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ANNOTATED CHECKLIST OF LAND MAMMALS OF EL SALVADOR

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El Salvador, a country of approximately 21,000 square kilometers, is located in Central America between 13°09' and 14°27' N latitude and 87°41' and 90°08' W longitude. To the north and east it borders on Honduras, to the west on Guatemala, and to the south on the Pacific Ocean. El Salvador has more than 200 inhabitants per square kilometer, a population density more than 12 times the average of Latin American countries (Escamilla, 1986). It is the smallest of the Central American republics, and one of only two countries in the region (the other is Belize) that do not have a coast along both the Atlantic and Pacific oceans. Although small in area, the country has a varied climate and topography, and thus a diverse tropical biota.

Temperature changes relatively little during the year, with annual and daily variations rarely exceeding 10° C (Escamilla, 1986). In San Salvador, at 710 meters, the mean annual temperature is 22.8° C. The coldest month, December, has a mean of 21.8° C and the hottest month, April, has a mean of 24.5° C. Although the temperature at a given locality is relatively constant, temperature does vary considerably with altitude. For example, at Santa Cruz Porrillo (elevation 30 meters) the average annual temperature is 26.7° C. In contrast, at Montecristo (2230 meters) the mean annual temperature is only 12.8° C (Holdridge, 1975).

Climatic differences in El Salvador are due mainly to the quantity and distribution of annual precipitation. Rainfall is abundant from May through October but rare from November through April (Escamilla,

1986). The mean annual rainfall at San Salvador is 1789 mm., ranging from 355 mm in July to only 4 mm in February (Holdridge, 1975).

Elevations vary from sea level along the Pacific coast to 2730 meters in the mountains along the Honduran border. Habitat zonation ranges from dry tropical forest to wet montane forest. The country has been subdivided into 19 life zones, based on climate, according to the system devised by Holdridge (Tosi and Hartshorn, 1978).

According to Burt and Stirton (1961), the first mammalian specimen taken from El Salvador was a squirrel, probably obtained in Departamento de La Unión, to which Ogilby (1839) gave the name *Sciurus variegatoides*. Bats obtained near Volcán Izalco, Departamento de Sonsonate, and donated to the Academy of Natural Sciences of Philadelphia in 1860 also represent an early collection from the country. In 1866, H. Allen described *Vespertilio concinnus* (= *Myotis nigricans*) from "Salvador," presumably based on the material from Volcán Izalco (Burt and Stirton, 1961).

Systematic mammal collecting in El Salvador began in 1925 under the financial patronage of Donald R. Dickey. Collecting was done by the late Rubin A. Stirton from July 1925 to April 1926, and from late November 1926 through June 1927. Stirton returned to El Salvador from November 1941 to May 1942 as head of an expedition from the University of California. Milton Hildebrand served as mammalogist on that expedition (Burt and Stirton, 1961).

Dickey (1928a, 1928b, 1928c) described 11 new species and subspecies from Stirton's collections. Four other subspecies later were described from this material by Nelson and Goldman (1931), Nelson (1932), Goldman (1937), and Hooper (1949).

The only other general mammal collecting in El Salvador was by Heinz Felten from October 1952 to April 1954. Felten (1955, 1956a, 1956b, 1956c, 1957a, 1957b, 1958a, 1958b, 1958c) published nine papers on the mammals of the country in which he recorded 73 species and described two new subspecies.

The series of papers by Felten and the treatise on Salvadorian land mammals by Burt and Stirton (1961) are the only synoptic treatments of the mammalian fauna of the country. A total of 97 species was reported in these publications. Records published since then, together with several overlooked by Burt and Stirton, have increased the number of known species to 121 as here listed, almost half of which are bats. Probably at least an additional dozen taxa, possibly more, occur in El Salvador. For example, the genera *Caluromys*, *Didelidurus*, *Galicitis*, and *Mazama* are unrepresented in our list; furthermore, only one species of *Micronycteris*, only four genera of glossophagines, and only

two kinds of xenarthrans have been reported from the country. In addition to new distributional records, systematic studies have resulted in changes in nomenclatorial status of several taxa in recent years. Some of the new distributional records and changes in nomenclature have been incorporated into second-hand summaries such as those of Hall (1981) and Jones *et al.* (1988).

