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The Type Specimens of Brazilian Mammals Collected by Prince Maximilian zu Wied

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INTRODUCTION

After the discovery, in the seventeenth century, of precious metals in several parts of Brazil, the colony was closed to non-Portuguese travelers and traders. This action, which prevented European naturalists from exploring the fauna and flora for almost two centuries, was changed only in 1808, following the establishment of the Portuguese court in Rio de Janeiro.

Among the first foreign naturalists who were permitted to visit Brazil was Prince Maximilian zu Wied who explored the coastal region from Rio de Janeiro to Salvador, Bahia, and made short trips into the thorny and dry *caatingas* of Bahia and Minas Gerais in the years 1815-1817.

His accurate observations are still the only source of information on the habits and distribution of a number of species of the mammals. The detailed descriptions of the regions in which he traveled and the precise records of the geographical distribution of mammals are remarkable for the time; very few professional zoologists then realized the relationship that exists between zoology and geography.

The specimens that Wied collected were sent to several European museums and later described by Schinz (Berlin), E. Geoffroy (Paris),

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Kuhl (Frankfurt), and Temminck (Leiden), and by Wied himself (Neuwied). Thirty-two new taxa, including nine genera, have been based on them. However, the elasticity of nomenclatorial rules, particularly of those concerning priority, has caused some confusion about the authorship of several names of new species secured by him.

After Wied's death, his collection of specimens from many parts of the world was sold. In 1869 the newly founded American Museum of Natural History sent D. G. Elliot to Europe to select specimens offered on the market as a nucleus for its collections. Among those acquired were Vedray's, Verreaux', and Wied's. In September, 1869, W. T. Blodgett, a member of the Board of Trustees of the American Museum, who was in Hannover, was asked to represent the Museum in the transactions. The arrangements took place in Paris, with Baron Bibra representing the Museum of Neuwied. The price of Wied's collection was £1250 sterling (\$7,500 in United States currency in 1869). It included 600 mammals and was shipped from Bremen, the last cases arriving in New York in 1870.

Of this collection, Blodgett wrote: "It is regarded as one of the most important private collections in Europe, and has long been consulted by the scientific world, and contains a large number of *types*, the results of the Prince's explorations in South America, and many rare specimens which have been secured at intervals during the period of a long lifetime" (Blodgett, 1870, p. 22). He further stated: "A full and complete Catalogue of the Collection was furnished, and deposited with Mr. Elliot, and when copied he will forward the original" (*loc. cit.*). In the library of the American Museum is a manuscript catalogue of the bird collection, dated 1865, and in the Department of Herpetology there is a catalogue of reptiles, dated 1860, but I am unable to find any list of mammals.

In 1870 there were no study collections in museums, and all the specimens secured were put on display or in storage, as was reported by J. A. Allen (1916, p. 33): "On May 1, 1885, I entered upon my duties as curator of the 'Department of Ornithology and Mammalogy' at the American Museum of Natural History in New York. The collection of mammals then consisted of about 1000 mounted skins and 300 mounted skeletons, all on exhibition in the exhibition halls. There was not even a nucleus of a study collection... The exhibition collections were rich and varied, the specimens having been selected with excellent discrimination, mainly by the late Dr. D. G. Elliot, and included the famous Maximilian collection of mammals and birds."

In 1885, J. A. Allen began the American Museum catalogue in which several references and captions from "Wied's Catalogue" are included. As the collections of the American Museum grew and the old specimens faded, some of the material was evidently discarded, because fewer than 600 entries from the Maximilian Collection appear in the catalogue of the Department of Mammalogy. There are entries for only 38 skins and 16 skulls of South American mammals, plus references to four additional skins donated to schools or destroyed.

In the present paper I list all the genera and species with names based on specimens collected by Wied in Brazil arranged alphabetically under each mammalian order, and the objective synonym and present status of the name. Many of the species are still considered valid, and some have been synonymized, but few zoologists have actually examined the syntypes.

To determine the exact type localities, I used mainly the information provided by Wied in his travel accounts (1820a, 1820b, 1820c, 1820d, 1821) and in the original descriptions of the species (summarized in 1826).

The abbreviations that are used in this paper refer to the collections of the following institutions:

A.M.N.H., the American Museum of Natural History D.Z., Departamento de Zoologia, Secretaria de Agricultura, São Paulo M.N.H.N., Museum National d'Histoire Naturelle, Paris R.N.H., Rijksmuseum van Natuurlijke Historie, Leiden

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ORDER MARSUPIALIA

Didelphis aurita Wied, 1826

Didelphis aurita WIED, 1826, p. 387. Didelphis marsupialis aurita: COPE, 1889, p. 129.

TYPE: A.M.N.H. No. 836, adult male, mounted skin with skull, here selected as lectotype. It is catalogued with the remark: "No label. Doubtless *D. aurita* of the Max[imilian] Cat[alogue] p. 32 & one of the types of *D. aurita* Max.!" The specimen is in fairly good condition, but the ears and left hind foot are broken. It bears a small label with the number 836 and one exhibit label which reads: "Am. Mus. 836. Maximilian coll. Azara's opossum. *Didelphis azarae* Temm. Brazil."

