apomys* sp., *Rattus* spp., *Papagomys* sp., *Taeromys* sp.; see Musser, 1982, 1987; Mus-

ser and Heaney, 1992; Flannery, 1995; and Jenkins et al., 1996). These unnamed taxa have been included in table 1. We excluded the recently described *Melomys bannisteri* from Kai Besar (Kitchener and Maryanto, 1993), because of difficulties in assessing the validity of this taxon (see Flannery, 1995). Also we maintain *C. sicula* and *C. canariensis* as different species, despite their great morphological similarities (Sarà, 1996).

We have arranged the higher taxonomic categories (orders, families, subfamilies), following the Wilson and Reeder (1993) ranking. The genera and species names have been alphabetically ordered under those categories.

ACKNOWLEDGEMENTS

Research for this article was sponsored by the Dirección General de Investigación Científica y Técnica (Madrid, Spain; Project Number PB97-1173) and the Comisión Científica de Técnica y Tecnología (Madrid, Spain; Project AMB96-0845). We must acknowledge Deborah Bonner and Cristian R. Altaba with many thanks for their help in translation and Salvador Moyà (Sabadell), John de Vos (Leiden), Jean-Denis Vigne (Paris), Paul Y Sondaar (Utrecht), Francis Petter (Paris), Ross MacPhee (New York), Leslie Marcus (New York), Dave Steadman (Gainesville), Timothy Flannery (Sydney), and Storrs Olson (Washington) for valuable help in assembling the bibliography and providing critical comments. Brenda Jones (New York) helped us substantially in editorial aspects of the manuscript.

CATALOG

ORDER XENARTHRA

FAMILY MEGALONYCHIDAE AMEGHINO, 1889

COMMENTS: 14 fossil sloth species from Quaternary deposits have been described in the Greater Antilles. Another four species remain to be described from La Hispaniola (Woods, 1990). Accurate stratigraphic data for these taxa are very scarce, and yet contradictory. One of the species listed here (*Neocnus gliriformis*) may not be from the late Pleistocene. *Habanocnus paulacoutoi* has been described from the middle Pleisto-

cene of Cuba, and therefore is not included here. A systematic revision of the whole group is necessary. Possibly some of the species listed here will be synonymized.

SUBFAMILY MEGALOCNINAE

KRAGLIEVICH, 1923

An. Mus. Nac. Hist. Nat. Buenos Aires, 33: 54

Megalocnus Leidy, 1868. Proc. Acad. Nat. Sci. Philadelphia 20: 180

TYPE SPECIES: *Megalocnus rodens* Leidy, 1868.

Megalocnus rodens Leidy, 1868. Proc. Acad. Nat. Sci. Philadelphia 20: 180

TYPE LOCALITY: Ciego Montero (Las Villas, Cuba).

DISTRIBUTION: Cuba.

SYNONYMS: *casimbae* Matthew, 1959, *ursulus* Matthew, 1959, *intermedius* Mayo, 1969, *junius* Matthew, 1959.

Mesocnus Matthew, 1931. Proc. Am. Philos. Soc. 58: 168

TYPE SPECIES: *Mesocnus browni* Matthew, 1931.

Mesocnus browni Matthew, 1931. Am. Mus. Novitates 511: 2

TYPE LOCALITY: Ciego Montero, Las Villas, Cuba.

DISTRIBUTION: Cuba.

Mesocnus torrei Matthew, 1931 Am. Mus. Novitates 511: 3

TYPE LOCALITY: Las Llanadas, Casimba, Sierra de Jatibonico, Las Villas, Cuba.

DISTRIBUTION: Cuba.

COMMENTS: Difficulty distinguishing precedent species (MacPhee, personal commun.).

Neomesocnus Arredondo, 1961. Bol. Grup. Explor. Cient. 1: 19

TYPE SPECIES: *Neomesocnus brevirostris* Arredondo, 1961.

Neomesocnus brevirostris Arredondo, 1961. Bol. Grup. Explor. Cient. 1: 22

TYPE LOCALITY: Cueva de Paredones, Ceiba del Agua, San Antonio de los Baños, Cuba.

DISTRIBUTION: Cuba.

Parocnus Miller, 1929. Smithson. Misc. Collect. 81 (9): 28

TYPE SPECIES: *Parocnus serus* Miller, 1929.

Parocnus serus Miller, 1929. *Smithson. Misc. Collect.* 81 (9): 28

TYPE LOCALITY: Cave near St Michel, Haiti.

DISTRIBUTION: La Hispaniola.

SUBFAMILY ORTOTHERIINAE

KRAGLIEVICH, 1923

An. Mus. Nac. Hist. Nat. Buenos Aires 33: 55

Acratocnus Anthony, 1916. *Ann. New York Acad. Sci.* 27: 195

TYPE SPECIES: *Acratocnus odontrigonus* Anthony, 1916.

Acratocnus odontrigonus Anthony, 1916. *Ann. New York Acad. Sci.* 27: 195

TYPE LOCALITY: Cueva de la Ceiba, Hacienda Jobo, Utuado, Puerto Rico.

DISTRIBUTION: Puerto Rico.

SYNONYMS: *major* Anthony, 1918.

Habanocnus Mayo, 1978. *Eclogae Geol. Helv.* 71: 688

TYPE SPECIES: *Habanocnus hoffstetteri* Mayo, 1978.

Habanocnus hoffstetteri Mayo, 1978. *Eclogae Geol. Helv.* 71: 688

TYPE LOCALITY: Cueva de Paredones, Ceiba del Agua, Provincia de La Habana, Cuba.

DISTRIBUTION: Cuba.

Miocnus Matthew, 1919. *Proc. Am. Philos. Soc.* 58: 168

TYPE SPECIES: *Miocnus antillensis* Matthew, 1919.

Miocnus antillensis Matthew, 1931. *Am. Mus. Novitates* 511: 4

TYPE LOCALITY: Las Llanadas, Casimba, Sierra de Jatibonico, Cuba.

DISTRIBUTION: Cuba.

Neocnus Arredondo, 1961. *Bol. Grup. Explor. Cient.* 1: 29

TYPE SPECIES: *Neocnus gliriformis* (Matthew, 1931).

SYNONYMS: *Microcnus* Matthew, 1919, *Cubanocnus* Kretzoi, 1968.

Neocnus bairiensis Mayo, 1980. *Actas II Congr. Argent. Paleontol. Bioestrat. and I Congr. Latinoam. Paleontol.*, Buenos Aires, 3: 224

TYPE LOCALITY: Baire, Provincia de Oriente, Cuba.

DISTRIBUTION: Cuba.

Neocnus gliriformis (Matthew, 1931). *Am. Mus. Novitates* 511: 4

TYPE LOCALITY: Las Llanadas –Casimba–, Sierra de Jatibonico, Las Villas, Cuba.

DISTRIBUTION: Cuba.

Neocnus major Arredondo, 1961. *Bol. Grup. Explor. Cient.* 1: 32

TYPE LOCALITY: Caverna de Pío Domingo, Sierra de Sumidero, Pinar del Río, Cuba.

DISTRIBUTION: Cuba.

COMMENTS: Considered a synonym of *gliriformis* by Paula Couto (1967), but a full species by other authors (Mayo, 1978; Woods, 1990).

Neocnus minor Arredondo, 1961. *Bol. Grup. Explor. Cient.* 1: 33.

TYPE LOCALITY: Caverna de Pío Domingo, Sierra de Sumidero, Pinar de Río, Cuba.

DISTRIBUTION: Cuba.

COMMENTS: Considered a synonym of *gliriformis* by Paula Couto (1967) but a full species by other authors (Mayo, 1978; Woods, 1990).

Paulocnus Hooijer, 1963. *Proc. K. Ned. Akad. Wet., Ser. B, Palaeontol. Geol. Phys. Chem.* 65: 47.

TYPE SPECIES: *Paulocnus petrifactus* Hooijer, 1963.

Paulocnus petrifactus Hooijer, 1963. *Proc. K. Ned. Akad. Wet., Ser. B, Palaeontol. Geol. Phys. Chem.* 65: 47.

TYPE LOCALITY: Tafelberg Santa Bárbara, eastern Curaçao.

DISTRIBUTION: Curaçao.

Synocnus Paula Couto, 1967. *Am. Mus. Novitates* 2304: 35

TYPE SPECIES: *Synocnus comes* (Miller, 1929).

SYNONYMS: *Acratocnus* [partim].

Synocnus comes (Miller, 1929). *Smithson. Misc. Collect.* 81 (9): 26

TYPE LOCALITY: Cueva Grande, Plantación Atalaya, St. Michel, Haiti.

DISTRIBUTION: La Hispaniola.

ORDER CHIROPTERA

FAMILY MORMOOPIDAE KOCH, 1862–63

Mormoops magna Silva Taboada 1974. *Acta Zool. Cracov.* 19, 3: 52

TYPE LOCALITY: Cueva de los Masones (layer M12), Trinidad, Provincia de Las Villas, Cuba.

DISTRIBUTION: Cuba.

Pteronotus pristinus Silva Taboada 1974. Acta Zool. Cracov. 19, 3: 49

TYPE LOCALITY: Cueva de los Masones (layer M2), Trinidad, Provincia de las Villas, Cuba.

DISTRIBUTION: Cuba.

FAMILY PHYLLOSTOMIDAE GRAY, 1825

SUBFAMILY PHYLLOSTOMINAE GRAY, 1825

Tonatia saurophila Koopman and Williams, 1951. Am. Mus. Novitates 1519: 11

TYPE LOCALITY: Wallingford Roadside Cave, Balaclava, St Elizabeth Parish, Jamaica.

DISTRIBUTION: Jamaica.

SUBFAMILY PHYLLONYCTERINAE MILLER, 1907

Phyllonycteris major Anthony, 1917. Bull. Am. Mus. Nat. Hist. 37: 567

TYPE LOCALITY: Cave near Morovis (Puerto Rico).

DISTRIBUTION: Puerto Rico, Antigua (as *Phyllonycteris* cf. *major*).

FAMILY VESPERTILIONIDAE GRAY, 1821

Nyctophilus howensis McKean, 1975. Aust. Mammal. 1: 330

TYPE LOCALITY: Unnamed calcarenite cave, North Bay, Lord Howe Island.

DISTRIBUTION: Lord Howe Island.

ORDER INSECTIVORA

FAMILY SOLENODONTIDAE GILL, 1872

Solenodon arredondoi Morgan and Ottenwalder 1993. Ann. Carnegie Mus. 62: 154

TYPE LOCALITY: Cueva Paredones, 3 km southwest of Ceiba del Agua, San Antonio de los Baños, La Habana Province, Cuba.

DISTRIBUTION: Cuba.

COMMENTS: This species was first reported as *Solenodon* sp. by Morgan et al. (1980).

FAMILY SORICIDAE

FISCHER VON WALDHEIM, 1817

SUBFAMILY SORICINAE

FISCHER VON WALDHEIM, 1817

Soriculus corsicanus (Bate, 1945). Ann. Mag. Nat. Hist. sec.11, XI: 748

TYPE LOCALITY: Teppa di Lupino, North Corsica.

DISTRIBUTION: Corsica.

COMMENTS: See comments under *Soriculus hidalgo*.

Soriculus hidalgo (Bate, 1945). Ann. Mag. Nat. Hist. sec.11, XI: 742

TYPE LOCALITY: Cap Ferrutx, Eastern Mallorca.

DISTRIBUTION: Mallorca and Menorca.

COMMENTS: Originally described as *Nesiotites hidalgo*. The genus *Nesiotites* was included in *Episoriculus* by Mein (1983), which in turn is synonymous with *Soriculus* (Wilson and Reeder, 1993).

Soriculus similis (Hensel, 1855). Z. Dtsch. Geol. Ges. 7: 459

TYPE LOCALITY: Montereale, near Cagliari (Sardinia).

DISTRIBUTION: Sardinia.

ORDER PRIMATES

FAMILY INDRIDAE BURNETT, 1828

Mesopropithecus Standing, 1905. Bull. Acad. Malgache (anc. sér.) 4: 95

TYPE SPECIES: *Mesopropithecus pithecooides* Standing, 1905.

SYNONYMS: *Neopropithecus* Lamberton, 1937.

Mesopropithecus globiceps (Lamberton, 1939). Mém. Acad. Malgache 27: 20

TYPE LOCALITY: Sirave (Madagascar).

SYNONYMS: *platyfrons*.

DISTRIBUTION: Southern and southwestern Madagascar.

COMMENTS: First mention, without description, in Lamberton (1937).

Mesopropithecus pithecooides Standing, 1905. Bull. Acad. Malgache (anc. sér.) 4: 95

TYPE LOCALITY: Ampasambazimba (Madagascar).

DISTRIBUTION: Central plateau of Madagascar.

FAMILY PALAEOPROPITHECIDAE

TATTERSALL 1973

Trans. New York Acad. Sci. 35: 321

Archaeoindris Standing, 1908. Bull. Acad. Malgache (anc. sér.) 6: 9

TYPE SPECIES: *Archaeoindris fontoynonti*.

SYNONYMS: *Lemuridotherium* Standing, 1910.

Archaeoindris fontoynonti Standing, 1908. Bull. Acad. Malgache (anc. sér.) 6: 9

TYPE LOCALITY: Ampasambazimba (Madagascar).

DISTRIBUTION: Central Madagascar.

Babakotia Godfrey, Simons, Chatrah and Rakotosamimanana 1990. C. R. Acad. Sci. Paris 310: 82.

TYPE SPECIES: *Babakotia radofilaoi*.

Babakotia radofilaoi Godfrey, Simons, Chatrah and Rakotosamimanana 1990. C. R. Acad. Sci. Paris 310: 82.

TYPE LOCALITY: Antsiroandoha cave, Ankara range, Madagascar.

DISTRIBUTION: Madagascar.

Palaeopropithecus Grandidier, 1899. Bull. Mus. Natl. Hist. Nat. (Paris) 5: 345

TYPE SPECIES: *Palaeopropithecus ingens* Grandidier, 1899.

SYNONYMS: *Bradytherium* Grandidier, 1901.

Palaeopropithecus ingens Grandidier, 1899. Bull. Mus. Natl. Hist. Nat. (Paris) 5: 345

TYPE LOCALITY: Belo (Madagascar).

SYNONYMS: *madagascariense*.

DISTRIBUTION: Southern and southwestern Madagascar.

Palaeopropithecus maximus Standing, 1903. Bull. Acad. Malgache (anc. sér.) 2: 231

TYPE LOCALITY: Ampasambazimba (Madagascar).

SYNONYMS: *raybaudii*.

DISTRIBUTION: Central plateau of Madagascar.

FAMILY ARCHAEOLEMURIDAE

GRANDIDIER, 1905

Nouv. Arch. Mus. Natl. Hist. Nat. (Paris), 4e sér.: 102

Archaeolemur Filhol, 1895. Bull. Mus. Natl. Hist. Nat. (Paris) 1: 13

TYPE SPECIES: *Archaeolemur majori*.

SYNONYMS: *Lophiolemur* Filhol, 1895, *Dinolemur* Filhol, 1895 [in partim], *Nesopithecus* Forsyth-Major, 1896, *Globilemur* Forsyth-Major, 1897, *Protoindris* Lorenz, 1900, *Bradylemur* Grandidier, 1899.

Archaeolemur edwardsi (Filhol, 1895). Bull. Mus. Natl. Hist. Nat. (Paris) 1: 13.

TYPE LOCALITY: Belo (Madagascar).

SYNONYMS: *roberti*, *platyrrhinus*.

DISTRIBUTION: Central highlands of Madagascar.