Historic accounts of biological conditions in El Salvador (Daugherty, 1972, and Guzmán, 1883, for example), some of which address the drastic affect in recent centuries of humans on the environment, suggest the possible past occurrence of a few species of mammals not listed here. We have not included these taxa (howler monkeys, white-lipped peccaries, and brockets are examples) because the published records are of a general nature or speculative, and, in any event, are not substantiated by actual specimens or first-hand observations. Nonetheless, chronicles of conditions in colonial and early republican times are of considerable value in gauging the overall impact of land degradation and human population pressure on biodiversity in the country.

Following is a checklist of mammalian species known to occur in El Salvador or that occurred there until relatively recently. Taxa are arranged phylogenetically through genera, but species in each genus are listed alphabetically. Citations are given to publications that are primary (or principal) sources of distributional data on species and subspecies of Salvadorian mammals. In a few instances, notation is made of specimens reported in the literature under a name different than the one used here, or comments are entered concerning the taxonomic status of a taxon. We hope this checklist will prove a useful reference for both laboratory and field workers concerned with studies of mammalian biology in El Salvador. We are grateful to K. F. Koopman, T. J. McCarthy, and D. E. Wilson for comments on a draft version of the manuscript.

Order MARSUPIALIA

Family Didelphidae

Didelphis marsupialis cauae J. A. Allen, 1900. Felten (1958c: 217, as *D. m. californica* in part), Burt and Stirton (1961:18, as *D. m. tabascensis* in part), Gardner (1973:70).

Didelphis virginiana californica Bennett, 1833. Felten (1958c:217, as *D. marsupialis californica* in part), Burt and Stirton (1961:18, as *D. marsupialis tabascensis* in part), Gardner (1973:74).

Philander opossum pallidus (J. A. Allen, 1901). Felten (1958c: 215, as *P. o. fuscogriseus*), Burt and Stirton (1961:20).

- Chironectes minimus argyrodytes* Dickey, 1928. Dickey (1928c:15, as *C. argyrodytes*), Burt and Stirton (1961:20, as *C. argyrodytes*).
Marmosa mexicana mexicana Merriam, 1897. Felten (1958c: 215), Burt and Stirton (1961:19).

Order INSECTIVORA

Family Soricidae

- Cryptotis goodwini* Jackson, 1933. Felten (1958c:218).
Cryptotis nigrescens merriami Choate, 1970. Burt and Stirton (1961:21), Choate (1970:279).
Cryptotis parva orophila (J. A. Allen, 1895). Choate (1970:264).

Order CHIROPTERA

Family Emballonuridae

- Rhynchonycteris naso* (Wied, 1820). Sanborn (1937:327, as *Rhynchiscus naso*), Felten (1955:276, as *Rhynchiscus naso*), Burt and Stirton (1961:22, as *Rhynchiscus naso*).
Saccopteryx bilineata (Temminck, 1838). Felten (1955:276), Burt and Stirton (1961:22). Regarded by some authorities as monotypic, but others recognize the subspecies *S. b. centralis* Thomas, 1904, as occurring in Central America.
Saccopteryx leptura (Schreber, 1774). Burt and Stirton (1961:23).
Peropteryx macrotis macrotis (Wagner, 1843). Felten (1955: 284), Burt and Stirton (1961:23).
Balantiopteryx plicata plicata Peters, 1867. Felten (1955:280), Burt and Stirton (1961:24).

Family Noctilionidae

- Noctilio leporinus mastivus* (Vahl, 1797). Hellebuyck *et al.* (1985: 784).