TYPE LOCALITY: Villa Viçosa [=Marobá], Rio Peruipe, State of Bahia, Brazil (Wied, 1826, p. 400).

Didelphis cinereus Temminck, 1824

Didelphis cinereus TEMMINCK, 1827 [1824, 1837, vol. 1], p. 46. Marmosa cinerea: TROUESSART, 1905, p. 855. Marmosa cinerea cinerea: CABRERA, 1919, p. 36.

TYPE: A.M.N.H. No. 845, adult male, skin, colors faded, formerly mounted. Weid's original label is attached. It reads on one side "No. 33 Mas Jupati," and in different handwriting on the reverse, "Didelphys nudicaudatus." The specimen also bears the regular A.M.N.H. No. 845 label and a red type label. The catalogue records the following remark: "Didelphis nudicaudatus. No. 33 Mas Jupati-Max. label 'D. myosurus' Max. Cat. p. 32." This lectotype was selected by J. A. Allen (1900, p. 190), who wrote: ". . . what may be fairly considered as the type of Didelphis cinerea Temminck-the mounted specimen sent to Temminck by Wied (cf. Wied, Beitrage zur Naturg. von Bras., II, 1826, p. 409, footnote) for description-it is now in this Museum [the American Museum of Natural History], it having been received as a part of the Maximilian Collection, purchased in 1870. . . . It is without doubt the type of Wied's [1826] description of the species, . . . and certainly a cotype of Temminck's original description; ... he must, however, have described the female from another specimen, from Bahia, loaned him, as he states, by the Vienna Museum." Temminck used Natterer's specimens in addition to Wied's, in his description of this species. The female referred to by Allen could well be the specimen R.N.H. "a" listed by Jentink (1888 [1888, 1892, vol. 12], p. 221) as being "un des types du Musée de Vienne. Bresil, Des collections du Prince von Wied."

TYPE LOCALITY: Morro d'Arara, some 30 kilometers west of the mouth of the Rio Mucuri, State of Bahia, Brazil (Wied, 1826, p. 410).

ORDER CHIROPTERA

Desmodus rufus Wied, 1826

Phyllostoma rotundum E. GEOFFROY-ST. HILAIRE, 1810, p. 181. Type locality, Asunción, Paraguay, as restricted by Cabrera (1958 [1958, 1961, no. 1], p. 93). Desmodus rufus WIED, 1826, p. 233.

[Desmodus rotundus] rotundus: Osgood, 1943, p. 61.

TYPE: I am unable to find any original specimen. Type not selected. TYPE LOCALITY: "Fazenda Muribeca," Rio Itabapoana, on the boundary between the States of Espírito Santo and Rio de Janeiro, Brazil (Wied, 1826, p. 238).

REMARKS: Desmodus rufus Wied is the type species of Desmodus Wied, 1826, by original designation.

Diclidurus albus Wied, 1819

Diclidurus albus WIED, 1819, p. 1630.

Diclidurus freyreissii WIED, 1822 [1822, 1823, 1824, fasc. 1], unnumbered page.

TYPE: I am unable to find any original specimen. Type not selected.

TYPE LOCALITY: Canavieiras, Rio Pardo, State of Bahia, Brazil (Wied, 1821, p. 76).

REMARKS: Wied used the specific name *albus* in the text of the original description (1819), and *freyreissii*, in the description opposite the corresponding plate in the pictorial Atlas (fasc. 1, *loc. cit.*), where the species was figured. In the "Reise" (1821, p. 76) Wied wrote of this species: "Mr. Freyreiss, who had remained in this region [Canavieiras] found, by chance, in the palm trees, one species of bat remarkable and still unknown, which could be considered a new genus. Instead of a tail it has two horny appendices horizontally arranged; the dorsal is larger and is five lines wide, and covers the tail bone, which ends in this appendix; the ventral one is formed by a fold in the interfemoral membrane. The hair of this animal is long and white; it hides during the day among the enormous palm leaves where we find the bright greenish-gray 'tangaras' [*sic*], along the whole coastal region" (English translation mine; for the Portuguese version, see Wied, 1940, p. 318).

Diclidurus albus Wied is the type species of Diclidurus Wied, 1819, by original designation.

Molossus perotis Wied in Schinz, 1821

Molossus perotis WIED in Schinz, 1821 [1821, 1823, vol. 1], p. 870. Dysopes perotis: WIED, 1831, unnumbered plate and text page. Eumops perotis: MILLER, 1906, p. 85 Eumops perotis perotis: SANBORN, 1932, p. 349.

TYPE: A.M.N.H. No. 435, adult, skin and fragmentary skull removed from originally mounted specimen; this specimen was selected as the lectotype by Goodwin (1953, p. 259).

TYPE LOCALITY: "Villa de São Salvador dos Campos dos Goytacazes" on the Rio Paraiba (Wied, 1826, p. 231), which is the present city of Campos, State of Rio de Janeiro, Brazil.

Phyllostoma brachyotum Wied in Schinz, 1821

Vespertilio perspicillatus LINNAEUS, 1758, p. 31. Type locality: "America," restricted to Surinam by Thomas (1911, p. 130).