Archaeolemur majori Filhol, 1895. Bull. Mus. Natl. Hist. Nat. (Paris) 1: 13

TYPE LOCALITY: Belo (Madagascar).

SYNONYMS: *australis*, *globiceps*, *bastardi*, *robustus*.

DISTRIBUTION: Southern and southwestern Madagascar.

Hadropithecus Lorenz, 1899. Anz. K. Akad. Wiss. Wien 19: 1

TYPE SPECIES: *Hadropithecus stenognathus* Lorenz, 1899.

SYNONYMS: *Pithecodon* Lorenz, 1900.

Hadropithecus stenognathus Lorenz, 1899. Anz. K. Akad. Wiss. Wien 19: 1

TYPE LOCALITY: Andrahomana Cave (Madagascar).

SYNONYMS: *sikorae*.

DISTRIBUTION: Madagascar.

FAMILY LEMURIDAE GRAY, 1821

Pachylemur Lamberton, 1946 [publ. 1948]. Bull. Acad. Malgache 27: 7

TYPE SPECIES: *Pachylemur insignis*

SYNONYMS: *Palaeochirolagus* Grandidier, 1899.

COMMENTS: Some authors (e.g., Tattersall, 1982, Woods and Eisenberg, 1989) include this genus in *Varecia*.

Pachylemur insignis (Filhol, 1895). Bull. Mus. Natl. Hist. Nat. (Paris) 1: 12

TYPE LOCALITY: Belo (Madagascar).

DISTRIBUTION: Southern and southwestern Madagascar.

SYNONYMS: *intermedius*, *jullyi* Grandidier 1899 [not *Lemur jullyi* Standing 1904].

Pachylemur jullyi Standing, 1904. Bull. Acad. Malgache (anc. sér.) 3: 306

TYPE LOCALITY: Antsirabe (Madagascar).

DISTRIBUTION: Central highlands of Madagascar.

FAMILY MEGALADAPIDAE

FORSYTH-MAJOR, 1893

Megaladapis Forsyth-Major, 1894. Philos. Trans. R. Soc. London B Biol. Sci. 185: 16

TYPE SPECIES: *Megaladapis madagascariensis* Forsyth-Major, 1894.

SYNONYMS: *Peloriadapis* Grandidier, 1899, *Palaeolemur* Lorenz, 1900, *Mesoadapis* Lorenz, 1900, *Megalindris* Standing, 1908.

Megaladapis edwardsi Grandidier, 1899. Bull. Mus. Natl. Hist. Nat. (Paris) 5: 276

TYPE LOCALITY: Ambolisatra (Madagascar).

SYNONYMS: *insignis*, *destructus*, *brachycephalus*, *dubius*, *dolichocephalus*, *gallienii*.

DISTRIBUTION: Southern and southwestern Madagascar.

Megaladapis grandidieri Standing, 1903. Bull. Acad. Malgache (anc. sér.) 2: 229

TYPE LOCALITY: Ampasambazimba (Madagascar).

DISTRIBUTION: Central highlands of Madagascar.

Megaladapis madagascariensis Forsyth-Major, 1894. Philos. Trans. R. Soc. London B Biol. Sci. 185: 16

TYPE LOCALITY: Ambolisatra (Madagascar).

DISTRIBUTION: Southern and southwestern Madagascar.

FAMILY DAUBENTONIDAE GRAY, 1863

Daubentonia robusta (Lamberton, 1934). Mém. Acad. Malgache 17: 40

TYPE LOCALITY: Sirave (Madagascar).

DISTRIBUTION: Madagascar.

FAMILY XENOTRICHIDAE HERSHKOVITZ 1970

Folia Primatol. 13

Antillothrix MacPhee, Horovitz, Arredondo and Jiménez Vasques, 1995. Am. Mus. Novitates 3134: 3

Antillothrix bernensis (Rímoli, 1977). Cuad. CENDIA, Univ. Aut. Santo Domingo 242: 8

TYPE LOCALITY: Cueva de Berna, República Dominicana.

DISTRIBUTION: La Hispaniola.

COMMENTS: Initially included in *Saimiri*. Several workers have suggested that this species is not a *Saimiri* but a cebine related to *Cebus* (MacPhee and Woods, 1982; Rosenberger, 1978). More recently MacPhee et al. (1994) established that this species should be included in a new genus, named later by MacPhee et al. (1995). *Antillothrix* must be

considered as the closest known relative of *Paralouatta varonai* (see also MacPhee 1996).

Paralouatta Rivero and Arredondo, 1991. J. Hum. Evol. 21: 1

TYPE SPECIES: *Paralouatta varonai* Rivero and Arredondo, 1991.

Paralouatta varonai Rivero and Arredondo, 1991. J. Hum. Evol. 21: 1

TYPE LOCALITY: Cueva del Mono Fósil (Sierra de Galeras, Cordillera de Guaniguanico, provincia de Pinar del Río, Cuba).

DISTRIBUTION: Cuba.

Xenothrix Williams and Koopman, 1952. Am. Mus. Novitates 1546: 12

TYPE SPECIES: *Xenothrix mcgregori* Williams and Koopman, 1952.

Xenothrix mcgregori Williams and Koopman, 1952. Am. Mus. Novitates 1546: 12

TYPE LOCALITY: Long Mile Cave, Trelawney Parish, Jamaica.

DISTRIBUTION: Jamaica.

COMMENTS: Until very recently, the familiar relationships of *Xenothrix* were unresolved; some authors related it to the callitrichines (e.g., Ford, 1990), others to the atelids pitheciines (Rosenberger et al., 1990). MacPhee and Fleagle (1991) placed it in its own family, Xenotrichidae, following Hershkovitz (1970). After MacPhee (1996), the Xenotrichidae includes all the autochthonous Antillean monkeys.

ORDER CARNIVORA

FAMILY CANIDAE FISCHER, 1817

Cynotherium Studiati, 1857. In La Marmora, A. de, "Voyage en Sardaigne," II: 570

TYPE SPECIES: *Cynotherium sardous* Studiati.

SYNONYMS: *Cuon* Hodgson, 1838 [in partim].

Cynotherium sardous Studiati. In La Marmora, A. de, "Voyage en Sardaigne," II: 570

TYPE LOCALITY: Bonaria, Cagliari (Sardinia).

DISTRIBUTION: Sardinia, Corsica.

FAMILY MUSTELIDAE FISCHER, 1817

SUBFAMILY LUTRINAE BONAPARTE, 1838

Algarolutra Malatesta and Willemsen, 1986. Geol. Rom. 25: 285

TYPE SPECIES: *Algarolutra majori*.

SYNONYMS: *Cyrnaonix* Helbing, 1935 [in partim].

Algarolutra majori (Malatesta, 1978). *Quaternaria* 20: 114

TYPE LOCALITY: Grotta di Dragonara, near Alguer, NW Sardinia.

DISTRIBUTION: Sardinia, Corsica.

Lutra Brünnich, 1771

SYNONYMS: *Nesolutra* Bate, 1935.

Lutra euxena (Bate, 1935). *Proc. Zool. Soc. London* 1935: 248

TYPE LOCALITY: Tal Gnien, near Imkabiba, southwest of Valetta, Malta.

DISTRIBUTION: Malta.

Lutrogale Gray, 1865. *Proc. Zool. Soc. London* 1865: 127

SYNONYMS: *Isolalutra* Symeonides and Sondaar, 1975.

Lutrogale cretensis (Symeonides and Sondaar, 1975) *Ann. Geol. Pays Hellen.* 27: 12

TYPE LOCALITY: Liko Cave bed, Liko, 4 km north of Georgioupolis, Crete.

DISTRIBUTION: Crete.

Megalenhydris Willemsen and Malatesta, 1987. *Proc. K. Ned. Akad. Wet. Ser. B Palaeontol. Geol. Phys. Chem.* 90: 85

TYPE SPECIES: *Megalenhydris barbaricina*.

Megalenhydris barbaricina Willemsen and Malatesta, 1987. *Proc. K. Ned. Akad. Wet. Ser. B Palaeontol. Geol. Phys. Chem.* 90: 85

TYPE LOCALITY: Ispiginoli, near Dorgali, Sardinia.

DISTRIBUTION: Sardinia.

Sardolutra Willemsen, 1992. *Scr. Geol.* 101: 34

TYPE SPECIES: *Sardolutra ichnusae*.

SYNONYMS: *Nesolutra* Bate, 1935 [in partim].

Sardolutra ichnusae (Malatesta, 1977). *Geol. Rom.* 16: 177

TYPE LOCALITY: Grotta di Nettuno, Capo Caccia, Sardinia.

DISTRIBUTION: Sardinia.

COMMENTS: Initially described as *Nesolutra ichnusae*.

ORDER BIBYMALAGASIA MACPHEE 1994

Bull. Am. Mus. Nat. Hist. 220: 201.

FAMILY PLESIORYCTEROPIDAE PATTERSON, 1975

Bull. Mus. Comp. Zool. 147: 216

SUBFAMILY PLESIORYCTEROPODINAE PATTERSON, 1975

Bull. Mus. Comp. Zool. 147: 216

Plesiorycteropus Filhol, 1895. *Bull. Mus. Natl. Hist. Nat. (Paris)* 1: 14

TYPE SPECIES: *Plesiorycteropus madagascarensis* Filhol, 1895.

SYNONYMS: *Majoria* Thomas 1915, *Hypogeomys* [partim] Grandidier 1912.

Plesiorycteropus germainepetterae MacPhee 1994. *Bull. Am. Mus. Nat. Hist.* 220: 32

TYPE LOCALITY: Central Madagascar, exact locality unknown. Probably Ampasambazimba (see MacPhee, 1994).

DISTRIBUTION: Madagascar.

Plesiorycteropus madagascarensis Filhol, 1895. *Bull. Mus. Natl. Hist. Nat. (Paris)* 1: 14

TYPE LOCALITY: Belo (Madagascar).

DISTRIBUTION: Madagascar.

COMMENTS: For a long time this species was included in the Tubulidentata. MacPhee (1987, 1989) initially suggested that it belonged in the Insectivora, but later MacPhee (1994) erected a new order for it. Specimens of *Plesiorycteropus* recorded by Burney et al. (1997) comes from a context radiometrically dated as more recent than AD 1440.

ORDER PROBOSCIDEA

FAMILY ELEPHANTIDAE GRAY, 1821

SUBFAMILY ELEPHANTINAE GILL, 1872

Elephas creutzburgi (Kuss, 1965). *Ber. Naturforsch. Ges. Freiburg Breisgau* 55: 287

TYPE LOCALITY: Cave near Sisses, Crete.

DISTRIBUTION: Crete.

Elephas cypriotes Bate, 1903. *Proc. R. Soc. London* 73: 499

TYPE LOCALITY: Imboahry cave, southern Kyrenia range, Cyprus.

DISTRIBUTION: Cyprus.

Mammuthus Burnett, 1830. *Q. J. Sci. Lit. Art.* 28: 352

TYPE SPECIES: *Mammuthus primigenius* (Blumenbach, 1799).

SYNONYMS: *Mammonteus* Camper, 1788, in Osborn, 1924—not Linnean in Camper, 1788—*Paraelephas* Osborn, 1924, *Archidiskodon* Pohlig, 1888, *Metarchidiskodon* Osborn, 1934, *Dicyclotherium* Geoffroy-Saint-Hilaire, 1837, *Cheiolites* von Meyer, 1848.

Mammuthus exilis Stock and Furlong, 1928. Science 68: 140

TYPE LOCALITY: Santa Rosa Island.

DISTRIBUTION: Santa Rosa and San Miguel Islands, California Channel Islands.

ORDER ARTIODACTYLA

FAMILY HIPPOPOTAMIDAE GRAY, 1821

Hippopotamus creutzburgi Boeschoten and Sondaar, 1966. Bijdr. Dierk. 36: 22

TYPE LOCALITY: Katharo basin, Crete.

DISTRIBUTION: Crete.

SYNONYMS: *parvus* Kuss, 1975.

Phanourios Boeschoten and Sondaar, 1972. Proc. K. Ned. Akad. Wet. Ser. B Palaeontol. Geol. Phys. Chem. 75: 326

TYPE SPECIES: *Phanourios minor*.

Phanourios minor (Desmarest, 1822). Mammalogie ou description des espèces de mammifères 2: 388

TYPE LOCALITY: Cyprus. Erroneously published as coming from Blaye, Département de la Charente (France).

DISTRIBUTION: Cyprus.

SYNONYMS: *minutus* Cuvier, 1824.

FAMILY CERVIDAE GOLDFUSS, 1820

SUBFAMILY CERVINAE GOLDFUSS, 1820

COMMENTS: A systematic revision of the Eastern Mediterranean insular cervines is necessary. Opposed opinions has been developed by de Vos (1984) and Capasso Barbato (1992). While de Vos (1984) included all deer from Crete in *Candiacervus*, Capasso Barbato (1992) included *rethymensis*, *major* and *dorothenensis* in *Cervus* (subgenus *Leptocervus*), and *ropalophorus* and *cretensis* in *Megaloceros* (subgenus *Candiacervus*).

Candiacervus Kuss, 1975. Ber. Naturforsch. Ges. Freiburg Breisgau 65.: 27

TYPE SPECIES: *Candiacervus cretensis*.

COMMENTS: Considered a subgenus of *Me-*

galoceros Brookes, 1828, by Capasso (1992).

Candiacervus cerigensis Kuss, 1975. Ber. Naturforsch. Ges. Freiburg Breisgau 65: 50

TYPE LOCALITY: Kandilia cave, 1.5 km SW of Pigadia, Karpathos.

DISTRIBUTION: Karpathos, Kasos.

Candiacervus cretensis (Simonelli, 1908). Mem. R. Accad. Sci. Ist. Bologna, Ser. VI, 4: 469

TYPE LOCALITY: Crete, not specified further, possibly a cave near Grida Avlaki.

DISTRIBUTION: Crete.

Candiacervus major (Barbato and Petronio, 1986). Atti Accad. Naz. Lincei Ser. VIII, 18: 93

TYPE LOCALITY: Bate Cave, Crete.

DISTRIBUTION: Crete.

Candiacervus pigadiensis Kuss, 1975. Ber. Naturforsch. Ges. Freiburg Breisgau 65: 50

TYPE LOCALITY: Kandilia cave, 1.5 km SW of Pigadia, Karpathos.

DISTRIBUTION: Karpathos, Kasos.

Candiacervus rethymnensis Kuss, 1975. Ber. Naturforsch. Ges. Freiburg Breisgau 65: 41

TYPE LOCALITY: Mawro Muri IV, west of Rethymnon, Crete.

DISTRIBUTION: Crete.

Candiacervus ropalophorus De Vos, 1984. Verh. K. Ned. Akad. Wet. Afd. Natuurkd. Eerste Reeks 31: 43

TYPE LOCALITY: Gerani 4, 40 uppermost cm of the cave filling, Crete.

DISTRIBUTION: Crete.

Cervus Linnaeus, 1758

Cervus astylodon (Matsumoto, 1924). Sci. Rep. Tohoku Univ. 2 Ser. (Geol.) 10: 21.

TYPE LOCALITY: Southern coast of Shimajiri district, Okinawajima.

DISTRIBUTION: Okinawajima, Tokunoshima, Iejima, Kumejima, Ishigakijima, Yonakunijima (Ryukyu Is.).

COMMENTS: The specimens of Ishigakijima and Yonakunijima very probably represent an undescribed species.

Cervus dorothenensis Capasso Barbato, 1992. Mem. Fis. Acc. Lincei, s.9, v.1: 194.

TYPE LOCALITY: Gorotta Bate, Crete.

DISTRIBUTION: Crete.