Family Mormoopidae

- Pteronotus davyi fulvus* (Thomas, 1892). Felten (1956a:78), Burt and Stirton (1961:27), Smith (1972:102), Hellebuyck *et al.* (1985: 785).
Pteronotus gymnotus (Wagner, 1843). Felten 1956a:75, as *P. suapurensis*), Burt and Stirton (1961:26, as *P. suapurensis*), Smith (1972:106, as *P. suapurensis*).
Pteronotus parnellii mesoamericanus Smith, 1972. Felten (1956a: 69, as *Chilonycteris rubiginosa fusca*), Burt and Stirton (1961:25, as

P. rubiginosus fuscus, Smith (1972:74), Webb and Perrigo (1984:249), Hellebuyck *et al.* (1985:786).

Pteronotus personatus psilotis (Dobson, 1878). Felten (1956a:73, as *Chilonycteris personata*), Burt and Stirton (1961:26, as *P. psilotis*), Smith (1972:93).

Mormoops megalophylla megalophylla Peters, 1864. Felten (1956a:80), Burt and Stirton (1961:27, as *M. m. senicula*), Davis and Carter (1962:67), Smith (1972:118).

Family Phyllostomidae

Micronycteris megalotis mexicana Miller, 1898. Felten (1956b:180), Burt and Stirton (1961:28).

Lonchorhina aurita aurita Tomes, 1863. Felten (1956b:181).

Macrophyllum macrophyllum (Schinz, 1821). Felten (1956b:183), Burt and Stirton (1961:28), Harrison and Pendleton (1975:869).

Phyllostomus discolor verrucosus Elliot, 1905. Felten (1956b:186), Burt and Stirton (1961:29).

Trachops cirrhosus coffini Goldman, 1925. Felten (1956b:189), Burt and Stirton (1961:30).

Chrotopterus auritus auritus (Peters, 1856). Burt and Stirton (1961:30).

Glossophaga commissarisi commissarisi Gardner, 1962. Hellebuyck *et al.* (1985:784-786).

Glossophaga leachii (Gray, 1844). Hall (1981:121, as *G. alticola*).

Glossophaga soricina handleyi Webster and Jones, 1980. Felten (1956b:192, as *G. s. leachii*), Burt and Stirton (1961:31, as *G. s. leachii*), Hellebuyck *et al.* (1985:784-786).

Anoura geoffroyi lasiopyga (Peters, 1868). Sanborn (1933:27), Felten (1956b:196), Hellebuyck *et al.* (1985:784-786).

Choeroniscus godmani (Thomas, 1903). Burt and Stirton (1961:32), Owen *et al.* (1990:418).

Leptonycteris curasoae yerbabuenae Martínez and Villa, 1940. Jones and Bleier (1974:144), Arita and Humphrey (1988:55). We follow the latter authors in use of the name combination here employed.

Carollia perspicillata azteca Saussure, 1860. Felten (1956b:199), Burt and Stirton (1961:33), Pine (1972:70-71), Hellebuyck *et al.* (1985:784-786).

Carollia subrufa (Hahn, 1905). Felten (1956b:211, as *C. castanea subrufa*), Burt and Stirton (1961:33, as *C. castanea subrufa*), Pine (1972:28), Hellebuyck *et al.* (1985:785).