Phyllostoma brachyotum WIED in Schinz, 1821 [1821, 1823, vol. 1], p. 164. Carollia perspicillata perspicillata: MILLER, 1924, p. 53.

TYPE: I am unable to find any original specimen. Type not selected. TYPE LOCALITY: Morro d'Arara, Rio Mucuri, State of Bahia, Brazil (Wied, 1826, p. 199).

Phyllostoma brevicaudum Wied in Schinz, 1821

Vespertilio perspicillatus LINNAEUS, 1758, p. 31. Type locality: "America," restricted to Surinam by Thomas (1911, p. 130).

Phyllostoma bernicaudum [sic] WIED in Schinz, 1821 [1821, 1823, vol. 1], p. 164. Phyllostoma brevicaudum WIED, 1826, p. 192.

Carollia brevicauda: JENTINK, 1888 [1888, 1892, vol. 12], p. 206.

Carollia perspicillata perspicillata: MILLER, 1924, p. 53.

TYPE: One specimen, A.M.N.H. No. 1333, is catalogued as "type," but has not been found. Another, R.N.H. No. 17692 (original "k," Jentink, *loc. cit.*) was also collected by Wied and seems to be the only syntype in existence.

TYPE LOCALITY: Fazenda do Coroaba, Rio Jucu, State of Espírito Santo, Brazil (Wied, 1826, p. 195).

Phyllostoma macrophyllum Wied in Schinz, 1821

Phyllostoma macrophyllum WIED in Schinz, 1821 [1821, 1823, vol. 1], p. 163. Macrophyllum nieuwiedii GRAY, 1838, p. 489; objective synonym. Dolichophyllum macrophyllum: TROUESSART, 1905, p. 110. Macrophyllum macrophyllum: NELSON, 1912, p. 93.

TYPE: I am unable to find any original specimen. Type not selected.

TYPE LOCALITY: Forests along the Rio Mucuri, State of Bahia, Brazil (Wied, 1826, p. 192).

REMARKS: Macrophyllum nieuwiedii Gray is the type species of Macrophyllum Gray, 1838, by original designation.

Phyllostoma obscurum Wied in Schinz, 1821

Phyllostoma planirostre SPIX, 1823, p. 66, pl. 36, fig. 1. Type locality, outskirts of Salvador, State of Bahia, Brazil.

Phyllostoma obscurum WIED in Schinz, 1821 [1821, 1823, vol. 1], p. 164. Artibeus planirostris: DOBSON, 1878, p. 515, pl. 30, fig. 1. Artibeus jamaicensis planirostris: HERSHKOVITZ, 1949, p. 447.

TYPE: I am unable to find any original specimen. Type not selected. TYPE LOCALITY: "Villa Vicosa" [= Marobá], Rio Peruipe, State of Bahia, Brazil (Wied, 1826, p. 206).

Phyllostoma superciliatum Wied in Schinz, 1821

Phyllostomus lituratus ILLIGER, 1815, p. 109; nomen nudum.

Phyllostomus lituratus: OLFERS, 1818, p. 224. Type locality: Asunción, Paraguay, restricted by Cabrera (1958 [1958, 1961, no. 1], p. 90).

Phyllostoma superciliatum WIED in Schinz, 1821 (1821, 1823, vol. 1], p. 165. Artibeus lituratus lituratus: HERSHKOVITZ, 1949, p. 447.

TYPE: I am unable to find any original specimen. Type not selected. TYPE LOCALITY: Fazenda Tapebuçu, between the rivers Macaé and São João, State of Rio de Janeiro, Brazil (Wied, 1826, p. 201).

Vespertilio calcaratus Wied in Schinz, 1821

Vespertilio calcaratus WIED in Schinz, 1821 [1821, 1823, vol. 1], p. 180; nec Rafinesque, 1818, p. 446.

Vesperilio maximiliani FISCHER, 1829, p. 112; substitute name.

Proboscidea (Centronycteris) calcarata: GRAY, 1838, p. 499.

Centronycteris maximiliani: MILLER, 1907, p. 91.

Centronycteris maximiliana maximiliani: SANBORN, 1937, p. 336.

TYPE: I am unable to find any original specimen. Type not selected. TYPE LOCALITY: Fazenda do Coroaba, Rio Jucu, State of Espírito Santo, Brazil (Wied, 1826, p. 271).

REMARKS: Vespertilio calcaratus is the type species of Centronycteris Gray, 1838, by monotypy.

Vespertilio caninus Wied in Schinz, 1821

Vespertilio caninus WIED in Schinz, 1821 [1821, 1823, vol. 1], p. 179; nec Blumenbach, 1797.

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Emballonura macrotis WAGNER, 1843, p. 367. Type locality: "Matto Grosso." Peropteryx canina: PETERS, 1867, p. 472. Peropteryx macrotis macrotis: SANBORN, 1937, p. 339.