Megaloceros Brookes, 1828. A Prodrum of a Synopsis Animalium: 20

SYNONYMS: *Megaceros* Owen, 1844. See comments in Lister (1987).

TYPE SPECIES: *Megaloceros giganteus* (Blumenbach, 1799).

Megaloceros cazioti (Depéret, 1897). Vertébrés Pléistocènes de l'Île de Corse: 115

TYPE LOCALITY: Grotta near Nonza (Corsica).

DISTRIBUTION: Corsica, Sardinia.

SYNONYMS: *algarensis* Comaschi Caria, 1956

COMMENTS: The only insular cervine with limb bone proportions similar to those from mainland species. After Klein Hofmeijer (1996), *M. cazioti* could be reassigned to genus *Dama*.

SUBFAMILY ODOCOILEINAE POCKOCK, 1923

Capreolus Gray, 1821

Capreolus tokunagai Otuka, 1941. Proc. Japan Acad. 12: 46

TYPE LOCALITY: Tanabaru cave, Miyako Is.

DISTRIBUTION: Miyako-gun, Kurema Is., Irabu Is.

SYNONYMS: *miyakoensis* Otsuka, 1973.

FAMILY BOVIDAE GRAY, 1821

SUBFAMILY CAPRINAE GRAY, 1821

Myotragus Bate, 1909. Geol. Mag., n. ser., Dec. 5, 6: 385

TYPE SPECIES: *Myotragus balearicus* Bate, 1909.

Myotragus balearicus Bate, 1909. Geol. Mag., n. ser., Dec. 5, 6: 385

TYPE LOCALITY: Cova de Na Barxa, Mallorca.

DISTRIBUTION: Mallorca, Menorca.

COMMENTS: In addition to *M. balearicus*, the genus includes five fossil species from the Pliocene and Pleistocene (Alcover et al., 1981).

ORDER RODENTIA

SUBORDER SCIUROGNATHI

FAMILY MYOXIDAE GRAY, 1821

Eliomys morpheus (Bate, 1918). Proc. Zool. Soc. London (1918): 219

TYPE LOCALITY: Mallorca, not further specified.

DISTRIBUTION: Mallorca, Menorca.

COMMENTS: Initially described in the genus *Hypnomys* Bate, 1918. This genus was considered a subgenus of *Eliomys* by Zammit Maempel and De Bruijn (1982).

Eliomys wiedincitensis De Bruijn, 1982. Proc. K. Ned. Akad. Wet. Ser. B Palaeontol. Geol. Phys. Chem. 85: 118

TYPE LOCALITY: Wied Incita, Malta.

DISTRIBUTION: Malta.

COMMENTS: Initially described in the genus *Maltamys*.

FAMILY MURIDAE ILLIGER, 1815

SUBFAMILY ARVICOLINAE GRAY, 1821

Microtus henseli (Forsyth Major, 1882). Atti Soc. Toscana Sci. Nat. 3: 126

TYPE LOCALITY: Corsica, not further specified.

DISTRIBUTION: Corsica, Sardinia.

COMMENTS: Initially described as *Arvicola henseli*, but later included in *Tyrrhenicola* Major, 1905, or in *Microtus*, as by Chaline (1974).

Microtus melitensis (Bate, 1920). Geol. Mag. 1920: 209

TYPE LOCALITY: Ghar Dalam Cave, Malta.

DISTRIBUTION: Malta.

COMMENTS: Initially described as *Arvicola melitensis*.

SUBFAMILY CRICETINAE FISCHER, 1817

Mesocricetus rathgeberi Pieper, 1984. Stuttg. Beitr. Naturkd. B 107: 2

TYPE LOCALITY: Unnamed cave at the north of Monte de la Guardia, Armathia.

DISTRIBUTION: Armathia.

COMMENTS: Needs restudy and included here only provisionally. The species comes from a Holocene level that contains only fauna introduced by humans (Pieper, 1984; Caloi et al., 1986), whereas the species has not been found in the late Pleistocene/Holocene of Kasos, the island to which Armathia was joined during the last glaciation.

SUBFAMILY MURINAE ILLIGER, 1815

Canariomys bravoii Crusafont-Pairó and Pether, 1964. Mammalia 28: 607

TYPE LOCALITY: Island of Tenerife, not further specified.

DISTRIBUTION: Tenerife.

COMMENTS: This species was not included among recent mammals by Musser and Carleton (1993), whereas *C. tamarani* was, although *C. bravoii* has been found in several archaeological sites in Tenerife. A mummified specimen of this species has recently been found (J. C. Rando, personal commun.).

Mus minotaurus Bate, 1942. Ann. Mag. Nat. Hist. 11, 9: 45

TYPE LOCALITY: Cave deposit between Canea and Suda, Crete.

DISTRIBUTION: Crete.

Rhagamys Forsyth-Major, 1905. Geol. Mag., Dec. 5, 2: 503

TYPE SPECIES: *Rhagamys orthodon*.

Rhagamys orthodon (Hensel, 1856). Z. Dtsch. Geol. Ges.: 281

TYPE LOCALITY: Unknown.

DISTRIBUTION: Sardinia, Corsica.

SUBFAMILY NESOMYINAE MAJOR, 1897

Hypogeomys australis Grandidier, 1903. Bull. Mus. Hist. Nat. Paris 9: 13

TYPE LOCALITY: Andrahomana cave, Madagascar.

DISTRIBUTION: Madagascar.

SUBFAMILY SIGMODONTINAE WAGNER, 1843

Megalomys audreyae Hopwood 1926. Ann. Mag. Nat. Hist. (9) 17: 329

TYPE LOCALITY: Cave on the Island of Barbuda, West Indies.

DISTRIBUTION: Barbuda Island (Lesser Antilles).

Megalomys curazensis Hooijer, 1959. Stud. Fauna Curaçao 9: 2

TYPE LOCALITY: Duivelsklip, eastern Curaçao, Netherlands Antilles.

DISTRIBUTION: Curaçao.

Megaoryzomys Lenglet and Coppois, 1979. Bull. Acad. R. Belgique, Classe des Sciences 55: 635

TYPE SPECIES: *Megaoryzomys curioi*.

Megaoryzomys curioi (Niethammer, 1964). Mammalia 28: 596

TYPE LOCALITY: Cave in the Cascajo Mountain, Santa Cruz, Galápagos.

DISTRIBUTION: Isla Santa Cruz, Galápagos.

Oryzomys victus Thomas, 1898. Ann. Mag. Nat. Hist. 7, I: 178

TYPE LOCALITY: St. Vincent, not further specified.

DISTRIBUTION: St. Vincent (Lesser Antilles).

Peromyscus anyapahensis White, 1966. Contr. Sci. Los Angeles 96: 2

TYPE LOCALITY: West Anacapa Island.

DISTRIBUTION: West Anacapa Island.

Peromyscus nesodytes Wilson, 1936. J. Mammal. 17: 408

TYPE LOCALITY: Locality 106, California Institute of Technology, Vertebrate Paleontology Collection, Santa Rosa Island, Santa Barbara County, California.

DISTRIBUTION: Santa Rosa and San Miguel Islands (California Channel Is.).

SUBORDER HISTRICOGNATHI

FAMILY CAPROMYIDAE SMITH, 1842

Capromys acevedoi Arredondo, 1958. El Cartero Cubano 17, 12: 10

TYPE LOCALITY: Cueva Lamas, 2 km SW Playa Santa Fe, Bauta, Habana, Cuba.

DISTRIBUTION: Cuba.

Capromys antiquus Varona and Arredondo, 1979. Poeyana 195: 8

TYPE LOCALITY: Caverna de Pío Domingo, Sumidero, Pinar del Río, Cuba.

DISTRIBUTION: Cuba.

Capromys columbianus (Chapman, 1892). Bull. Am. Mus. Nat. Hist. 4: 314

TYPE LOCALITY: Cave near Trinidad, Cuba.

DISTRIBUTION: Cuba.

Capromys latus Varona and Arredondo, 1979. Poeyana 195: 5

TYPE LOCALITY: Cueva Lamas, 2 km SW Playa Santa Fe, Bauta, Habana, Cuba.

DISTRIBUTION: Cuba.

Capromys megas (Varona and Arredondo, 1979). Poeyana 195: 12

TYPE LOCALITY: Cueva Lamas, 2 km SW Playa Santa Fe, Bauta, Habana, Cuba.

DISTRIBUTION: Cuba.

Capromys pleistocenicus (Arredondo, 1958). El Cartero Cubano 17 (12): 48

TYPE LOCALITY: Cueva de Pío Domingo, Sierra de Sumidero, Pinar del Río, Cuba.

DISTRIBUTION: Cuba.

Capromys robustus Varona and Arredondo, 1979. Poeyana 195: 10

TABLE 1
 Unnamed Recent Mammalian Insular Species

Taxa	No. of species	Locality	Authority
<i>Dorcopsis</i>	1	Halmahera, Gebe	Flannery (1995)
Peroryctidae	1	Halmahera	Flannery (1995)
Xenarthra	4	Antilles	Woods & Eisenberg (1989)
<i>Solenodon</i>	1	La Hispaniola	Woods & Ottenwalder (1992)
<i>Nesophontes</i> ^a	1	Cayman Is.	Morgan & Woods (1986)
<i>Microgale</i>	1 ^b	Madagascar	Jenkins et al. (1996)
<i>Crocidura</i>	1 or 2 ^b	Sulawesi	Musser (1982) ^c
<i>Crocidura</i>	1 ^b	Peleng, Taliabu (Sula Is.)	Musser (1987)
Chiroptera	1	La Hispaniola	Woods & Ottenwalder (1992)
<i>Pteralopex</i>	1 ^b	Kolombangara, New Georgia	Flannery (1995)
<i>Nyctophilus</i>	1 ^b	New Caledonia	Flannery (1995)
<i>Mesopropithecus</i>	1	Madagascar	Godfrey et al. (1995)
<i>Homo</i>	1	Sardinia	Spoor & Sondaar (1986) ^d
<i>Elephas</i>	1	Tylos	Bachmayer et al. (1976)
<i>Elephas</i>	1 or more	Cyclades	Dermitzakis & Sondaar (1979)
Cervidae	1	Amorgos	Caloi et al. (1986)
Cervidae	1	Malta	Caloi et al. (1986)
<i>Candiacervus</i>	1	Creta	De Vos (1984)
<i>Muntiacus</i>	1	Okinawajima, Iejima, Kumejima (Ryukyuu Is.)	Otsuka et al. (1980)
Muridae	1 or 2	Cyprus	Boekschoten & Sondaar (1972) ^e
Murinae ^a	1–3	Timor	Glover (1986) ^f
<i>Apodemus</i>	1	Naxos	Dermitzakis & Sondaar (1979)
<i>Apomys</i>	1 ^b	Negros (Philippines)	Musser & Heaney (1992)
<i>Batomys</i>	1 ^b	Dinagat	Musser et al. (1985)
<i>Lenomys</i> ^a	1 ^b	Sulawesi	Musser & Holden (1991)
<i>Melomys</i>	1 ^b	New Britain	Flannery (1995)
<i>Meriones</i>	1	Lampedusa	Burgio & Kotsakis (<i>in</i> Caloi et al. 1986)
<i>Mus</i>	1	Karpathos	Dermitzakis & Sondaar (1979)
<i>Nesomys</i>	1	Madagascar	Burney et al. (1997)
<i>Papagomys</i>	1 ^b	Flores	Musser & Heaney (1992)
<i>Rattus</i>	1	Manus	Flannery (1995)
<i>Rattus</i>	1 ^b	Timor	Musser & Heaney (1992) ^g
<i>Rattus</i>	1 ^b	Moluccas	Musser & Heaney (1992)
<i>Rattus</i>	1 ^b	Bisa	Flannery (1995) ^h
<i>Sundamys</i> ^a	1 ^b	Nicobar Is.	Musser & Newcomb (1983)
<i>Taeromys</i> ^a	1 ^b	Sulawesi	Musser & Holden (1991)
<i>Tokudaia</i> ^a	1	Tokunoshima	Tsuchiya et al. (1989)
Sigmodontinae	1	Fernando de Noronha	Olson (1981)
<i>Megalomys</i>	1	Aruba	Hooijer (1966)
<i>Megaoryzomys</i>	1	Isabela	Steadman & Ray (1982)
<i>Nesoryzomys</i>	2	Isabela	Steadman et al. (1991)
<i>Nesoryzomys</i>	1	Rábida	Steadman et al. (1991)
<i>Nesoryzomys</i>	1	Baltra, Santa Cruz	Steadman et al. (1991)
<i>Oryzomys</i>	1	Curaçao	Hooijer (1966)
<i>Oryzomys</i>	1	Barbados	Woods (1990)
<i>Oryzomyini</i>	1	Barbuda, Antigua, Monserrat, Guadelupe, Marie Galante	Pregill et al. (1988)
<i>Oryzomyini</i>	1	Anguilla	Steadman <i>in</i> Steadman et al. (1984a)
<i>Oryzomyini</i>	1	St. Kitts	Wing (1973)

TABLE 1
Continued

Taxa	No. of species	Locality	Authority
<i>Oryzomyini</i>	0–2	Antigua	Pregill et al. (1988)
<i>Oryzomyini</i>	1	Montserrat	Steadman et al. (1984)
<i>Thomasomys</i>	1	Bonaire	Hooijer (1966)
<i>Geocapromys</i> ^a	1	Cayman Is.	Morgan & Woods (1986)
<i>Hexalobodon</i> ^a	1	La Hispaniola	Woods (1990)
TOTAL	56–62 (or more)		

^a Species mentioned by Wilson and Reeder (1993).

^b Living species.

^c Musser (1982) recorded two unnamed *Crocidura* species in Central Sulawesi. One of them could correspond to the recently described *C. musseri*.

^d A possible endemic species of *Homo* is considered a component of the Pleistocene fauna from Sardinia.

^e One of these two “murids” could be the living *Acomys nesiotus*. Until recently *Acomys* was considered to be a murid.

^f One of the three undescribed species mentioned by Glover (1986) could be *Rattus timorensis*. The second one could be the *Rattus* spp. of Musser and Heaney (1992).

^g This species could be one of the three murids mentioned by Glover (1986).

^h The *Rattus* species cited by Flannery (1995) in the Moluccas could represent the same species cited by Musser and Heaney (1992) in Bisan.

TYPE LOCALITY: Cueva del Túnel, La Salud, Cuba.

DISTRIBUTION: Cuba.

Mesocapromys barbouri Varona and Arredondo, 1979. Poeyana 195: 21

TYPE LOCALITY: Rockshelter in Reparto América, Calabazar, Habana, Cuba.

DISTRIBUTION: Cuba.

Mesocapromys beatrizae Varona and Arredondo, 1979. Poeyana 195: 28

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

DISTRIBUTION: Cuba.

Mesocapromys delicatus Varona and Arredondo, 1979. Poeyana 195: 26

TYPE LOCALITY: Quarry near “Moza,” 5 km NE of Sancti Spiritus, Las Villas, Cuba.

DISTRIBUTION: Cuba.

Mesocapromys gracilis Varona and Arredondo, 1979. Poeyana 195: 17

TYPE LOCALITY: Cueva del Túnel, La Salud, La Habana, Cuba.

DISTRIBUTION: Cuba.

Mesocapromys kraglievichi Varona and Arredondo, 1979. Poeyana 195: 19

TYPE LOCALITY: Cueva de Paredones, San Antonio de los Baños, Habana, Cuba.

DISTRIBUTION: Cuba.

Mesocapromys minimus Varona and Arredondo, 1979. Poeyana 195: 24

TYPE LOCALITY: Arroyo del Palo, Mayarí, Oriente, Cuba.

DISTRIBUTION: Cuba.