- Sturnira liliium parvidens* Goldman, 1917. Felten (1956c:341), Hellebuyck *et al.* (1985:784-785).
- Sturnira ludovici ludovici* Anthony, 1924. Hellebuyck *et al.* (1985:784-786).
- Uroderma bilobatum davis* Baker and McDaniel, 1972. Felten (1956c:343, as *U. b. bilobatum*), Burt and Stirton (1961:34, as *U. b. bilobatum*), Davis (1968:695, as *U. b. bilobatum*), Baker and McDaniel (1972:4), Baker *et al.* (1972:428), Baker *et al.* (1975:141), Baker (1979:126), Baker *et al.* (1979:222), Baker (1981:297), Greenbaum (1981), Owen (1987:56).
- Uroderma magnirostrum* Davis, 1968. Davis (1968:680), Swanepoel and Genoways (1979:102).
- Vampyrops helleri* Peters, 1866. LaVal (1969:820), Hellebuyck *et al.* (1985:785-786).
- Chiroderma salvini salvini* Dobson, 1878. Hellebuyck *et al.* (1985:785).
- Chiroderma villosum jesupi* J. A. Allen, 1900. Hellebuyck *et al.* (1985:785), Owen (1987:55).
- Artibeus aztecus major* Davis, 1969. Hellebuyck *et al.* (1985:784-786). Owen (1987) removed this and other small species (including *phaeotis* and *toltecus*) from the genus *Artibeus* and placed them in the genus *Dermanura*.
- Artibeus inopinatus* Davis and Carter, 1964. Burt and Stirton (1961:35, as *A. hirsutus*), Davis and Carter (1964:121).
- Artibeus intermedius* J. A. Allen, 1897. Davis (1984:10), Owen (1987:54).
- Artibeus jamaicensis paulus* Davis, 1970. Felten (1956c:346, as *A. j. jamaicensis*), Burt and Stirton (1961:35, as *A. j. jamaicensis*), Davis (1970b:121), Hellebuyck *et al.* (1985:784-786).
- Artibeus lituratus palmarum* J. A. Allen and Chapman, 1897. Felten (1956c:350), Burt and Stirton (1961:34), Davis (1984:13), Hellebuyck *et al.* (1985:784-785).
- Artibeus phaeotis palatinus* Davis, 1970. Davis (1970a:401), Hellebuyck *et al.* (1985:784-786).
- Artibeus toltecus hesperus* Davis, 1969. Felten (1956c:351, as *A. cinereus toltecus*), Burt and Stirton (1961:35, as *A. cinereus*), Davis (1969:26), Swanepoel and Genoways (1979:98), Hellebuyck *et al.* (1985:784-786).
- Enchisthenes hartii* (Thomas, 1892). Hellebuyck *et al.* (1985:785). Owen (1987) reluctantly placed *hartii* in the genus *Dermanura*. Jones *et al.* (1988), however, opined that *Enchisthenes* probably merits generic status.

- Centurio senex senex*** Gray, 1842. Felten (1956c:352), Burt and Stirton (1961:36), Davis *et al.* (1964:386), Paradiso (1967:601), Hellebuyck *et al.* (1985:784, 786), Owen (1987:55).
- Desmodus rotundus murinus*** Wagner, 1840. Felten (1956c:354), Burt and Stirton (1961:36), Hellebuyck *et al.* (1985:785).
- Diaemus youngi*** Jentink, 1893. Greenbaum and Jones (1978:5), McBee *et al.* (1985:404), Owen *et al.* (1990:418).
- Diphylla ecaudata*** Spix, 1823. Felten (1956c:364, as *D. e. centralis*), Burt and Stirton (1961:37). Currently regarded as a monotypic species (Jones *et al.*, 1988).

Family Natalidae

- Natalus stramineus saturatus*** Dalquest and Hall, 1949. Felten (1957a:1, as *N. mexicanus*), Goodwin (1959:8), Burt and Stirton (1961:38, as *N. mexicanus*).

Family Vespertilionidae

- Myotis keaysi pilosatibialis*** LaVal, 1973. Hellebuyck *et al.* (1985:786).
- Myotis nigricans nigricans*** (Schinz, 1821). H. Allen (1866:280), Felten (1957a:5), Miller and G. M. Allen (1928:181, 187), Burt and Stirton (1961:39), LaVal (1973a:10), Koopman (1976:5).
- Myotis velifer velifer*** (J. A. Allen, 1890). Hellebuyck *et al.* (1985:786).
- Eptesicus fuscus miradorensis*** (H. Allen, 1866). Burt and Stirton (1961:39), Hellebuyck *et al.* (1985:785).
- Lasiurus blossevillii frantzii*** (Peters, 1871). Burt and Stirton (1961:39, as *L. borealis*). We follow Baker *et al.* (1988) in use of the specific name *blossevillii*.
- Lasiurus intermedius intermedius*** H. Allen, 1862. Hellebuyck *et al.* (1985:786).
- Rhogeessa tumida*** H. Allen, 1866. Felten (1957a:6, as *R. parvula tumida*), Burt and Stirton (1961:40, as *R. parvula tumida*), LaVal (1973b:44), Bickham and Baker (1977:453), Baker (1984:179), Baker *et al.* (1985:235).