TYPE: I am unable to find any original specimen. Type not selected. TYPE LOCALITY: Wied (1826, p. 266) indicated that the specimens were collected on November 20. On that day, 1815, he was in the vicinity of São João da Barra, State of Rio de Janeiro, and nothing is said, in the "Reise," about bats on that date. But in 1816, he was on the Rio Grande de Belmonte (Bahia), and he wrote (1820b, pp. 285-286): "When we returned from our hunting excursion in the dusk of the evening, we saw a number of large bats hovering over the surface of the water. We loaded our pieces with small shot, and were so fortunate as to kill some of them. On a close examination it appeared that they were of the species *noctilio*; their colour was a uniform rusty red; whereas others have a yellowishwhite stripe down the back. I no where found this handsome bat more common than in this place. . . . On the 21st we left Timicuí." I propose, then, to restrict the type locality to Timicuí, on the Rio Belmonte, above Bôca d'Obu, State of Bahia, Brazil.

REMARKS: Vespertilio caninus Weid is the type species of Peropteryx Peters, 1867, by original designation.

Vespertilio leucogaster Wied in Schinz, 1821

Vespertilio albescens E. GEOFFROY-ST. HILAIRE, 1806, p. 204. Type locality: Estancia de San Solano, Estero del Iberá, Paraguay.

Vespertilio leucogaster WIED in Schinz, 1821 [1821, 1823, vol. 1], p. 180. Myotis albescens: THOMAS, 1900, p. 546.

TYPE: A.M.N.H. No. 385, adult, skin in good condition, with skull; catalogued as "Vespertilio leucogaster Wied. Maximilian label. Type." This specimen is here selected as the lectotype. One syntype in Leiden (see Jentink, 1888 [1888, 1892, vol. 12], p. 192) was collected in the forest of Rio Mucuri.

TYPE LOCALITY: Forests along the Rio Mucuri, State of Bahia, Brazil (Wied, 1826, p. 274).

Vespertilio nigricans Wied in Schinz, 1821

Vespertilio nigricans WIED in Schinz, 1821 [1821, 1823, vol. 1], p. 179. Myotis nigricans: MILLER, 1897, p. 74. Myotis nigricans nigricans: MILLER, 1924, p. 72, part.

TYPE: I am unable to find any original specimen. Type not selected. TYPE LOCALITY: "Fazenda do Agá" between the rivers Itapemirin and Iconha, State of Espírito Santo, Brazil (Wied, 1826, p. 268).

Vespertilio naso Wied, 1820

Vespertilio naso WIED, 1820a, p. 251, footnote. Rhynchonycteris naso: PETERS, 1867, p. 477.

TYPE: A.M.N.H. No. 386, adult, skin with skull, left leg and patagium missing, here selected as lectotype; catalogued as "*Emballonura sexatilis* Spix. Brasilia. Maximilian label."

TYPE LOCALITY: Vicinity of Morro d'Arara, Rio Mucuri, State of Bahia, Brazil. Wied (1820b, p. 217) wrote: "The banks of the Mucuri every where bordered with thick woods, present, from the frequent windings of the river, which on the whole is narrow, a great diversity of picturesque forest scenery. . . . We here saw, on old trunks bending over the water, and on rocks, great numbers of gray bats, which sit there in the cool during the day; they are distinguished by their projecting nose." On the same page, in a footnote, follows the rather short original description. (Original text in Wied, 1820a, p. 251; for the Portuguese version, see Wied, 1940, p. 184.)

REMARKS: Vespertilio naso Wied is the type species of Rhynchonycteris Peters, 1867, by monotypy.

ORDER PRIMATES

Ateles hypoxanthus Kuhl, 1820

Ateles arachnoides E. GEOFFROY-ST. HILAIRE, 1806, p. 271. Type locality: "Le Brésil, restricted to Rio de Janeiro by Vieira (1944, p. 15).

Ateles hypoxanthus KUHL, 1820, p. 25.

Brachyteles arachnoides: GRAY, 1843, p. 10.

TYPE: R.N.H. No. 17688, adult male, mounted skin with skull, from "Bahia," here selected as lectotype. It is the specimen listed by Schlegel (1876, p. 185) and Jentink (1892 [1888, 1892, vol. 11], p. 44) as one of Wied's "types." Kuhl (1820) listed syntypes in Berlin, Leiden, Neuwied, and Paris. One skull listed in the catalogue of the American Museum (A.M.N.H. No. 128) was not found. One specimen in the Museum National d'Histoire Naturelle, the "type" of E. Geoffroy-St. Hilaire's (1806) description, according to I. Geoffroy-St. Hilaire (1851), according to Rode (1938) came "du voyage de M. Geoffroy de Saint-Hilaire en Portugal, 1808."

TYPE LOCALITY: "Bahia," as it appears on the label on the type specimen; here restricted to "As Barreiras," a beach on the Rio Belmonte or Jequitinhonha, State of Bahia, Brazil. Wied (1820b, p. 77) gave a short description, adding the following remarks: "We long sought, but in vain for these animals; in the sequel we were, however, more successful, and I found it to be a species of the genus *ateles* [*sic*]." On a later page (p. 267) he wrote: "In the evening we landed in a *coroa*, in the part called *As Barreiras*, which is an extremely good place for hunting, and almost the only spot on the lower part of the Belmonte where the large yellowish grey monkey, called here by the name of *miriqui* (*ateles*) is met with." (Original text in Wied, 1820a, p. 92; for the Portuguese version, see Wied, 1940, p. 79.)