Mesocapromys silvai Varona and Arredondo, 1979. Poeyana 195: 31

TYPE LOCALITY: Dolina de los Cocos, Las Villas, Cuba.

DISTRIBUTION: Cuba.

Mysateles jaumei Varona and Arredondo, 1979. Poeyana 195: 15

TYPE LOCALITY: Cueva Lamas, 2 km SW Playa Santa Fe, Bauta, Habana, Cuba.

DISTRIBUTION: Cuba.

UNNAMED RECENT MAMMALIAN INSULAR SPECIES

In addition to the mammalian species listed above, there are other recently extinct insular species that have not been named. In order to complete this catalog we present here a list of these species (table 1).

The record presented here is probably not complete. We do not yet know the stratigraphic succession on some oceanic islands

with mammals, where the faunistic history may have been complex (e.g., Philippines, Sulawesi; see Sondaar, 1987). However, we believe that there might be just a few species that could be added here. The present record

includes most of the forgotten mammalian islanders, and allows for faunistic analyses, both of Class Mammalia as a whole and of the insular mammals.

REFERENCES

- Alcover, J. A., and M. McMin
1994. Predators of vertebrates on islands. *BioScience* 44: 12–18.
- Alcover, J. A., S. Moyà-Solà, and J. Pons-Moyà
1981. Les Quimeres del Passat. Els vertebrats fòssils del Plio-Quaternari de les Balears i Pitiüses. Monogr. Cient. Editorial Moll 1: 260 pp. Ciutat de Mallorca: Moll.
- Alcover, J. A., A. Sans, and M. Palmer
In press. The extent of extinctions of mammals on islands. *J. Biogeogr.*
- Anderson, E.
1984. Who's who in the Pleistocene: a mammalian bestiary. In P. S. Martin and R. G. Klein (eds.), *Quaternary extinctions: a prehistoric revolution*, 40–89. Tucson: Univ. Arizona Press.
- Anderson, S., and J. K. Jones
1984. Orders and families of recent mammals of the world. New York: Wiley, 686 pp.
- Bachmayer, F., N. Symeonidis, N. Seeman, and H. Zapfe
1976. Die Ausgrabungen in der Zwergelentenhöhle "Charkadio" aus der Insel Tylos (Dodekanes, Griechenland) in den Jahren 1974 und 1975. *Ann. Naturhist. Mus. Wien* 80: 113–144.
- Bate, D. M. A.
1945. Pleistocene shrews from the larger western Mediterranean islands. *Ann. Mag. Nat. Hist.* 16: 738–769.
- Bickneivicius, A. R., D. E. McFarlane, and R. D. E. MacPhee
1993. Body size in *Amblyrhiza inundata* (Rodentia: Caviomorpha), an extinct megafaunal rodent from the Anguilla Bank, West Indies: estimates and implications. *Am. Mus. Novitates* 3079: 25 pp.
- Boekschoten, G. J., and P. Y. Sondaar
1972. On the fossil Mammalia of Cyprus. *Proc. K. Ned. Akad. Wet., ser. B, Phys. Sci.* 75: 306–338.
- Burney, D. A., H. F. James, F. V. Grady, J. G. Rafamantanantsoa, Ramilisonina, H. T. Wright, and J. B. Cowart
1997. Environmental change, extinction, and human activity: evidence from caves in NW Madagascar. *J. Biogeogr.* 24: 755–767.
- Caloi, L., T. Kotsakis, and M. Palombo
1986. La fauna a vertebrati terrestri del Pleistocene delle isole del Mediterraneo. *Geol. Rom.* 25: 235–256.
- Capasso Barbato, L.
1992. Nuova specie di Cervide del Pleistocene di Creta. *Atti Accad. Naz. Lincei Mem. L. Sci. Fis. Mat. Nat. Sez.* 9(1): 183–220.
- Carleton, M., and S. M. Goodman
1996. Systematic studies of Madagascar's endemic rodents (Muroidea: Nesomyinae): A new genus and species from the central highlands. *Fieldiana: Zool.* 65: 231–256.
- Chaline, J.
1974. Esquisse de l'évolution morphologique, biométrique et chromosomique du genre *Microtus* (Arvicolidae, Rodentia) dans le Pléistocène de l'hémisphère nord. *Bull. Soc. Géol. France*, 7 sér, 16: 440–450.
- Corbet, G. B., and J. E. Hill
1986. A world list of mammalian species. 2nd. ed. London: British Museum (Natural History), 254 pp.
- Dermitzakis, M. D., and P. Y. Sondaar
1979. The importance of fossil mammals in reconstructing palaeogeography with special reference to the Pleistocene Aegean Archipelago. *Ann. Géol. Pays Hellen.* 29: 808–840.
- Flannery, T.
1993. Revision of the fruit bats of the genus *Melonycteris* (Pteropodidae: Mammalia). *Rec. Aust. Mus.* 45: 59–80.
1994. Systematic revision of *Emballonura furax* Thomas, 1881 and *E. diana* Hill, 1956 (Chiroptera: Emballonuridae), with description of new species and subspecies. *Mammalia* 58: 601–612.
1995. Mammals of the South-West Pacific and Moluccan Islands. Chatswood: Australian Museum/Reed Books, 464 pp.

- Flannery, T., and Boead
1996. Systematic revision within the *Phalanger ornatus* complex (Phalangeridae: Marsupialia), with description of a new species and subspecies. *Aust. Mammal.* 18: 35–44.
- Flannery, T., D. Colgan, and J. Trimble
1994. A new species of *Melomys* from Manus Island, Papua New Guinea, with notes on the systematics of the *M. rufescens* complex (Muridae: Rodentia). *Proc. Linn. Soc. N.S.W.*: 114: 29–43.
- Fleagle, J. G.
1988. Primate adaptation and evolution. San Diego, CA: Academic Press, 486 pp.
- Ford, S. M.
1990. Platyrrhine evolution in the West Indies. *J. Hum. Evol.* 19: 237–254.
- Glover, I.
1986. Archaeology in eastern Timor, 1966–67. *Terra Australis* 2: 241 pp.
- Godfrey, L. R., M. R. Sutherland, R. R. Paine, F. L. Williams, D. S. Boy, and M. Vuillaume-Randriamanantena
1995. Limb joint surface areas and their relation in Malagasy lemurs and other mammals. *Am. J. Phys. Anthropol.* 97: 11–36.
- Groves, C. P., and T. Flannery
1994. A revision of the genus *Uromys* Peters, 1867 (Muridae, Mammalia) with descriptions of two new species. *Rec. Aust. Mus.* 46: 145–170.
- Heaney, L. R., P. C. Gonzales, and A. C. Alcala
1987. An annotated checklist of the taxonomic and conservation status of land mammals in the Philippines. *Silliman J.* 54: 32–66.
- Hershkovitz, P.
1970. Notes on the Tertiary platyrrhine monkeys and description of a new genus from the late Miocene of Colombia. *Folia Primatol.* 13: 213–240.
- Hooijer, D. A.
1966. Fossil mammals of the Netherlands Antilles. *Arch. Néerl. Zool.* 16: 531–533.
- Horton, D. R.
1984. Red kangaroos: last of the Australian Megafauna. In P. S. Martin and R. G. Klein (eds.), *Quaternary extinctions: a prehistoric revolution*: 639–680. Tucson: Univ. Arizona Press.
- Jenkins, P. D.
1993. A new species of *Microgale* (Insectivora: Tenrecidae) from Eastern Madagascar with an unusual dentition. *Am. Mus. Novitates* 3067: 11 pp.
- Jenkins, P. D., S. M. Goodman, and C. J. Raxworthy
1996. The shrew tenrecs (*Microgale*) (Insectivora: Tenrecidae) of the Réserve Naturelle Intégrale d'Andringitra, Madagascar. *Fieldiana: Zool.* 85: 191–217.
- Juste, J., and C. Ibañez
1993. A new *Tadarida* of the subgenus *Charephon* (Chiroptera: Molossidae) from Sao Tomé island (Gulf of Guinea, West Africa). *J. Mammal.* 74: 901–907.
- Kitchener, D. J., and I. Maryanto
1993. A new species of *Melomys* (Rodentia: Muridae) from Kai Besar Island, Maluku Tengah, Indonesia. *Rec. West. Aust. Mus.* 16: 427–436.
- Klein Hofmeijer, G. J. M.
1996. Late Pleistocene deer fossils from Corbeddu cave. Ph.D. diss., Univ. Utrecht, The Netherlands.
- Koopman, K. F., M. K. Hecht, and E. Ledecy-Janecek
1957. Notes on the mammals of the Bahamas with special reference to the bats. *J. Mammal.* 38: 164–174.
- Lamberton, M. C.
1937. Fouilles paléontologiques faites en 1936. *Bull. Acad. Malgache* 19 (for 1936): 19 pp.
- Lawlor, T. E.
1982. The evolution of body size in mammals: evidence from insular populations in Mexico. *Am. Nat.* 119: 54–72.
- Lister, A. M.
1887. *Megaloceros* Brookes, 1828 (Mammalia, Artiodactyla): proposed emendation of the original spelling. *Bull. Zool. Nomencl.* 44: 255–256.
- Lotze, J. H., and S. Anderson
1979. *Procyon lotor*. *Mamm. Species* 119: 8 pp.
- MacPhee, R. D. E.
1987. Systematic position of *Plesiorycteropus madagascariensis*. *J. Vertebr. Paleontol.* Abstr.
1989. The morphology and relationships of the extinct Malagasy tenrecoid *Plesiorycteropus madagascariensis*. Fifth International Theriological Congr. Abstr.
1994. Morphology, adaptations and relationships of *Plesiorycteropus*, and a diagnosis of a new order of Eutherian mammals. *Bull. Am. Mus. Nat. Hist.* 220: 214 pp.
1996. The Greater Antillean monkeys. *Rev. Ciènc., Ciutat de Mallorca* 18: 13–32.
- MacPhee, R. D. E., and J. G. Fleagle
1991. Postcranial remains of *Xenothrix*

- mcgregori* (Primates, Xenotrichidae) and other Quaternary mammals from Long Mile Cave, Jamaica. In T. A. Griffiths, and D. Klineger (eds.), Contributions to mammalogy in honor of Karl F. Koopman. Bull. Am. Mus. Nat. Hist. 206: 287–321.
- MacPhee, R. D. E., I. Horovitz, O. Arredondo, and O. Jiménez Vasquez
1995. A new genus for the extinct Hispaniolan monkey *Saimiri bernensis* (Rímoli, 1977), with notes on its systematic position. Am. Mus. Novitates 3134: 21 pp.
- MacPhee, R. D. E., D. A. McFarlane, O. Arredondo, and O. Jiménez Vasquez
1994. West Indian monkeys: new fossils and interpretations. Am. J. Phys. Anthropol. suppl. 18: 133.
- MacPhee, R. D. E., and M. Rivero de la Calle
In press. AMS ¹⁴C age determination for the alleged "Cuban Spider Monkey," *Ateles* (= *Montaneia*) *anthropomorphus*. J. Hum. Evol.
- MacPhee, R. D. E., and C. A. Woods
1982. A new fossil cebine from Hispaniola. Am. J. Phys. Anthropol. 58: 419–436.
- Martin, P. S.
1984. Prehistoric overkill: the global model. In P. S. Martin, and R. G. Klein (eds.), Quaternary extinctions: a prehistoric revolution: 354–403. Tucson: Univ. Arizona Press.
- Mayo, N. A.
1978. Ein neues Genus und zwei neue Arten fossiler Riesenfaultiere von der Familie der Megalonychidae (Edentata: Mammalia) aus dem Pleistozän Kubas. Eclogae Geol. Helv. 71: 687–697.
- Mein, P.
1983. Particularités de l'évolution insulaire chez les petits Mammifères. Colloq. Int. C.N.R.S. 330: 189–193.
- Morgan, G. S.
1989. Fossil Chiroptera and Rodentia from the Bahamas, and the historical biogeography of the Bahamian mammal fauna. In C. A. Woods (ed.), Biogeography of the West Indies. past, present & future: 685–740. Gainesville, FL: Sandhill Crane Press.
- Morgan, G. S., and C. A. Woods
1986. Extinction and the zoogeography of West Indian land mammals. Biol. J. Linn. Soc. 28: 167–203.
- Morgan, G. S., C. E. Ray, and O. Arredondo
1980. A giant extinct insectivore from Cuba (Mammalia: Insectivora: Solenodontidae). Proc. Biol. Soc. Washington 93: 597–608.
- Murray, P.
1984. Extinctions downunder: a bestiary of extinct Australian late Pleistocene Monotremes and Marsupials. In P. S. Martin and R. G. Klein (eds.), Quaternary extinctions: a prehistoric revolution: 600–628. Tucson: Univ. Arizona Press.
1991. The Pleistocene Megafauna of Australia. In P. Vickers-Rich, J. M. Monaghan, R. F. Baird, and T. H. Rich (eds.), Vertebrate palaeontology of Australasia: 1071–1164. Victoria: Pioneer Design Studio.
- Musser, G. G.
1982. Results of the Archbold Expeditions. No. 110. *Crunomys* and the small-bodied shrew rats native to the Philippine Islands and Sulawesi (Celebes). Bull. Am. Mus. Nat. Hist. 174: 95 pp.
1987. The mammals of Sulawesi. In T. C. Whitmore (ed.), Biogeographical evolution of the Malay Archipelago: 73–93. Oxford: Clarendon Press.
- Musser, G. G., and M. D. Carleton
1993. Family Muridae. In D. E. Wilson, and D. M. Reeder (eds.), Mammal species of the world: 501–755. Washington: Smithsonian Institution Press.
- Musser, G. G., and L. R. Heaney
1992. Philippine rodents: Definitions of *Taromys* and *Limnomys* plus a preliminary assessment of phylogenetic patterns among native Philippine murines (Murinae, Muridae). Bull. Am. Mus. Nat. Hist. 211: 138 pp.
- Musser, G. G., L. R. Heaney, and D. S. Rabor
1985. Philippine Rats: a new species of *Craeteromys* from Dinagat Island. Am. Mus. Novitates 2821: 25 pp.
- Musser, G. G., and M. E. Holden
1991. Sulawesi rodents (Muridae: Murinae): Morphological and geographical boundaries of species in the *Rattus hoffmanni* group and a new species from Pulau Peleng. In T. A. Griffiths and D. Klineger (eds.), Contributions to mammalogy in honor of Karl F. Koopman. Bull. Am. Mus. Nat. Hist. 206: 322–413.
- Musser, G. G., and C. Newcomb
1983. Malaysian murids and the giant rat of Sumatra. Bull. Am. Mus. Nat. Hist. 174: 327–598.
- Nowack, R. M., and J. L. Paradiso
1983. Walker's mammals of the world. Bal-