Family Molossidae

- Nyctinomops laticaudatus yucatanicus*** (Miller, 1902). Felten (1957a:8, as *Tadarida yucatanica*).
- Eumops auripendulus auripendulus*** (Shaw, 1800). Burt and Stirton (1961:40, as *E. abrasus*), Eger (1977:28).

- Eumops underwoodi underwoodi*** Goodwin, 1940. Hellebuyck *et al.* (1985:787).
- Molossus coibensis*** J. A. Allen, 1904. Felten (1957a:14, as *M. tropidorhynchus coibensis*), Burt and Stirton (1961:41), Dolan (1989:59).
- Molossus molossus*** (Pallas, 1766). Felten (1957a:13, as *M. major aztecus*), Burt and Stirton (1961:41, as *M. major*), Warner *et al.* (1974:175, as *M. pygmaeus*), Dolan (1989:65).
- Molossus rufus*** É. Geoffroy St.-Hilaire, 1805. Felten (1957a:9), Burt and Stirton (1961:41), Dolan (1989:46). Dolan (1989) regarded this large mastiff bat as monotypic, but indicated that further studies may show that recognition of subspecies is justified. In that case, the name *nigricans* would apply to Central American populations of the species.

Order PRIMATES

Family Cebidae

- Ateles geoffroyi vellerosus*** Gray, 1866. Kellogg and Goldman (1944:35), Felten (1958c:219), Burt and Stirton (1961:21).

Order XENARTHRA

Family Myrmecophagidae

- Tamandua mexicana mexicana*** (Saussure, 1860). Burt and Stirton (1961:42, as *T. tetradactyla mexicana*).

Family Dasypodidae

- Dasypus novemcinctus fenestratus*** Peters, 1864. Felten (1958c:220), Burt and Stirton (1961:42).

Order LAGOMORPHA

Family Leporidae

- Sylvilagus floridanus hondurensis*** Goldman, 1932. Felten (1958c:220), Burt and Stirton (1961:65).

Order RODENTIA

Family Sciuridae

- Sciurus deppei deppei*** Peters, 1863. Felten (1957b:149), Burt and Stirton (1961:52).
- Sciurus variegatoides bangsi*** Dickey, 1928. Dickey (1928b:9), Harris (1937:11), Felten (1957b:150), Burt and Stirton (1961:52).

Sciurus variegatoides variegatoides Ogilby, 1839. Ogilby (1839: 117), Lesson (1842:112), J. A. Allen (1877:747), Nelson (1899:81), Dickey (1928b:8), Harris (1937:8), Felten (1957b:150), Burt and Stirton (1961:50).

Family Geomyidae

Orthogeomys grandis engelhardi Felten, 1957. Felten (1957b: 151), Burt and Stirton (1961:52).

Orthogeomys grandis pygacanthus Dickey, 1928. Dickey (1928b:9, as *O. pygacanthus*), Burt and Stirton (1961:52).

Family Heteromyidae

Liomys salvini salvini (Thomas, 1893). Felten (1957b:153, as *L. heterothrix*), Burt and Stirton (1961:54), Genoways (1973: 241).

Heteromys desmarestianus desmarestianus Gray, 1868. Dickey (1928b:10, as *H. d. psakastus*), Felten (1957b:152), Burt and Stirton (1961:53), Rogers and Schmidly (1982:385).

Family Muridae

Oryzomys alfaroi saturator Merriam, 1891. Felten (1958a:5), Burt and Stirton (1961:61, as *O. palustris couesi*).

Oryzomys couesi couesi (Alston, 1877). Felten (1958a:1), Burt and Stirton (1961:61).

Oryzomys fulvescens fulvescens (Saussure, 1860). Felten (1958a:6), Burt and Stirton (1961:62).

Oryzomys melanotis salvadorensis Felten, 1958. Felten (1958a:3, as *O. rostratus salvadorensis*), Burt and Stirton (1961:61).