Callithrix melanochir Kuhl, 1820

Callithrix melanochir KUHL, 1820, p. 40. Callicebus melanochir: ELLIOT, 1913, p. 244.

TYPE: Syntypes in Berlin, Leiden, Neuwied, and Paris were listed by Kuhl (1820). Both I. Geoffroy-St. Hilaire (1851) and Rode (1938) listed the type (adult male) as being in the collection of the Museum National d'Histoire Naturelle, which is probably the same specimen described as the type by Elliot (1913). Apparently this specimen has since been lost, according to J. Dorst (*in litt.*). In the collection of the Rijksmuseum van Natuurlijke Historie are two other specimens collected by Wied: one is R.N.H. No. 17690 (mounted skin with skull), listed by Schlegel (1876, p. 233) and Jentink (1892 [1888, 1892, vol. 11], p. 51) as specimen "c" and marked "type," which was collected at "Rio Belmonte"; the other is marked "a," skin and skull, and has the back of the skull damaged.

TYPE LOCALITY: The type locality is here restricted to the lower Rio Belmonte or Jequitinhonha, State of Bahia, Brazil, where the Leiden specimen was collected. It is to be noted that Wied also collected 10 specimens at Morro d'Arara, Rio Mucuri. (See Wied, 1820b, p. 224; 1823 [1822, 1823, 1824], unnumbered page and plate; 1940, p. 190.)

Cebus robustus Kuhl, 1820

Cebus robustus KUHL, 1820, p. 35.

Cebus apella robustus: CABRERA, 1959 [1958, 1961, no. 1], p. 167.

TYPE: Kuhl, in the original description, listed syntypes in Paris and Neuwied. I. Geoffroy-St. Hilaire (1851) listed the type as in the Museum National d'Histoire Naturelle, but Rode (1938) did not mention it. Elliot (1913, p. 68) stated that he had not been able to find any type of *Cebus* from the Maximilian Collection in the American Museum.

TYPE LOCALITY: "In Brasilia vulgaris, ubi tamen versus meridien fluvium Rio Doce non transit" (Kuhl, 1820, p. 35); cited as "Morro d'Arara, Rio Mucuri," State of Bahia, Brazil, by Vieira (1955). Wied (1826, p. 89) gave the range of the species, and in the "Reise" (1820b, p. 227) there is a reference to "14 *Micos*, a non descript species," collected in the region near Morro d'Arara. Cabrera (1958 [1958, 1961, no. 1], p. 167) stated that no type locality had been originally given and proposed to designate the left bank of the Rio Doce as such, which cannot be accepted, as Vieira's restriction has precedence.

Cebus xanthosternos Kuhl, 1820

Cebus xanthosternos KUHL, 1820, p. 51.

Cebus apella xanthosthernos: CABRERA, 1958 [1958, 1961, no. 1], p. 168.

TYPE: R.N.H. No. 17689, adult, mounted skin and skull, collected at "Rio Belmonte," State of Bahia, Brazil, here selected as lectotype. It is listed by both Schlegel (1876, p. 208) and Jentink (1892 [1888, 1892, vol. 11], p. 47).

TYPE LOCALITY: Bôca d'Obu, Rio Belmonte, State of Bahia, Brazil. Wied (1820b, p. 327) wrote: "Near one of those sandbanks, not far from Bôca d'Obu, we met with a great many monkeys (*macacos* or *micos*), among which there is a particular kind, with a yellow breast, here called *macaco di bando*." In a footnote Wied gave a short description of the species. (Original text in Wied, 1820a, p. 371; for the Portuguese version, see Wied, 1940, p. 263.)

REMARKS: There is much confusion in the literature regarding the subspecies of *Cebus*. In particular, Cabrera (1958 [1958, 1961, no. 1], p. 168) synonymized both *Cebus cucullatus* Spix, 1823, and *Cebus xanthocephalus* Spix, 1823 (p. 6) with "*xanthosternos* Wied" but did not include the distribution records of Spix's specimens (Rio de Janeiro and São Paulo) in his statement of the range of *xanthosternos*. According to him the "habitat" of *xanthosternos* is "en el este del estado do Baia." Hill (1960 [1957, 1960, vol. 4], pp. 481, 483, map 9) synonymized *xanthosternos* with *xanthocephalus* but failed to include the distribution records of the latter in the range of *xanthosternos* on the map. He also considered *robustus* and *cucullatus* to be identical but made no reference either in the text or on the map to the collecting localities of the latter.

Midas chrysomelas Kuhl, 1820

Midas chrysomelas KUHL, 1820, p. 51. Leontideus chrysomelas: CABRERA, 1956, p. 49.