- timore, MD: Johns Hopkins Univ. Press, 2 vols., 1362 pp.
- Olson, S. L.
1981. Natural history of vertebrates on the Brazilian Islands of the mid-South Atlantic. *Natl. Geogr. Soc. Res. Rep.* 13: 481–492.
- Otsuka, H., T. Horiguchi, and H. Nakagawa
1980. On the fossil deer discovered from Tokunoshima, Ryukyu islands. *Geol. Stud. Ryukyu Isls.* 5: 4954.
- Paula Couto, C. de
1967. Pleistocene Edentates of the West Indies. *Am. Mus. Novitates* 2304: 55 pp.
- Pieper, H.
1984. Eine neue *Mesocricetus*-Art (Mammalia: Cricetidae) von der griechischen Insel Armathia. *Stuttg. Beitr. Naturkd. Ser. B (Geol. Palaeontol.)* 107: 9 pp.
- Pregill, G. K., D. W. Steadman, S. L. Olson, and F. V. Grady
1988. Late Holocene fossil vertebrates from Burma Quarry, Antigua, Lesser Antilles. *Smithson. Contrib. Zool.* 463: 27 pp.
- Rosenberger, A. L.
1978. New species of Hispaniolan primate: a comment. *An. Cient. Univ. Central del Este* 3: 248–251.
- Rosenberger, A. L., T. Setoguchi, and N. Shigehara
1990. The fossil record of the callitrichine primates. *J. Hum. Evol.* 19: 209–236.
- Ruedi, M.
1995. Taxonomic revision of shrews of the genus *Crociodura* from the Sunda Shelf and Sulawesi with description of two new species (Mammalia: Soricidae). *Zool. J. Linn. Soc.* 115: 211–265.
- Sarà, M.
1996. A landmark-based morphometrics approach to the systematics of Crocidurinae. A case study on endemic shrews *Crociodura sicula* and *C. canariensis* (Soricidae, Mammalia). In L. Marcus et al. (eds.), *Advances in morphometrics: 335–344*. New York: Plenum Press.
- Sondaar, P. Y.
1987. Pleistocene man and extinctions of islands endemics. *Mém. Soc. Géol. France* 150: 159–165.
- Sondaar, P. Y., M. Sanges, T. Kotsakis, D. Esu, and P. L. De Boerp
1984. First report on a paleolithic culture in Sardinia. *Br. Archaeol. Rep. Int. Ser.* 229: 29–60.
- Spoor, C. F., and P. Y. Sondaar
1986. Human fossils from the endemic island fauna of Sardinia. *J. Hum. Evol.* 15: 399–408.
- Steadman, D. W., and C. E. Ray
1982. The relationships of *Megaoryzomys curioi*, an extinct cricetine rodent (Muridae: Muridae) from the Galápagos Islands, Ecuador. *Smithson. Contrib. Paleobiol.* 51: 23 pp.
- Steadman, D. W., G. K. Pregill, and S. L. Olson
1984. Fossil vertebrates from Antigua, Lesser Antilles: evidence for late Holocene human-caused extinctions in the West Indies. *Proc. Natl. Acad. Sci. USA.* 81: 4448–4451.
- Steadman, D. W., T. W. Stafford, D. J. Donahue, and A. J. T. Jull
1991. Chronology of Holocene Vertebrate extinction in the Galápagos Islands. *Quat. Res.* 36: 123–136.
- Steadman, D. W., D. R. Watters, E. J. Reitz, and G. K. Pregill
1984. Vertebrates from archaeological sites on Montserrat, West Indies. *Ann. Carnegie Mus.* 53: 29 pp.
- Tattersall, I.
1982. The primates of Madagascar. New York: Columbia Univ. Press, 382 pp.
- Tsuchiya, K., S. Wakana, H. Suzuki, S. Hattori, and Y. Hayashi
1989. Taxonomic study of *Tokudaia* (Rodentia: Muridae): I. Genetic differentiation. *Mem. Natl. Sci. Mus. Tokyo* 22: 227–234.
- Vos, J. de
1984. The endemic Pleistocene deer of Crete. *Verh. K. Ned. Akad. Wet.* 31: 100 pp.
- Wilson, D. E.
1991. Mammals of Tres Marias Islands. *Bull. Am. Mus. Nat. Hist.* 206: 214–250.
- Wilson, D. E., and D. M. Reeder
1993. Mammal species of the World. A taxonomic and geographic reference. Washington, D.C.: Smithsonian Institution Press, 1206 pp.
- Wing, E. S.
1973. Notes on the faunal remains excavated from St. Kitts, West Indies. *Carib. J. Sci.* 13: 253–255.
- Woods, C. A.
1989. The biogeography of West Indian rodents. In C. A. Woods (ed.), *Biogeography of the West Indies. Past, present and future: 741–798*. Gainesville, FL: Sandhill Crane Press.
1990. The fossil and recent land mammals of the West Indies: an analysis of the origin, evolution, and extinction of an in-

- sular fauna. *Atti Conv. Lincei* 85: 641–680.
- Woods, C. A., and J. F. Eisenberg
1989. The land mammals of Madagascar and the Greater Antilles: comparison and analysis. In C. A. Woods (ed.), *Biogeography of the West Indies. Past, present and future*: 799–826. Gainesville, FL: Sandhill Crane Press.

- Woods, C. A., and J. A. Ottenwalder
1992. The natural history of Southern Haiti. *Florida Mus. of Nat. Hist.*, 211 pp.
- Zammit-Maempel, G., and H. de Bruijn
1982. The Plio-Pleistocene Gliridae from the Mediterranean islands reconsidered. *Proc. K. Ned. Akad. Wet. Ser. B. Phys. Sci.* 85: 113–128.

APPENDIX 1. TENTATIVE LIST OF THE ENDEMIC MAMMALS FROM THE OCEANIC AND OCEANIC-LIKE ISLANDS OF THE WORLD

(L): living species; (+): extinct species; (D): locally disappeared species

This is a conservative catalog in which the species that have been properly synonymized have been excluded (except *Crocidura canariensis*; see Introduction). All oceanic and oceanic-like islands of the world harboring endemic mammals are listed, except in the case of some very small islands associated with larger islands that also possessed the species in question.

This catalog is based mainly on sources in Wilson and Reeder (1993), excluding some of the taxa considered by these authors, and adding the data introduced in the present paper as well as the data of several other authors. The excluded species from the catalog of Wilson and Reeder (1993) are *Amblyrhiza inundata* (currently considered extinct during the Pleistocene, see Bicknevicus et al., 1993), *Suncus madagascarensis* (possibly introduced by humans, see Woods and Eisenberg, 1989) and some *Procyon* species (that could hardly be considered full species, because they differ only slightly from the mainland *Procyon lotor* populations; see, for example, Koopman et al., 1957; Lotze and Anderson, 1979; Corbet and Hill, 1986). We also used the published records of mammals of the different oceanic and oceanic-like islands, excluding the nonendemic mammals. Thus, only three species have been listed here from Wilson (1991). The most important references including additional data on the distribution of the insular mammals on different archipelagoes are Lawlor (1982), Heaney et al. (1987), Morgan (1989), Woods (1989, 1990).

Atlantic Ocean and Related Seas

SOUTH ATLANTIC ISLANDS

FALKLAND IS. (=MALVINAS)
Dusicyon australis (+).

CENTRAL ATLANTIC

FERNANDO DE NORONHA

Muridae, undescribed genus, undescribed species C (+).

EAST ATLANTIC

MACARONESIAN ISLANDS

AÇORES

Nyctalus azoreum (L).

MADEIRA

Pipistrellus maderensis (L).

CANARY ISLANDS

Fuerteventura

Crocidura canariensis (L), *Malpaisomys insularis* (+).

Gomera, La

Pipistrellus maderensis (L), *Plecotus teneriffae* (L).

Graciosa, La

Crocidura canariensis (L), *Malpaisomys insularis* (+).

Gran Canaria

Crocidura osorio (L), *Canariomys tamarani* (+).

Hierro, El

Pipistrellus maderensis (L), *Plecotus teneriffae* (L).

Lanzarote

Crocidura canariensis (L), *Malpaisomys insularis* (+).

Lobos

Crocidura canariensis (L).

Palma, La

Pipistrellus maderensis (L), *Plecotus teneriffae* (L).

Tenerife

Pipistrellus maderensis (L), *Plecotus teneriffae* (L), *Canariomys bravoii* (+).

GULF OF GUINEA ISLANDS

SÃO TOMÉ

Crocidura thomensis (L), *Myonycteris brachycephala* (L), *Tadarida tomensis* (L).

WEST ATLANTIC (MEXICAN ATLANTIC ISLANDS)

COZUMEL

Procyon pygmaeus (L), *Rheithrodontomys spectabilis* (L).

ROATAN

Dasyprocta ruatanica (L).

MEDITERRANEAN ISLANDS

WESTERN MEDITERRANEAN

GYMNESIC ISLANDS

Mallorca

Soriculus hidalgoi (+), *Myotragus balearicus* (+), *Eliomys morpheus* (+).

Menorca

Soriculus hidalgoi (+), *Myotragus balearicus* (+), *Eliomys morpheus* (+).

CIRNO-SARDINIAN ISLANDS

Corsica

Soriculus corsicanus (+), *Cynotherium sardous* (+), *Algarolutra majori* (+), *Megaceros cazioti* (+), *Microtus henseli* (+), *Rhagamys orthodon* (+), *Prolagus sardus* (+).

Sardinia

Soriculus similis (+), *Homo* undescribed species (+), *Cynotherium sardous* (+), *Algarolutra majori* (+), *Megalenhydrys barbaricina* (+), *Sardolutra ichnusae* (+), *Megaceros cazioti* (+), *Microtus henseli* (+), *Rhagamys orthodon* (+), *Prolagus sardus* (+).

CENTRAL MEDITERRANEAN

EGADI IS.

Crocidura sicula (L).

SICILY

Crocidura sicula (L).

MALTA AND GOZO

Gozo

Crocidura sicula (L).

Malta

Lutra euxena (+), *Hippopotamus melitensis* (+), Cervidae, unnamed genus undescribed species C (+), *Microtus melitensis* (+), *Eliomys wiedincetensis* (+).

PANTELLERIA

Crocidura cossyrensis (L).

LAMPEDUSA

Meriones undescribed species (+).

EASTERN MEDITERRANEAN

CRETE

Crocidura zimmermanni (L), *Lutrogale cretensis* (+), *Elephas creutzburgi* (+), *Hippopotamus creutzburgi* (+), *Candiacervus cretensis* (+), *Candiacervus major* (+), *Candiacervus rethymensis* (+), *Candiacervus ropalophorus* (+), *Candiacervus* unnamed species A (+), *Candiacervus* unnamed species B (+), *Acomys minous* (L), *Mus minotaurus* (+).

KARPATOS

Candiacervus cerigensis (+), *Candiacervus pigadiensis* (+), *Mus* undescribed species (+).

KASOS

Candiacervus cerigensis (+), *Candiacervus pigadiensis* (+).

ARMATHIA

Mesocricetus rathgeberi (+).

CYPRUS

Elephas cypriotes (+), *Phanourios minor* (+), *Acomys nesiotes* (L), Muridae, unnamed genus undescribed species A (+), Muridae, unnamed genus undescribed species B (+) (one of these undescribed "extinct murids" could actually be *Acomys nesiotes*, see table 1).

TYLOS

Elephas unnamed species A (+).

CYCLADES IS.

Amorgos

Cervidae, unnamed genus undescribed species D (+).

Delos

Elephas unnamed species B (+).

Kithnos

Elephas unnamed species B (+).

Milos

Elephas unnamed species B (+).

Naxos

Elephas unnamed species B (+), *Apodemus* undescribed species (+).

Serifos

Elephas unnamed species B (+).

WEST INDIES AND NEIGHBORING ISLANDS

LITTLE SWAN

Geocapromys thoracatus (+).

BAHAMAS

ABACO

Erophylla sezekorni (L), *Natalus tumidifrons* (L), *Geocapromys ingrahami* (D).

ANDROS

Pteronotus quadridens (D), *Monophyllus redmani* (D), *Brachyphylla nana* (D), *Erophylla sezekorni* (L), *Natalus tumidifrons* (D), *Natalus lepidus* (D), *Geocapromys ingrahami* (D).

NEW PROVIDENCE

Mormoops blainvilli (D), *Pteronotus macleayii* (D), *Pteronotus quadridens* (D), *Monophyllus redmani* (D), *Natalus tumidifrons* (D), *Brachyphylla nana* (D), *Erophylla sezekorni* (L), *Phyllonycteris poeyi* (D), *Geocapromys ingrahami* (D).

ELEUTHERA

Erophylla sezekorni (L), *Natalus lepidus* (L), *Geocapromys ingrahami* (D).

CAT

Erophylla sezekorni (L), *Natalus tumidifrons* (D), *Natalus lepidus* (L), *Geocapromys ingrahami* (D).

LONG

Erophylla sezekorni (L), *Natalus lepidus* (L),
Geocapromys ingrahami (D).

EXUMAS [GREAT EXUMA AND LITTLE EXUMA]

Erophylla sezekorni (L), *Natalus tumidifrons*
(D), *Natalus lepidus* (L), *Mormoops blainvillii*
(D), *Geocapromys ingrahami* (D).

SAN SALVADOR

Erophylla sezekorni (L), *Natalus tumidifrons*
(L), *Geocapromys ingrahami* (D).

CROOKED

Monophyllus redmani (L), *Erophylla seze-*
korni (L), *Geocapromys ingrahami* (D).

ACKLINS

Monophyllus redmani (L), *Erophylla seze-*
korni (L), *Geocapromys ingrahami* (D).

EAST PANA KEY

Geocapromys ingrahami (L).

MAYAGUANA

Erophylla sezekorni (L).

GREAT INAGUA

Erophylla sezekorni (L).

PROVIDENCIALES

Monophyllus redmani (L), *Erophylla seze-*
korni (L), *Geocapromys ingrahami* (D).

NORTH CAICOS

Monophyllus redmani (L), *Erophylla seze-*
korni (L).

MIDDLE CAICOS

Monophyllus redmani (L), *Brachyphylla*
nana (L), *Erophylla sezekorni* (L), *Geocapromys*
ingrahami (D).

EAST CAICOS

Erophylla sezekorni (L).

GREATER ANTILLES AND NEIGHBORING ISLANDS

CAYMAN IS.

Nesophontes undescribed species (+), *Brachyphylla nana* (L), *Erophylla sezekorni* (L), *Geocapromys undescribed species* (+).

JAMAICA

Mormoops blainvillii (L), *Pteronotus macleayii* (L), *Pteronotus quadridens* (L), *Ariteus flavescens* (L), *Brachyphylla nana* (D), *Erophylla sezekorni* (L), *Monophyllus redmani* (L), *Phyllonycteris aphylla* (L), *Tonatia saurophila* (+), *Natalus micropus* (L), *Xenothrix mcgregori* (+), *Geocapromys brownii* (L), *Clidomys osborni* (+), *Clidomys parvus* (+).

PUERTO RICO

Acratocnus odontrigonus (+), *Nesophontes edithae* (+), *Mormoops blainvillii* (L), *Pteronotus quadridens* (L), *Brachyphylla cavernarum* (L), *Erophylla sezekorni* (L), *Monophyllus plethodon* (D), *Monophyllus redmani* (L), *Phyllonycteris major* (+), *Stenoderma rufum* (L), *Heteropsomys antillensis* (+), *Heteropsomys insulans* (+), *Puertoicomys corozalus* (+), *Elasmodontomys obliquus* (+).

CUBA AND NEIGHBORING ISLANDS

Cuba

Habanocnus hoffstetteri (+), *Megalocnus rodens* (+), *Mesocnus browni* (+), *Mesocnus torrei* (+), *Miocnus antillensis* (+), *Neocnus bairiensis* (+), *Neocnus gliriformis* (+), *Neocnus major* (+), *Neocnus minor* (+), *Neomesocnus brevisrostris* (+), *Solenodon arredondoi* (+), *Solenodon cubanus* (L), *Nesophontes longirostris* (+), *Nesophontes major* (+), *Nesophontes micrus* (+), *Nesophontes submicrus* (+), *Mormoops blainvillii* (L), *Mormoops magna* (+), *Pteronotus macleayii* (L), *Pteronotus pristinus* (+), *Pteronotus quadridens* (L), *Brachyphylla nana* (L), *Erophylla sezekorni* (L), *Monophyllus redmani* (L), *Phyllonycteris poeyi* (L), *Phyllops falcatus* (L), *Natalus lepidus* (L), *Natalus micropus* (L), *Mormopterus minutus* (L), *Paralouatta varonai* (+), *Boromys ofella* (+), *Boromys torrei* (+), *Capromys acevedoi* (+), *Capromys antiquus* (+), *Capromys arredondoi* (+), *Capromys latus* (+), *Capromys pappus* (+), *Capromys pilorides* (L), *Capromys robustus* (+), *Geocapromys columbianus* (+), *Geocapromys megas* (+), *Geocapromys pleistoceniscus* (+), *Mesocapromys barbouri* (+), *Mesocapromys beatrizae* (+), *Mesocapromys delicatus* (+), *Mesocapromys gracilis* (+), *Mesocapromys kraglievichi* (+), *Mesocapromys minimus* (+), *Mesocapromys nanus* (+?), *Mesocapromys silvai* (+), *Mysateles jaumei* (+), *Mysateles melanurus* (L), *Mysateles prehensilis* (L).