Tylomys nudicaudus nudicaudus (Peters, 1866). Burt and Stirton (1961:59).

Ototylomys phyllotis phyllotis Merriam, 1901. Felten (1958a:7, as *O. p. guatemalae*), Hooper (1960:pl. 9), Burt and Stirton (1961:59), Lawlor (1969:40), Carleton (1980:25).

Nyctomys sumichrasti florencei Goldman, 1937. Goldman (1937: 422), Felten (1958a:7), Burt and Stirton (1961:59), Csuti (1980:43).

Reithrodontomys fulvescens chiapensis A. H. Howell, 1914. Hooper (1952:122), Burt and Stirton (1961:56).

Reithrodontomys gracilis anthonyi Goodwin, 1932. Hooper (1952:135), Anderson and Jones (1960:524), Burt and Stirton (1961:56).

- Reithrodontomys gracilis pacificus*** Goodwin, 1932. Felten (1958a:9, as *R. g. anthonyi*), Anderson and Jones (1960:525).
- Reithrodontomys mexicanus ocotepequensis*** Goodwin, 1937. Hooper (1952:150), Burt and Stirton (1961:56).
- Reithrodontomys mexicanus orinus*** Hooper, 1949. Hooper (1949:169-170, 1952:149), Felten (1958a:10), Burt and Stirton (1961:55), Csuti (1980:44).
- Reithrodontomys sumichrasti modestus*** Thomas, 1907. Hooper (1952:81), Felten (1958a:8), Burt and Stirton (1961:55).
- Peromyscus aztecus cordillerae*** Dickey, 1928. Dickey (1928a:2, as *P. boylii cordillerae*), Ondrias (1960:218, as *P. boylii*), Burt and Stirton (1961:56, as *P. boylei cordillera*), Carleton (1979:294).
- Peromyscus aztecus oaxacensis*** Merriam, 1898. Hooper (1957:12), Felten (1958b:133, as *P. oaxacensis*), Burt and Stirton (1961:57, as *P. oaxacensis*), Carleton (1979:295).
- Peromyscus boylii sacarensis*** Dickey, 1928. Dickey (1928a:3), Burt and Stirton (1961:56), Carleton (1979:281).
- Peromyscus gymnotis*** Thomas, 1894. Owen *et al.* (1990:417).
- Peromyscus mexicanus saxatilis*** Merriam, 1898. Dickey (1928a:3, as *P. m. philombrius*, and 1928a:4, as *P. m. salvadorensis*), Hooper (1957:12), Felten (1958b:134), Ondrias (1960:218), Burt and Stirton (1961:57), Huckaby (1980:16), Owen *et al.* (1990:417).
- Peromyscus stirtoni*** Dickey, 1928. Dickey (1928a:5), Burt and Stirton (1961:58), Huckaby (1980:9).
- Habromys lophurus*** (Osgood, 1904). Hooper (1958:pl. 13, as *Peromyscus lophurus*), Musser (1969:20, as *Peromyscus lophurus*), Robertson and Musser (1976:8, as *Peromyscus lophurus*). We follow Carleton (1980, 1989) in recognition of *Habromys* at the generic level.
- Baiomys musculus nigrescens*** Osgood, 1904. Felten (1958b:136, as *B. m. grisescens*), Packard (1960:625), Burt and Stirton (1961:58).
- Scotinomys teguina rufoniger*** Sanborn, 1935. Felten (1958b:137), Hooper (1960:pl. 11), Burt and Stirton (1961:58), Hooper (1972:19).
- Sigmodon hispidus griseus*** J. A. Allen, 1908. Felten (1958b:138), Burt and Stirton (1961:62).
- Rheomys thomasi stirtoni*** Dickey, 1928. Dickey (1928b:12), Stirton (1944:342), Burt and Stirton (1961:60).
- Rheomys thomasi thomasi*** Dickey, 1928. Dickey (1928b:11), Stirton (1944:341-342), Burt and Stirton (1961:60), Hooper (1968:552).