TYPE: Kuhl (1820) listed syntypes in Berlin, Leiden, and Neuwied. According to I. Geoffroy-St. Hilaire (1851) the type was a male specimen in the collection of the Museum National d'Histoire Naturelle. It was not listed by Rode (1938) or seen by Hill (1957 [1957, 1960, vol. 3], p. 270). Elliot (1913, p. 212) described one specimen in the American Museum of Natural History as apparently the type, as follows: "The above description is taken from the male example in Prince Max's [*sic*] Collection purchased by the New York Museum and presumably the type, as it is not supposed that the type of Kuhl's description would be permitted to leave the collection. It is in good preservation but the delicate yellow has faded considerably." Elliot did not give a catalogue number, and I am unable to find such a specimen. One syntype still exists (R.N.H. No. 17961), a mounted skin with skull, collected in Ilheus, Bahia, by Wied. It was listed by Schlegel (1876, p. 254) and Jentink (1892 [1888, 1892, vol. 11], p. 55).

TYPE LOCALITY: Ribeirao das Minhocas, a small tributary of the upper Rio Ilheus, State of Bahia, Brazil (Wied, 1821, p. 137). Cabrera (1958 [1958, 1961]) gave Elliot credit for the restriction of the type locality, but Elliot only translated Kuhl's (1820, p. 51) words: "In Brasilia rarus inter 14 et 15 gradum in sylvis magnis ad rio dos Ilheos." Wied (1821, p. 137) wrote: "We also killed in the same place [banks of the Ribeirao das Minhocas] the 'saui' ('black sauim') I have mentioned before. I was very happy to be able to secure this beautiful animal which is a new species, and has a very distinctive coloration" (English translation mine). He also gave some information about habits and distribution and, in a footnote, a short description. (For the Portuguese version, see Wied, 1940, p. 356.)

ORDER EDENTATA

Dasypus longicaudus Wied, 1826

Dasypus novemcinctus LINNAEUS, 1758, p. 51. Type locality: "America," restricted to Pernambuco by Cabrera (1958 [1958, 1961, no. 1], p. 225).

Dasypus longicaudus WIED, 1826, p. 531.

Dasypus novemcinctus novemcinctus: BAILEY, 1905, p. 53.

TYPE: I am unable to find any original specimen. Type not selected. TYPE LOCALITY: Morro d'Arara, Rio Mucuri, State of Bahia, Brazil, here restricted. "In the forests at the Mucuri we got in this manner in three weeks thirty armadillos of this species, which all were used as food for the crew" (Wied, 1826, p. 534; English translation mine. See also Wied, 1820b, p. 223).

Dasypus setosus Wied, 1826

Dasypus setosus WIED, 1826, p. 520. Euphractos sexcinctus setosus: CABRERA, 1917, p. 58. TYPE: I am unable to find any original specimen. Type not selected. TYPE LOCALITY: "Sertão da Bahia," Brazil. "We found this species in the large Campos Geraes and the bordering areas of the Sertong; it lives also in Minas Geraes and if it is, as I believe for sure, Azara's second Tatu, it lives also in Paraguay, and therefore it seems to be spread over the width of S. Amer." (Wied, 1826, p. 528; English translation mine).

ORDER CARNIVORA

Canis azarae Wied, 1824

Canis azarae WIED, 1824 [1822, 1823, 1824, fasc. 6], unnumbered page.

Canis brasiliensis WIED, 1824 [1822, 1823, 1824, fasc. 6], unnumbered plate; nec Schinz, 1821 (1821, 1823).

Cerdocyon guaraxa HAMILTON-SMITH, 1829, p. 962, pl. 28. Name based on a plate of a specimen collected in Pernambuco by G. Marcgrav.

Cerdocyon thous azarae: CABRERA, 1931, p. 60.

TYPE: R.N.H. No. 17694, adult male, originally "c," here selected as lectotype.

Type Locality: "Bresil" on the label. Here restricted to Sertão da Bahia, Brazil (see description in Wied, 1826, p. 343).

REMARKS: Canis azarae Wied is the type species of the genus Cerdocyon Hamilton-Smith by subsequent designation (Thomas, 1914).

Canis campestris Wied, 1826

Canis brachyurus ILLIGER, 1815, p. 109. Type locality: "Esteros del Paraguay." Canis campestris WIED, 1826, p. 334; nec Bechstein, 1797. Chrysocyon brachyurus: Osgood, 1919, p. 35.

TYPE: R.N.H. No. 17693, originally "a," adult male, skin and skull damaged on the back, here selected as lectotype.

TYPE LOCALITY: "Bresil," on the label of the lectotype.

Felis macroura Wied, 1822

Felis wiedii SCHINZ, 1821 [1821, 1823, vol. 1], p. 235.

Felis macroura WIED, 1822 [1822, 1823, 1824, fasc. 1], unnumbered page and unnumbered plate.

Felis wiedii wiedii: CABRERA, 1958 [1958, 1961, no. 1], p. 289.

TYPE: R.N.H. No. 17696, originally "b," adult female, skin only, here selected as lectotype.

Type Locality: Morro d'Arara, Rio Mucuri, State of Bahia, Brazil (Wied, 1820b, p. 288; 1826, p. 378).

Felis wiedii Schinz, 1821

Felis wiedii SCHINZ, 1821 [1821, 1823, vol. 1], p. 235.

Felis macroura WIED, 1822 [1822, 1823, 1824, fasc. 1], unnumbered page and plate.