Cayo Frago

Mesocapromys auritus (L).

Cayo Juan Garca

Mesocapromys sanfelipensis (+?).

Cayo Maj

Mysateles garridoi (L).

Cayos de Ana Mara

Mesocapromys angelcabrerai (L).

Isla de la Juventud (=Is. of Pines)

Nesophontes major (+), *Brachyphylla nana* (L), *Phyllonycteris poeyi* (L), *Phyllops falcatus* (D), *Natalus lepidus* (L), *Boromys ofella* (+), *Boromys torrei* (+), *Mysateles gundlachi* (L), *Mysateles meridionalis* (L).

LA HISPANIOLA AND NEIGHBORING ISLANDS

Hispaniola, La

Parocnus serus (+), *Synocnus comes* (+), *Edentata*, undescribed genus undescribed species C (+), *Edentata*, undescribed genus undescribed species D (+), *Solenodon marcanoi* (+), *Solenodon paradoxus* (L), *Solenodon* undescribed species, *Nesophontes hypomicrus* (+), *Nesophontes major* (+), *Nesophontes paramicrus* (+), *Nesophontes zamicros* (+), *Mormoops blainvillii* (L), *Pteronotus quadridens* (L), *Brachyphylla nana* (L), *Erophylla sezekorni* (L), *Monophyllus redmani* (L), *Phyllonycteris poeyi* (L), *Phyllops falcatus* (L), *Natalus micropus* (L), *Chiroptera*, un-

named genus, undescribed species (+), *Antillothrix bernensis* (+), *Brotomys contractus* (+), *Brotomys voratus* (+), *Hexolobodon phenax* (+), *Hexolobodon* undescribed species (+), *Isolobodon montanus* (+), *Isolobodon portoricensis* (+?), *Plagiodontia aedium* (L), *Plagiodontia araeum* (+), *Plagiodontia ipnaeum* (+?), *Rhizoplagiodontia lemkei* (+), *Quemisia gravis* (+).

Gonave, La

Nesophontes hypomicrus (+), *Mormoops blainvillii* (D), *Brotomys contractus* (+), *Hexolobodon phenax* (+), *Isolobodon montanus* (+), *Isolobodon portoricensis* (+?), *Plagiodontia araeum* (+).

Tortue, La

Edentata, undescribed genus, undescribed species A (+), Edentata, undescribed genus, undescribed species B (+), *Isolobodon portoricensis* (+?).

LESSER ANTILLES

ANGUILLA

Brachyphylla cavernarum (L), *Monophyllus plethodon* (L), *Oryzomys* undescribed species D (+).

ANTIGUA

Ardops nichollsi (L), *Brachyphylla cavernarum* (L), *Monophyllus plethodon* (L), *Mormoops blainvillii* (D), *Phyllonycteris major* (+), *Oryzomys* undescribed species C (+).

BARBADOS

Brachyphylla cavernarum (L), *Monophyllus plethodon* (L), *Myotis martiniquensis* (L), *Oryzomys* undescribed species B (+).

BARBUDA

Brachyphylla cavernarum (L), *Monophyllus plethodon* (L), *Mormoops blainvillii* (D), *Megalomys audryae* (+), *Oryzomys* undescribed species C (+).

DOMINICA

Ardops nichollsi (L), *Brachyphylla cavernarum* (L), *Monophyllus plethodon* (L), *Myotis dominicensis* (L).

GUADELOUPE

Ardops nichollsi (L), *Brachyphylla cavernarum* (L), *Chiroderma improvisum* (L), *Monophyllus plethodon* (L), *Sturnira thomasi* (L), *Eptesicus guadeloupensis* (L), *Oryzomys* undescribed species C (+).

MARIE GALANTE

Ardops nichollsi (L), *Brachyphylla cavernarum* (L), *Monophyllus plethodon* (L), *Oryzomys* undescribed species C (+).

MARTINICA

Ardops nichollsi (L), *Brachyphylla cavernarum* (L), *Monophyllus plethodon* (L), *Myotis martiniquensis* (L), *Megalomys desmaresti* (+).

MONSERRAT

Ardops nichollsi (L), *Brachyphylla caverna-*

rum (L), *Chiroderma improvisum* (L), *Monophyllus plethodon* (L), *Oryzomys* undescribed species C (+), *Oryzomys* undescribed species F (+)

ST. BARTHELEMY

Brachyphylla cavernarum (L), *Monophyllus plethodon* (L).

ST. CHRISTOPHER (=ST. KITTS)

Ardops nichollsi (L), *Brachyphylla cavernarum* (L), *Monophyllus plethodon* (L), *Oryzomys* undescribed species E (+).

ST. EUSTATIUS

Ardops nichollsi (L), *Brachyphylla cavernarum* (L), *Monophyllus plethodon* (L).

ST. MARTIN

Brachyphylla cavernarum (L), *Monophyllus plethodon* (L).

ST. VINCENT

Ardops nichollsi (L), *Brachyphylla cavernarum* (L), *Monophyllus plethodon* (L), *Oryzomys victus* (+).

ST. LUCIA

Ardops nichollsi (L), *Brachyphylla cavernarum* (L), *Monophyllus plethodon* (L), *Megalomys luciae* (+).

VIRGIN IS.

Brachyphylla cavernarum (L), *Stenoderma rufum* (L).

NETHERLAND ANTILLES

ARUBA

Megalomys undescribed species (+).

CURAÇAO

Paulocnus petrifactus (+), *Megalomys curazensis* (+), *Oryzomys* undescribed species A (+).

BONAIRE

Thomasomys undescribed species (+).

Indian Ocean

MADAGASCAR

Echinops telfairi (L), *Geogale aurita* (L), *Hemicentetes semispinosus* (L), *Limnogale mergulus* (L), *Microgale breviceaudata* (L), *Microgale cowani* (L), *Microgale dobsoni* (L), *Microgale dryas* (L), *Microgale gracilis* (L), *Microgale longicaudata* (L), *Microgale melanorrachis* (L), *Microgale parvula* (L), *Microgale principula* (L), *Microgale pusilla* (L), *Microgale soricoides* (L), *Microgale taiva* (L), *Microgale talazaci* (L), *Microgale thomasi* (L), *Microgale gymnorhyncha* (L), *Microgale* undescribed species (L), *Oryzomys hova* (L), *Oryzomys talpoides* (L), *Oryzomys tetradactylus* (L), *Setifer setosus* (L), *Tenrec ecaudatus* (L), *Eidolon dupreanum* (L), *Pteropus rufus* (L), *Rousettus madagascarensis* (L), *Emballonura atrata* (L), *Triaenops furculus* (L), *Myzopoda aurita* (L), *Myotis goudoti* (L), *Scotophilus robustus* (L), *Mormopterus jugularis* (L), *Allocebus trichotis* (L), *Cheirogaleus major* (L), *Cheirogaleus medius* (L), *Microcebus coquereli*

(L), *Microcebus murinus* (L), *Microcebus rufus* (L), *Phaner furcifer* (L), *Eulemur coronatus* (L), *Eulemur fulvus* (L), *Eulemur macaco* (L), *Eulemur rubriventer* (L), *Hapalemur aureus* (L), *Hapalemur griseus* (L), *Hapalemur simus* (L), *Lemur catta* (L), *Pachylemur insignis* (+), *Pachylemur jullyi* (+), *Varecia variegata* (L), *Lepilemur dorsalis* (L), *Lepilemur edwardsi* (L), *Lepilemur leucopus* (L), *Lepilemur microdon* (L), *Lepilemur mustelinus* (L), *Lepilemur ruficaudatus* (L), *Lepilemur septentrionalis* (L), *Megaladapis edwardsi* (+), *Megaladapis grandidieri* (+), *Megaladapis madagascarensis* (+), *Archaeoindris fontoy-nonti* (+), *Archaeolemur edwardsi* (+), *Archaeolemur majori* (+), *Avahi laniger* (L), *Babakotia radofilaoi* (+), *Hadropithecus stenognathus* (+), *Indri indri* (L), *Mesopropithecus globiceps* (+), *Mesopropithecus pithecoides* (+), *Mesopropithecus undescribed species* (+), *Palaeopropithecus ingens* (+), *Palaeopropithecus maximus* (+), *Propithecus diadema* (L), *Propithecus tattersalli* (L), *Propithecus verreauxi* (L), *Daubentonia madagascarensis* (L), *Daubentonia robusta* (+), *Galidia elegans* (L), *Galidictis fasciata* (L), *Galidictis grandidieri* (L), *Mungotictis decemlineata* (L), *Salanoia concolor* (L), *Cryptoprocta ferox* (L), *Cryptoprocta spelaea* (+), *Eupleres goudotii* (L), *Fossa fossana* (L), *Hippopotamus lemerlei* (+), *Hippopotamus madagascarensis* (+), *Brachytarsomys albicauda* (L), *Brachytarsomys villosa* (L), *Brachyuromys betsileoensis* (L), *Brachyuromys ramirohitra* (L), *Eliurus ellermani* (L), *Eliurus majori* (L), *Eliurus minor* (L), *Eliurus myoxinus* (L), *Eliurus penicillatus* (L), *Eliurus petteri* (L), *Eliurus tanala* (L), *Eliurus webbi* (L), *Gymnuromys roberti* (L), *Hypogeomys antimena* (+), *Hypogeomys australis* (+), *Macrotarsomys bastardi* (L), *Macrotarsomys ingens* (L), *Monticolomys koopmani* (L), *Nesomys rufus* (L), *Nesomys undescribed species* (+?), *Plesiorycteropus gervillae* (+), *Plesiorycteropus madagascarensis* (+).

SEYCHELLES AND ALDABRA

ALDABRA

Pteropus aldabrensis (L), *Pteropus seychellensis* (L), *Triaenops furculus* (L).

SEYCHELLES

Pteropus seychellensis (L), *Coleura seychellensis* (L).

COMORO

Pteropus livingstonei (L), *Pteropus seychellensis* (L), *Rousettus obliviosus* (L), *Myotis goudoti* (L), *Eulemur mongoz* (L).

ANDAMAN AND NICOBAR

ANDAMAN

Crocidura andamanensis (L), *Crocidura his-*

pida (L), *Crocidura jenkinsi* (L), *Pteropus melanotus* (L), *Rhinolophus cognatus* (L), *Rattus stoicus* (L).

NICOBAR

Crocidura nicobarica (L), *Tupaia nicobarica* (L), *Pteropus faunulus* (L), *Pteropus melanotus* (L), *Rattus burrus* (L), *Rattus palmarum* (L), *Sundamys undescribed species* (+).

CHRISTMAS

Pteropus melanotus (L).

NIAS

Pteropus melanotus (L).

MASCARENE IS.

MAURITIUS

Pteropus niger (L), *Pteropus subniger* (+).

REUNION, LA

Pteropus niger (L), *Pteropus subniger* (+).

RODRIGUEZ

Pteropus niger (D), *Pteropus rodricensis* (L).

ROUND

Pteropus rodricensis (D).

EAST AFRICAN ISLANDS

MAFIA

Pteropus seychellensis (L).

PEMBA

Pteropus voeltzkowi (L).

Islands SW Sumatra

MENTAWAI

PAGAI SELATAN (=PAGI S)

Tupaia chrysogaster (L), *Nasalis concolor* (L), *Presbytis potenziani* (L), *Hylobates klossii* (L), *Callosciurus melanogaster* (L), *Lariscus obscurus* (L), *Chiropodomys karlkoopmani* (L), *Leopoldamys siporanus* (L), *Maxomys pagensis* (L), *Rattus lugens* (L), *Tupaia chrysogaster* (L), *Hipposideros breviceps* (L), *Nasalis concolor* (L), *Presbytis potenziani* (L), *Callosciurus melanogaster* (L), *Sundasciurus fraterculus* (L), *Chiropodomys karlkoopmani* (L), *Leopoldamys siporanus* (L), *Maxomys pagensis* (L), *Rattus lugens* (L).

SIBERUT

Nasalis concolor (L), *Presbytis potenziani* (L), *Hylobates klossii* (L), *Callosciurus melanogaster* (L), *Lariscus obscurus* (L), *Petinomys lugens* (L), *Sundasciurus fraterculus* (L), *Chiropodomys karlkoopmani* (L), *Leopoldamys siporanus* (L), *Maxomys pagensis* (L), *Rattus lugens* (L).

SIPURA (=SIPORA)

Tupaia chrysogaster (L), *Nasalis concolor* (L), *Presbytis potenziani* (L), *Callosciurus melanogaster* (L), *Hylopetes sipora* (L), *Iomys sipora* (L), *Petinomys lugens* (L), *Sundasciurus fraterculus* (L), *Leopoldamys siporanus* (L), *Maxomys pagensis* (L), *Rattus lugens* (L).

BANYAK IS.**LASIA AND BABI***Rattus simalurensis* (L).**SIMALEUE (=SIMALUR)***Rattus simalurensis* (L).**SIUMAT***Rattus simalurensis* (L).**ENGGANO***Pteropus melanotus* (L), *Rattus adustus* (L),
Rattus enganensis (L).**Oriental Mega-Archipelago****PHILIPPINES**

(species with general distribution species and species with undetermined distribution in Philippines).