Rattus rattus (Linnaeus, 1758). Felten (1958b:139, as *R. r. rattus*), Burt and Stirton (1961:63).

Mus musculus Linnaeus, 1758. Felten (1958b:140, as *M. m. domesticus*), Burt and Stirton (1961:63).

Family Erethizontidae

Coendou mexicanus mexicanus (Kerr, 1792). Felten (1957b:147), Burt and Stirton (1961:64).

Family Dasyproctidae

Agouti paca nelsoni Goldman, 1913. Felten (1957b:148, as *Cuniculus paca nelsoni*), Burt and Stirton (1961:64).

Dasyprocta punctata punctata Gray, 1842. Felten (1957b:149), Burt and Stirton (1961:65).

Order CARNIVORA

Family Canidae

Canis latrans dickeyi Nelson, 1932. Nelson (1932:224), Burt and Stirton (1961:48), Csuti (1980:57).

Urocyon cinereoargenteus guatemalae Miller, 1899. Felten (1958c:221, as *U. c. fraterculus*), Burt and Stirton (1961:48).

Family Procyonidae

Bassariscus sumichrasti variabilis (Peters, 1874). Felten (1958c:222), Burt and Stirton (1961:45, as *Jentinkia sumichrasti variabilis*).

Procyon lotor crassidens Hollister, 1914. Felten (1958c:222), Goldman (1950:70), Burt and Stirton (1961:43).

Procyon lotor dickeyi Nelson and Goldman, 1931. Nelson and Goldman (1931:20), Goldman (1950:69), Burt and Stirton (1961:43), Csuti (1980:59).

Nasua nasua narica (Linnaeus, 1766). Felten (1958c:222, as *N. narica narica*), Burt and Stirton (1961:44, as *N. narica narica*).

Potos flavus chiriquensis J. A. Allen, 1904. Felten (1958c:223, as *P. f. campechensis*), Burt and Stirton (1961:44), Kortlucke (1973:34).

Family Mustelidae

Mustela frenata goldmani (Merriam, 1896). Hall (1951:360), Felten (1958c:224), Burt and Stirton (1961:46).

Eira barbara inserta (J. A. Allen, 1908). Burt and Stirton (1961:46).

- Spilogale putorius elata* Howell, 1906. Van Gelder (1959:325), Burt and Stirton (1961:46).
- Spilogale putorius tropicalis* Howell, 1902. Van Gelder (1959: 319), Burt and Stirton (1961:46).
- Mephitis macroura macroura* Lichtenstein, 1832. Felten (1958c:225), Burt and Stirton (1961:47).
- Conepatus mesoleucus nicaraguae* J. A. Allen, 1910. Burt and Stirton (1961:47, as *C. leuconotus nicaraguae*).
- Lutra longicaudis annectens* Major, 1897. Burt and Stirton (1961:48, as *L. annectens*).

Family Felidae

- Felis concolor mayensis* Nelson and Goldman, 1929. Burt and Stirton (1961:49).
- Felis onca centralis* Mearns, 1901. Nelson and Goldman (1933: 235).
- Felis pardalis pardalis* Linnaeus, 1758. Burt and Stirton (1961: 49).
- Felis wiedii salvinia* (Pocock, 1941). Felten (1958c:226), Burt and Stirton (1961:49).
- Felis yagouaroundi fossata* Mearns, 1901. Burt and Stirton (1961: 50).

Order PERISSODACTYLA

Family Tapiridae

- Tapiris bairdii* (Gill, 1865). Hershkovitz (1954:496).

Order ARTIODACTYLA

Family Tayassuidae

- Dicotyles tajacu nigrescens* (Goldman, 1926). Felten (1958c:226, as *Pecari tajacu nigrescens*), Burt and Stirton (1961:66, as *Tayassu tajacu nigrescens*). We follow Woodburne (1968) and more recently Wright (1989) in employing the generic name *Dicotyles*.

Family Cervidae

- Odocoileus virginianus nelsoni* Merriam, 1898. Felten (1958c:227), Hershkovitz (1958:543), Burt and Stirton (1961:66), Mendéz (1984:521).

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