Felis wiedii wiedii: CABRERA, 1958 [1958, 1961, no. 1], p. 289.

TYPE: R.N.H. No. 17695, skin only, originally "c," here selected as lectotype.

TYPE LOCALITY: Morro d'Arara, Rio Mucuri, State of Bahia, Brazil (Wied, 1826, p. 378).

Nasua nocturna Wied, 1826

Nasua nocturna WIED, 1826, p. 298. Potos flavus nocturnus: VIEIRA, 1952, p. 35.

TYPE: D.Z. No. 7381, adult female, neotype selected by Vieira (1952).

TYPE LOCALITY: None originally given. Vieira (1952, p. 35) designated São Miguel dos Campos, Alagoas, Brazil, though in 1955 (p. 368) he gave "sul da Bahia."

Nasua socialis Wied, 1826

Nasua solitaria SCHINZ, 1823 [1821, 1823, vol. 3], p. 199. Nasua socialis WIED, 1826, p. 183. Nasua nasua solitaria: VIEIRA, 1945, p. 410.

TYPE: R.N.H. No. 17697, skin only, originally "c" (Jentink, 1892 [1888, 1892, vol. 11], p. 130), here selected as lectotype.

TYPE LOCALITY: Here restricted to Morro d'Arara, Rio Mucuri, State of Bahia, Brazil, on the basis of 10 specimens collected by Wied in this locality (Wied, 1820b, p. 227).

Nasua solitaria Schinz, 1823

Nasua solitaria SCHINZ, 1823 [1821, 1823, vol. 3], p. 199. Nasua nasua solitaria: VIEIRA, 1945, p. 410.

TYPE: R.N.H. No. 17697, skin only, originally "c" (Jentink, 1892 [1888, 1892, vol. 11], p. 130), here selected as lectotype.

TYPE LOCALITY: Here restricted to Morro d'Arara, Rio Mucuri, State of Bahia, Brazil, on the basis of 10 specimens collected by Wied in this locality.

ORDER RODENTIA

Hypudaeus dasytrichos Wied, 1826

Hypudaeus dasytrichos WIED, 1826, p. 425.

Oxymycterus rufus dasytrichus: CABRERA, 1958 [1958, 1961, no. 1], p. 468.

TYPE: A.M.N.H. No. 559, mounted skin with skull, here selected as lectotype.

TYPE LOCALITY: [Lower] Rio Mucuri, State of Bahia, Brazil; restricted by Cabrera (1958 [1958, 1961, no. 1], p. 468) on the basis of the first specimen mentioned by Wied.

Mus pyrrhorhinos Wied, 1821

Mus pyrrhorhinos WIED, 1821, p. 177, footnote. Wiedomys pyrrhorhinos: HERSHKOVITZ, 1959, p. 5.

TYPE: A.M.N.H. No. 574, mounted skin, faded, tail missing; catalogued as "*Mus pyrthorhinus* Brasilia." The specimen bears a type label, in Allen's handwriting, according to Goodwin (1953, p. 300).

TYPE LOCALITY: The locality was misspelled by Hershkovitz (1959) and Cabrera (1961 [1958, 1961, no. 2]). It is the *caatingas* along the Riacho da Ressaca, between the farms Tamboril and Ilha, State of Bahia, Brazil, near the Minas Gerais boundary (see Wied, 1821, p. 177; 1940, p. 386).

REMARKS: Mus pyrrhorhinos Wied is the type species of the genus Wiedomys Hershkovitz, 1959, by original designation.

Cavia rupestris Wied, 1820

Cavia rupestris WIED, 1820d, p. 43; 1823 [1822, 1823, 1824, fasc. 4], text to plate. Kerodon rupestris: F. CUVIER, 1925, p. 151. Kerodon rupestris: LUND, 1841, p. 285.

TYPE: One syntype still exists in the collection of the Rijksmuseum van Natuurlijke Historie (specimen "b," young adult, listed by Jentink, 1888 [1888, 1892, vol. 12], p. 170).

TYPE LOCALITY: Rio Grande de Belmonte, State of Bahia, Brazil, restricted by Cabrera (1958 [1958, 1961, no. 1], p. 580). Wied (1826, p. 472) gave the geographical distribution of the species, and it is to be noted that it inhabits only the dry *caatingas* of the hinterland.

REMARKS: Cavia rupestris Wied is the type species of Kerodon F. Cuvier, 1825, by monotypy.

GAZETTEER OF TYPE LOCALITIES

A paper on the itinerary of Wied's travels in Brazil has recently been published by Bokermann (1957), and most of the localities cited in the

1965

"Reise" are plotted on a set of maps. Therefore I indicate here only the approximate geographical coordinates of the type localities of mammals, the species described from each, and short descriptive references quoted from Wied. It is of importance to remember that Wied collected in two widely different ecological environments: the coastal mountain rain forest and the dry inland *caatinga* of Minas Gerais and Bahia.