Acerodon jubatus (L), *Haplonycteris fischeri* (L), *Ptenochirus jagori* (L), *Pteropus pumilus* (L), *Saccolaimus pluto* (L), *Taphozous philippinensis* (L), *Rhinolophus virgo* (L), *Miniopterus tristis* (L).**BASILAN***Cynocephalus volans* (L), *Pteropus mearnsi* (L), *Pteropus speciosus* (L), *Tarsius syrichta* (L), *Cervus mariannus* (L), *Exilisciurus concinnus* (L), *Petinomys crinitus* (L), *Sundasciurus philippinensis* (L).**BILIRAN***Crociodura beatus* (L), *Ptenochirus minor* (L), *Tarsius syrichta* (L), *Exilisciurus concinnus* (L), *Apomys littoralis* (L), *Batomys salomonseni* (L).**BOHOL***Crociodura beatus* (L), *Cynocephalus volans* (L), *Hipposideros pygmaeus* (L), *Rhinolophus rufus* (L), *Tarsius syrichta* (L), *Cervus alfredi* (D), *Exilisciurus concinnus* (L), *Sundasciurus samarensis* (L), *Apomys littoralis* (L), *Bullimus bagobus* (L).**BUSUANGA***Sundasciurus hoogstraali* (L).**CALICOAN***Bullimus bagobus* (L), *Rattus everetti* (L).**CAMIGUIN***Rattus everetti* (L).**CATANDUANES***Apomys microdon* (L), *Phloeomys cumingi* (L), *Rattus everetti* (L).**CEBU***Dobsonia chapmani* (+?), *Sus cebifrons* (L), *Cervus alfredi* (D).**DINAGAT***Podogymnura aureospinula* (L), *Urogale everetti* (L), *Cynocephalus volans* (L), *Ptenochirus minor* (L), *Pteropus leucopterus* (L), *Hipposideros obscurus* (L), *Tarsius syrichta* (L), *Exilisciurus concinnus* (L), *Petinomys crinitus* (L), *Apo-**mys littoralis* (L), *Batomys undescribed* sp (L), *Bullimus bagobus* (L), *Crateromys australis* (L), *Rattus everetti* (L).**ILIN***Crateromys paulus* (L).**LEYTE***Crociodura beatus* (L), *Cynocephalus volans* (L), *Eonycteris robusta* (L), *Ptenochirus minor* (L), *Tarsius syrichta* (L), *Exilisciurus concinnus* (L), *Sundasciurus samarensis* (L), *Apomys microdon* (L), *Batomys salomonseni* (L), *Bullimus bagobus* (L), *Crunomys rabori* (L), *Rattus everetti* (L).**LUZON***Crociodura grayi* (L), *Eonycteris robusta* (L), *Otopterus cartilagonodus* (L), *Pteropus leucopterus* (L), *Hipposideros obscurus* (L), *Hipposideros pygmaeus* (L), *Rhinolophus rufus* (L), *Rhinolophus subrufus* (L), *Pipistrellus petersi* (L), *Sus philippensis* (L), *Cervus mariannus* (L), *Abditomys latidens* (L), *Apomys abrae* (L), *Apomys datae* (L), *Apomys microdon* (L), *Apomys musculus* (L), *Apomys sacobianus* (L), *Archboldomys luzonensis* (L), *Batomys dentatus* (L), *Batomys granti* (L), *Bullimus luzonicus* (L), *Carpomys melanurus* (L), *Carpomys phaeurus* (L), *Celaenomys silaceus* (L), *Chrotomys gonzalesi* (L), *Chrotomys mindorensis* (L), *Chrotomys whiteheadi* (L), *Crateromys schadenbergi* (L), *Crunomys fallax* (L), *Phloeomys cumingi* (L), *Phloeomys pallidus* (L), *Rattus everetti* (L), *Rhynchomys isarogensis* (L), *Rhynchomys soricoides* (L), *Tryphomys adustus* (L).**MARINDUQUE***Phloeomys cumingi* (L).**MARIPIPI***Crociodura beatus* (L), *Bullimus bagobus* (L).**MINDANAO***Podogymnura truei* (L), *Crociodura beatus* (L), *Crociodura grandis* (L), *Urogale everetti* (L), *Cynocephalus volans* (L), *Alionycteris paucidentata* (L), *Eonycteris robusta* (L), *Ptenochirus minor* (L), *Pteropus mearnsi* (L), *Pteropus speciosus* (L), *Hipposideros coronatus* (L), *Hipposideros obscurus* (L), *Rhinolophus inops* (L), *Rhinolophus rufus* (L), *Rhinolophus subrufus* (L), *Pipistrellus petersi* (L), *Cheiromeles parvidens* (L), *Mops sarasinorum* (L), *Tarsius syrichta* (L), *Cervus mariannus* (L), *Exilisciurus concinnus* (L), *Hylopetes mindanensis* (L), *Petinomys crinitus* (L), *Sundasciurus davensis* (L), *Sundasciurus mindanensis* (L), *Sundasciurus philippinensis* (L), *Apomys hylocoetes* (L), *Apomys insignis* (L), *Apomys littoralis* (L), *Batomys salomonseni* (L), *Bullimus bagobus* (L), *Crunomys melanius* (L), *Limnomys sibuanus* (L), *Rattus everetti* (L), *Tarsomys apoensis* (L), *Tarsomys echinatus* (L).**MINDORO***Crociodura grayi* (L), *Crociodura mindorus*

(L), *Harpyionycteris whiteheadi* (L), *Coelops hirsutus* (L), *Rhinolophus rufus* (L), *Rhinolophus subrufus* (L), *Cheiromeles parvidens* (L), *Cervus mariannus* (L), *Bubalus mindorensis* (L), *Anonymomys mindorensis* (L), *Apomys gracilirostris* (L), *Apomys musculus* (L), *Chrotomys mindorensis* (L), *Rattus everetti* (L), *Rattus mindorensis* (L).

NEGROS

Crocidura negrina (L), *Dobsonia chapmani* (+?), *Eonycteris robusta* (L), *Harpyionycteris whiteheadi* (L), *Nyctimene rabori* (L), *Hipposideros pygmaeus* (L), *Cheiromeles parvidens* (L), *Sus cebifrons* (L), *Cervus alfredi* (L), *Apomys littoralis* (L), *Apomys* undescribed species (L).

PANAY

Acerodon lucifer (+), *Cervus alfredi* (L), *Crateromys heaneyi* (L).

SAMAR

Cynocephalus volans (L), *Tarsius syrichta* (L), *Exilisciurus concinnus* (L), *Sundasciurus samarensis* (L), *Bullimus bagobus* (L), *Rattus everetti* (L).

SIARGAO

Urogale everetti (L), *Cynocephalus volans* (L), *Eonycteris robusta* (L), *Exilisciurus concinnus* (L), *Petinomys crinitus* (L), *Bullimus bagobus* (L).

SIBUYAN

Rattus everetti (L).

SULU ARCH. (=TAWITAWI)

Pteropus speciosus (L), *Rattus tawitawiensis* (L).

TICAO

Rattus everetti (L).

BONERATE

Pteropus griseus (L).

SULAWESI

BUTUNG

Ailurops ursinus (L), *Macaca ochereata* (L), *Prosciurillus leucomus* (L).

LEMbeh

Ailurops ursinus (L), *Babyrousa babyrussa* (L).

MUNA

Ailurops ursinus (L), *Dobsonia exoleta* (L), *Macaca ochereata* (L).

PELENG (BANGGAI IS.)

Ailurops ursinus (L), *Phalanger pelebensis* (L), *Strigoscus pelengensis* (L), *Crocidura* undescribed species C (L), *Hipposideros dinops* (L), *Tarsius spectrum* (L), *Rattus koopmani* (L), *Rattus pelurus* (L).

SALAYAR

Acerodon celebensis (L), *Pteropus griseus* (L), *Tarsius spectrum* (L).

SANGIHE (=SANGHIR) IS.

Strigoscus celebensis (L), *Acerodon celebensis* (L), *Dobsonia crenulata* (L), *Rousettus celebensis* (L), *Thoopterus nigrescens* (L), *Rhinolophus celebensis* (L), *Tarsius spectrum* (L), *Callosciurus rosenbergi* (L), *Prosciurillus leucomus* (L).

SULAWESI

Ailurops ursinus (L), *Strigoscus celebensis* (L), *Crocidura elongata* (L), *Crocidura lea* (L), *Crocidura levicula* (L), *Crocidura musseri* (L), *Crocidura nigripes* (L), *Crocidura rhoditis* (L), *Crocidura* undescribed species A (L), *Crocidura* undescribed species B (L)[one of these undescribed species could represent *Crocidura musseri*], *Acerodon celebensis* (L), *Boneia bidens* (L), *Dobsonia exoleta* (L), *Harpyionycteris celebensis* (L), *Neopteryx frosti* (L), *Pteropus caniceps* (L), *Pteropus griseus* (L), *Rousettus celebensis* (L), *Styloctenium wallacei* (L), *Thoopterus nigrescens* (L), *Hipposideros dinops* (L), *Hipposideros inexpectatus* (L), *Hipposideros macrobullatus* (L), *Rhinolophus celebensis* (L), *Hesperoptenus gaskelli* (L), *Miniopterus petersi* (L), *Miniopterus tristis* (L), *Pipistrellus minahassae* (L), *Pipistrellus petersi* (L), *Scotophilus celebensis* (L), *Cheiromeles parvidens* (L), *Mops sarasinorum* (L), *Tarsius diana* (L), *Tarsius pumilus* (L), *Tarsius spectrum* (L), *Macaca maura* (L), *Macaca nigra* (L), *Macaca ochereata* (L), *Macaca tonkeana* (L), *Macrogalidia musschenbroekii* (L), *Babyrousa babyrussa* (L), *Sus celebensis* (L), *Bubalus depressicornis* (L), *Bubalus quarlesi* (L), *Hyosciurus heinrichi* (L), *Hyosciurus ileile* (L), *Prosciurillus abstrusus* (L), *Prosciurillus leucomus* (L), *Prosciurillus murinus* (L), *Prosciurillus weberi* (L), *Rubrisciurus rubriventer* (L), *Bunomys andrewsi* (L), *Bunomys chrysocomus* (L), *Bunomys coelestis* (L), *Bunomys fratrorum* (L), *Bunomys heinrichi* (L), *Bunomys penitus* (L), *Bunomys prolatus* (L), *Crunomys celebensis* (L), *Echiothrix leucura* (L), *Eropeplus canus* (L), *Haeromys minahassae* (L), *Lenomys meyeri* (L), *Lenomys* undescribed species (+), *Margaretamys beccarii* (L), *Margaretamys elegans* (L), *Margaretamys parvus* (L), *Maxomys dollmani* (L), *Maxomys hellwaldii* (L), *Maxomys musschenbroekii* (L), *Maxomys wattsi* (L), *Melasmothrix naso* (L), *Paruromys dominator* (L), *Paruromys ursinus* (L), *Rattus bontanus* (L), *Rattus foramineus* (L), *Rattus hoffmanni* (L), *Rattus marmosurus* (L), *Rattus mollicomulus* (L), *Rattus xanthurus* (L), *Taeromys arcuatus* (L), *Taeromys callitrichus* (L), *Taeromys celebensis* (L), *Taeromys hamatus* (L), *Taeromys punicans* (L), *Taeromys taerae* (L), *Taeromys* undescribed species (L), *Tateomys macrocercus* (L), *Tateomys rhinogradoides* (L).

TALAUD IS.

Ailurops ursinus (L), *Acerodon humilis* (L),

Pteropus speciosus (L), *Rhinolophus celebensis* (L), *Melomys caurinus* (L), *Melomys talaudium* (L).

TANAHJAMPEA (=DYAMPEA)

Pteropus griseus (L).

TOGIAN IS.

Ailurops ursinus (L), *Acerodon celebensis* (L), *Dobsonia crenulata* (L), *Dobsonia exoleta* (L), *Macaca tonkeana* (L), *Babyrousa babyrussa* (L), *Rattus hoffmanni* (L).

MOLUCCAS

AMBON (=AMBOINA)

Dobsonia moluccensis (L), *Dobsonia viridis* (L), *Pteropus argentatus* (L), *Pteropus chrysoproctus* (L), *Pteropus melanopogon* (L), *Pteropus temmincki* (L), *Rhinolophus keyensis* (L), *Miniopterus petersi* (L), *Pipistrellus petersi* (L).

BACAN (=BATCHIAN)

Phalanger ornatus (L), *Dobsonia crenulata* (L), *Pteropus caniceps* (L), *Pteropus personatus* (L), *Syconycteris carolinae* (L), *Rhinolophus keyensis* (L), *Rattus morotaiensis* (L).

BANDA

Dobsonia viridis (L), *Pteropus griseus* (L), *Pteropus melanopogon* (L).

BISA

Phalanger rothschildi (L), *Pteropus chrysoproctus* (L), *Pteropus personatus* (L), *Melomys obiensis* (L), *Rattus* undescribed species A (=Rattus undescribed species from Moluccas of Musser and Heaney 1992?; see table 1) (L)

BURU

Dobsonia moluccensis (L), *Dobsonia viridis* (L), *Pteropus chrysoproctus* (L), *Pteropus melanopogon* (L), *Pteropus ocularis* (L), *Pteropus temmincki* (L), *Miniopterus petersi* (L), *Pipistrellus petersi* (L).

GEBE

Phalanger alexandrae (L), *Dorcopsis* undescribed species A (+), *Myotis stalker* (L).

GORAM (=SERAM LAUT =GORONG)

Pteropus chrysoproctus (L), *Rhinolophus keyensis* (L).

HALMAHERA

Peroryctidae, undescribed genus, undescribed species (+), *Phalanger ornatus* (L), *Dorcopsis* undescribed species A (+), *Dobsonia crenulata* (L), *Pteropus caniceps* (L), *Pteropus personatus* (L), *Syconycteris carolinae* (L), *Rattus morotaiensis* (L).

KEI (=KAI) IS.

Dobsonia viridis (L), *Pteropus melanopogon* (L), *Rhinolophus keyensis* (L), *Myotis stalker* (L).

MOROTAI

Phalanger ornatus (L), *Dobsonia crenulata* (L), *Pteropus caniceps* (L), *Pteropus personatus*

(L), *Thoopterus nigrescens* (L), *Rattus morotaiensis* (L).

OBI BESAR

Phalanger rothschildi (L), *Dobsonia crenulata* (L), *Pteropus chrysoproctus* (L), *Pteropus personatus* (L), *Melomys obiensis* (L).

SERAM

Rhyncomeles prattorum (L), *Dobsonia moluccensis* (L), *Dobsonia viridis* (L), *Pteropus chrysoproctus* (L), *Pteropus melanopogon* (L), *Pteropus ocularis* (L), *Pteropus temmincki* (L), *Hipposideros macrobullatus* (L), *Melomys aerosus* (L), *Melomys fraterculus* (L), *Melomys fulgens* (L), *Rattus feliceus* (L), *Stenomys ceramicus* (L).

TERNATE

Phalanger ornatus (L), *Dobsonia crenulata* (L), *Pteropus caniceps* (L), *Pteropus personatus* (L).

TIDORE

Phalanger ornatus (L), *Dobsonia crenulata* (L), *Pteropus caniceps* (L), *Pteropus personatus* (L).

LESSER SUNDA

ADONARA

Cynopterus nusatenggara (L).

ALOR (NEAR TIMOR)

Acerodon mackloti (L), *Cynopterus nusatenggara* (L), *Dobsonia peroni* (L), *Pteropus lombocensis* (L).

BABAR

Dobsonia peroni (L).

FLORES

Suncus mertensi (L), *Acerodon mackloti* (L), *Cynopterus nusatenggara* (L), *Dobsonia peroni* (L), *Pteropus lombocensis* (L), *Sus heurni* (L), *Komodomys rintjanus* (L), *Papagomys armandvillei* (L), *Papagomys theodorverhoeveni* (+?), *Papagomys* undescribed species, *Paulamys naso* (L), *Rattus hainaldi* (L), *Spelaeomys florensis* (+).

KOMODO

Cynopterus nusatenggara (L), *Dobsonia peroni* (L), *Rhinolophus simplex* (L).

LOMBLEN (=LEMBLATA)

Cynopterus nusatenggara (L), *Nyctophilus heran* (L).

LOMBOK

Acerodon mackloti (L), *Cynopterus nusatenggara* (L), *Pteropus lombocensis* (L), *Rhinolophus simplex* (L).

MOYO

Cynopterus nusatenggara (L).

NUSA PENIDA

Dobsonia peroni (L).

PADAR

Komodomys rintjanus (L).

PANTAR

Cynopterus nusatenggara (L).

RINTJA

Komodomys rintjanus (L).

SALEMBAR (=SOLOMBO BESAR)

Pteropus speciosus (L).

SANGEANG

Cynopterus nusatenggara (L).

SEMAU

Pteropus griseus (L).

SUMBA

Acerodon mackloti (L), *Cynopterus nusatenggara* (L), *Dobsonia peroni* (L).

SUMBAWA

Acerodon mackloti (L), *Cynopterus nusatenggara* (L), *Dobsonia peroni* (L), *Rhinolophus simplex* (L).

TANIMBAR (=TIMORLAUT) IS.

Pteropus melanopogon (L).

TIMOR

Crociodura tenuis (L), *Acerodon mackloti* (L), *Dobsonia peroni* (L), *Pteropus griseus* (L), *Hipposideros crumeniferus* (L), *Sus timorensis* (L), *Coryphomys buhleri* (+), *Rattus timorensis* (L), *Rattus* undescribed species C (+), Muridae, unnamed genus, undescribed species D (+), Muridae, unnamed genus, undescribed species E (+) (the two undescribed murids could actually represent *Rattus timorensis* and *Rattus* undescribed species C; see table 1).

WETAR

Cynopterus nusatenggara (L), *Dobsonia peroni* (L), *Rhinolophus keyensis* (L), *Kerivoula myrella* (L).

SULA IS.

MANGGOLE

Strigocuscus pelengensis (L), *Pteropus caniceps* (L), *Rousettus celebensis* (L), *Thoopterus nigrescens* (L), *Babyrousa babyrussa* (L), *Rattus elaphinus* (L).

SANANA

Dobsonia exoleta (L), *Rousettus celebensis* (L), *Miniopterus tristis* (L), *Cheiromeles parvidens* (L).

SULA (=TALIABU)

Phalanger pelegensis (L), *Strigocuscus pelengensis* (L), *Crociodura* undescribed species C (L), *Acerodon celebensis* (L), *Pteropus caniceps* (L), *Babyrousa babyrussa* (L), *Rattus elaphinus* (L).

Islands Surrounding New Guinea

NW NEW GUINEA

BIAK

Petaurus biacensis (L), *Dobsonia emersa* (L), *Uromys boeadii* (L).

OWII

Petaurus biacensis (L), *Dobsonia emersa* (L), *Uromys emmae* (L).

NE NEW GUINEA

KIRIWINA (TROBRIAND IS.)

Echymipera davidi (L).

WOODLARK

Phalanger lullulae (L).

BISMARCK ARCH. (SENSU LATO)

ADMIRALTY IS.

Baluan

Spilocuscus kraemeri (D).

Manus

Spilocuscus kraemeri (L), *Dobsonia anderseni* (L), *Pteropus admiralitatum* (L), *Kerivoula myrella* (L), *Melomys matambuai* (L), *Rattus* undescribed species B (+).

Mussau

Dobsonia anderseni (L), *Pteropus admiralitatum* (L).

BISMARCK ARCH.

Karkar

Dobsonia anderseni (L), *Pteropus tonganus* (L).

New Britain

Dobsonia anderseni (L), *Dobsonia praedatrix* (L), *Melonycteris melanops* (L), *Pteropus admiralitatum* (L), *Pteropus capistratus* (L), *Pteropus gilliardorum* (L), *Kerivoula myrella* (L), *Hydromys neobritannicus* (L), *Melomys* undescribed species (L), *Uromys neobritannicus* (L).

New Ireland

Dobsonia anderseni (L), *Dobsonia praedatrix* (L), *Melonycteris melanops* (L), *Pteropus capistratus* (L), *Emballonura serii* (L), *Rattus sanila* (L).

Tabar

Pteropus admiralitatum (L).

Umboi

Dobsonia anderseni (L), *Dobsonia praedatrix* (L), *Pteropus capistratus* (L).

SOLOMON ARCH.

BOUGAINVILLE

Dobsonia inermis (L), *Melonycteris woodfordi* (L), *Nyctimene bougainville* (L), *Pteralopex anceps* (L), *Pteropus mahaganus* (L), *Pteropus rayneri* (L), *Anthops ornatus* (L), *Hipposideros dinops* (L), *Melomys bougainville* (L), *Solomys ponceleti* (L), *Solomys salebrosus* (L).

BUKA

Melonycteris woodfordi (L), *Pteralopex anceps* (L), *Pteropus rayneri* (L), *Melomys bougainville* (L), *Melomys spechti* (L), *Solomys ponceleti* (D), *Solomys salebrosus* (D), *Solomys spriggsarum* (+).

CHOISEUL IS.

Dobsonia inermis (L), *Melonycteris woodfordi* (L), *Nyctimene bougainville* (L), *Pteralopex anceps* (L), *Pteropus admiralitatum* (L), *Pteropus rayneri* (L), *Anthops ornatus* (L), *Chaerephon so-*

lomonis (L), *Melomys bougainville* (L), *Solomys ponceleti* (L), *Solomys salebrosus* (L).

FAURO

Dobsonia inermis (L), *Melonycteris woodfordi* (L), *Pteropus admiralitatum* (L), *Pteropus woodfordi* (L).

FLORIDA

Dobsonia inermis (L), *Melonycteris woodfordi* (L), *Solomys salamonis* (+?).

GUADALCANAL

Dobsonia inermis (L), *Melonycteris fardoulisi* (L), *Nyctimene bougainville* (L), *Pteralopex atrata* (L), *Pteralopex pulchra* (L), *Pteropus admiralitatum* (L), *Pteropus rayneri* (L), *Pteropus woodfordi* (L), *Anthops ornatus* (L), *Hipposideros dinops* (L), *Uromys imperator* (+?), *Uromys porculus* (+?), *Uromys rex* (L).

KOLOMBANGARA

Dobsonia inermis (L), *Melonycteris fardoulisi* (L), *Melonycteris woodfordi* (L), *Nyctimene bougainville* (L), *Pteralopex undescribed species* (D), *Pteropus admiralitatum* (L), *Pteropus rayneri* (L), *Pteropus woodfordi* (L).

MALAITA

Dobsonia inermis (L), *Melonycteris fardoulisi* (L), *Nyctimene bougainville* (L), *Pteropus admiralitatum* (L), *Pteropus rayneri* (L), *Pteropus tonganus* (L), *Pteropus woodfordi* (L), *Hipposideros dinops* (L).

NEW GEORGIA (=RUBIANA)

Dobsonia inermis (L), *Melonycteris fardoulisi* (L), *Nyctimene bougainville* (L), *Pteralopex undescribed sp* (L), *Pteropus admiralitatum* (L), *Pteropus rayneri* (L), *Pteropus woodfordi* (L), *Hipposideros dinops* (L), *Melonycteris woodfordi* (L).

ONTOG JAVA

Pteropus howensis (L).

RENNELL

Dobsonia inermis (L), *Pteropus rennelli* (L), *Pteropus tonganus* (L).

SAN CRISTOBAL (=MAKIRA)

Dobsonia inermis (L), *Melonycteris fardoulisi* (L), *Nyctimene bougainville* (L), *Pteropus cognatus* (L), *Pteropus tonganus* (L), *Hipposideros demissus* (L).

SANTA ISABEL

Dobsonia inermis (L), *Melonycteris woodfordi* (L), *Nyctimene bougainville* (L), *Pteralopex atrata* (L), *Pteropus mahaganus* (L), *Pteropus rayneri* (L), *Anthops ornatus* (L), *Hipposideros dinops* (L), *Chaerephon solomonis* (L), *Solomys sapientis* (L).

VELLA LAVELLA

Dobsonia inermis (L), *Melonycteris fardoulisi* (L), *Melonycteris woodfordi* (L), *Pteropus admiralitatum* (L), *Pteropus rayneri* (L), *Pteropus woodfordi* (L).

SANTA CRUZ IS.

Nendö

Nyctimene sanctacrucis (+), *Pteropus niteniensis* (L), *Pteropus tonganus* (L).

Vanikolo

Pteropus tonganus (L), *Pteropus tuberculatus* (L).

Other Pacific Ocean and Related Seas Islands

SEA OF CORTES

ANGEL DE LA GUARDA

Peromyscus guardia (L).

GRANITO

Peromyscus guardia (L).

MEJÍA

Peromyscus guardia (L).

MONSERRAT

Peromyscus caniceps (L).

SALSIPUEDES

Peromyscus interparietalis (L).

SAN DIEGO IS.

Peromyscus sejugis (L).

SAN ESTEBAN

Peromyscus stephani (L).

SAN LORENZO (N and S)

Peromyscus interparietalis (L).

SAN PEDRO NOLASCO

Peromyscus pombertoni (+).

SANTA CATALINA

Peromyscus slevini (L).

SANTA CRUZ IS.

Peromyscus sejugis (L).

TORTUGA

Peromyscus dickleyi (L).

GALÁPAGOS

BALTRA

Nesoryzomys undescribed species B (+).

FERNANDINA

Nesoryzomys fernandinae (L), *Nesoryzomys indefessus* (L).

ISABELA, LA

Megaoryzomys undescribed species (+), *Nesoryzomys* undescribed species C (+), *Nesoryzomys* undescribed species D (+).

RÁBIDA

Nesoryzomys undescribed species A (+).

SAN CRISTOBAL

Oryzomys galapagoensis (L).

SAN SALVADOR

Nesoryzomys swarthi (L).

SANTA CRUZ

Megaoryzomys curioi (+), *Nesoryzomys darwini* (+), *Nesoryzomys* undescribed species B (+).

SANTA FÉ

Oryzomys galapagoensis (L).

MEXICAN PACIFIC OCEAN

TRES MARIAS IS.

Myotis findleyi (L), *Oryzomys nelsoni* (+),
Peromyscus madrensis (L), *Sylvilagus graysoni*
 (L).

CALIFORNIA CHANNEL ISLANDS

SAN CLEMENTE

Urocyon littoralis (L).

SAN MIGUEL

Urocyon littoralis (L), *Mammuthus exilis*
 (+), *Peromyscus nesodytes* (+).

SAN NICOLAS

Urocyon littoralis (L).

SANTA CATALINA

Urocyon littoralis (L).

SANTA CRUZ

Urocyon littoralis (L).

SANTA ROSA

Urocyon littoralis (L), *Mammuthus exilis*
 (+), *Peromyscus nesodytes* (+).

WEST ANACAPA

Peromyscus anayapahensis (+).

RYUKYU

(accurate distribution inside the archipelago un-
 known).

Pteropus mariannus (L).

AMAMIOSHIMA

Crocidura watasei (L), *Diplothrinx legatus*
 (L), *Tokudaia osimensis* (L), *Pentalagus furnessi*
 (L).

IJEIMA

Crocidura watasei (L), *Metacervulus astylo-*
don (+), *Muntiacus undescribed species* (+),
Tokudaia muenninki (D).

IRABU

Capreolus miyakoensis (+).

IRIOMOTE

Rhinolophus imaizumii (L).

ISHIGAKIJIMA

Metacervulus astylodon (+).

KUMEJIMA

Metacervulus astylodon (+), *Muntiacus un-*
described species (+), *Capreolus miyakoensis*
 (+).

MIYAKOJIMA

Capreolus miyakoensis (+), *Diplothrinx le-*
gatus (D).

OKINAWAJIMA

Crocidura watasei (L), *Metacervulus asty-*
lodon (+), *Muntiacus undescribed species* (+),
Diplothrinx legatus (L), *Tokudaia muenninki* (L).

OKINOEARABUJIMA

Crocidura watasei (L).

TOKUNOSHIMA

Crocidura watasei (L), *Metacervulus asty-*
lodon (+), *Diplothrinx legatus* (L), *Tokudaia un-*
described species (L), *Pentalagus furnessi* (L).

YONAKUNIJIMA

Metacervulus astylodon (+), *Crocidura wa-*
tasei (L).

JAPAN SEA

SADO

Sorex sadonis (L), *Mogera tokudae* (L).

NEW ZEALAND AND LORD HOWE

NEW ZEALAND

Chalinolobus tuberculatus (L), *Mystacina*
robusta (+?), *Mystacina tuberculata* (L).

LORD HOWE

Nyctophilus howensis (+).

OTHER PACIFIC ISLANDS

BONIN IS.

Pteropus pselaphon (L), *Pipistrellus sturdee-*
i (L).

VOLCANO IS.

Pteropus pselaphon (L).

CAROLINE ISLANDS

PAKIN ATOLL

Pteropus molossinus (L).

ANT ATOLL

Pteropus molossinus (L).

KOSRAE

Pteropus ualanus (L).

MORTLOCK

Pteropus molossinus (L), *Pteropus phaeoce-*
phalus (L).

PALAU IS.

Pteropus pelewensis (L), *Pteropus pilosus*
 (+), *Emballonura semicaudata* (L).

PONAPE (=POHNPEI) IS.

Pteropus molossinus (L), *Emballonura sem-*
icaudata (L).

TRUCK IS.

Pteropus insularis (L), *Emballonura semi-*
caudata (L).

ULITHI

Pteropus mariannus (L).

YAP

Pteropus yapensis (L).

MARIANA IS.

GUAM

Pteropus mariannus (L), *Pteropus tokudae*
 (+), *Emballonura semicaudata* (D).

GUGUAN

Pteropus mariannus (L).

MAUG

Pteropus mariannus (L), *Emballonura semi-*
icaudata (L).

PAGAN

Pteropus mariannus (L).

ROTA

Emballonura semicaudata (D), *Pteropus*
mariannus (L).

NEW CALEDONIA AND LOYALTY IS.

NEW CALEDONIA

Notopterus neocaledonica (L), *Pteropus ornatus* (L), *Pteropus tonganus* (L), *Pteropus vetulus* (L), *Chalinolobus neocaledonicus* (L), *Nyctophilus undescribed* sp (L).

LOYALTY ISLANDS

Lifou

Pteropus ornatus (L), *Miniopterus robustior* (L).

Maré

Pteropus ornatus (L), *Miniopterus robustior* (L).

Ouvéa

Pteropus tonganus (L).

VANUATU (=NEW HEBRIDES)

Notopterus macdonaldi (L), *Pteropus anetianus* (L), *Pteropus fundatus* (L), *Pteropus tonganus* (L), *Emballonura semicaudata* (L), *Chaerephon bregullae* (L).

TORRES

Pteropus tonganus (L).

BANK IS.

Notopterus macdonaldi (L), *Pteropus anetianus* (L), *Pteropus fundatus* (L), *Pteropus tonganus* (L).

FUJI

TAVEUNI

Notopterus macdonaldi (L), *Pteralopex acrodonta* (L), *Pteropus samoensis* (L), *Pteropus tonganus* (L), *Chaerephon bregullae* (L).

VANUA LEVU

Notopterus macdonaldi (L), *Pteropus samoensis* (L), *Pteropus tonganus* (L), *Chaerephon bregullae* (L).

VITI LEVU

Notopterus macdonaldi (L), *Pteropus samoensis* (L), *Pteropus tonganus* (L), *Emballonura semicaudata* (D).

TONGA

Pteropus tonganus (L), *Pteropus samoensis* (D), *Notopterus macdonaldi* (D), *Emballonura semicaudata* (L).

SAMOA IS.

Pteropus samoensis (L), *Pteropus tonganus* (L), *Emballonura semicaudata* (L), *Myotis insularum* (L).

CHRISTMAS (=KIRITIMATI) (LINE IS.)

Rattus macleari (+), *Rattus nativitatis* (+).

COOK IS.

AIUTAKI

Pteropus tonganus (D).

MANGAIA

Pteropus tonganus (L).

RAROTONGA

Pteropus tonganus (L).

WALLIS AND FUTUNA

'UVEA

Pteropus tonganus (L).

FUTUNA

Pteropus tonganus (L).

Arctic Sea

WRANGEL

Dicrostonyx vinogradovi (L).

Recent issues of the *Novitates* may be purchased from the Museum. Lists of back issues of the *Novitates* and *Bulletin* published during the last five years are available at World Wide Web site <http://nimidi.amnh.org>. Or address mail orders to: American Museum of Natural History Library, Central Park West at 79th St., New York, NY 10024. TEL: (212) 769-5545. FAX: (212) 769-5009. E-MAIL: scipubs@amnh.org