AGÁ, FAZENDA DO: Latitude $20^{\circ} 21$. S., longitude $40^{\circ}-41^{\circ}$ W. A farm, not far from the coast, approximately 30 kilometers north of the Rio Itapemirim, between this river and the Iconha, in the State of Espírito Santo. "Not far from the *fazenda*, a lofty rounded insulated mountain, called Morro de Aga, rises from among the contiguous woods. It consists of rocks and steep naked precipices, and is surrounded by high hills. . . Near Aga we came to the *Povoacao* Piuma or Ipiuma" (Wied, 1820b, p. 148). Vespertilio nigricans.

D' ARARA, MORRO: Latitude $17^{\circ}-18^{\circ}$ S., longitude $39^{\circ}-40^{\circ}$ W. Approximately 30 kilometers above the mouth of the Rio Mucuri, State of Bahia. "The place chosen for the *fazenda* and saw-mill of the minister, Conde da Barca, lies about a day and a half's journey up the Mucuri, and is named Morro d'Arara from the number of maccaws (*araras*) found there" (Wied, 1820b, p. 216). "Towards noon we reached, on the north bank of the Mucuri, the entrance of a narrow, shady channel, about ten or twelve paces in breadth. . . . It is the entrance to a fine and pretty considerable lake called Lagoa d'Arara, which is encompassed all round by woody mountains. It is about a quarter of a league up the *lagoa* that the *ouvidor* had just begun to found the establishment of the minister at Morro d'Arara" (*op. cit.*, p. 218). "The length of the road from Mucuri hither is about seven or eight leagues" (*op. cit.*, p. 226). *Didelphis cinereus, Phyllostoma brachyotum, Vespertilio naso, Cebus robustus, Felis macroura, Felis wiedii, Nasua solitaria, Nasua socialis, Dasypus longicaudus.*

BARREIRAS, As: Latitude 16° S., longitude 39°-40° W. Beach on the Rio Belmonte or Jequitinhonha, State of Bahia. Ateles hypoxanthus.

BELMONTE, RIO GRANDE DE: Rio Jequitinhonha, in the State of Bahia. Wied traveled in its lower course, more or less along the parallel 16° of latitude S. and from 39° to 40° longitude W. Callithrix melanochir, forests of lower course; Kerodon rupestris, from the hinterland.

CANAVIEIRAS: Latitude 15°-16° S., longitude 38°-39° W. City on the mouth of the Rio Pardo, State of Bahia. *Diclidurus albus*.

COROABA, FAZENDA DO: Latitude $20^{\circ}-21^{\circ}$ S., longitude $40^{\circ}-41^{\circ}$ W. Old farm situated at approximately 6 kilometers north of the town of Araçatiba, State of Espírito Santo. "Araçatiba is the greatest fazenda that I met during this journey. ... About a league off, on a romantic spot upon the river Jucu, entirely surrounded with lofty primeval forests, there is a second fazenda, called Coroaba" (Wied, 1820b, p. 161). Phyllostoma brevicaudum, Vespertilio calcaratus.

MINHOCAS, RIBEIRÃO DAS: Latitude 15° - 16° S., longitude 40° - 41° W. A small tributary of the upper Rio Ilheus (left bank), in the State of Bahia. *Nidas chrysomelas*.

MUCURI, RIO: River on the boundary between the states of Espírito Santo and Bahia. Phyllostoma macrophyllum, Vespertilio leucogaster.

MURIBECA, FAZENDA: Latitude $21^{\circ}-22^{\circ}$ S., longitude $40^{\circ}-41^{\circ}$ W. A farm on the Rio Itabapoana, where the village of Batalha is today, on the boundary

between the states of Rio de Janeiro and Espírito Santo. "... Upon an eminence ... we had a most enchanting view over the magestic [sic] wilderness, on the banks of the Itabapuana, which ... traverses a verdaint [sic] plain, in the middle of which rises the great *fazenda* of *Muribeca*" (Wied, 1820b, p. 136). "About noon we reached the river Itapemirim, on the south bank of which lies the villa of the same name. It is seven leagues from Muribeca" (op. cit., p. 145).

D'OBU, BOCA: Latitude $15^{\circ}-16^{\circ}$ S., longitude $39^{\circ}-40^{\circ}$ W. A small tributary of the Rio Belmonte, in the State of Bahia. "In order to make myself acquainted with the beautiful and interesting wilderness on the river Belmonte, I resolved to pass some months in the *Sertoes*, and perhaps even to go up the river as far as Minas. On the 17th of August I left Belmonte" (Wied, 1820b, p. 279). ". . . Towards noon [?] we reached the mouth of the Obu, a small river which falls into the Belmonte. . . . The mouth of the little river is called Boca d'Obu, and before it lies an island named Ilha da Boca d'Obu" (*op. cit.*, p. 282). "As various matters obliged me to return to the Mucuri, I left the island of Cachoeirinha at the end of September and sailed down the river to Villa de Belmonte. . . . We passed two nights on the sand banks in the river. . . . Near one of these sand-banks, not far from the Boca d'Obu, we met with a great many monkeys. . . . On the 28th of September, I reached the Villa de Belmonte" (*op. cit.*, pp. 326-327). *Cebus xanthosternos*.

RESSACA, RIACHO DA: Latitude $15^{\circ}-16^{\circ}$ S., longitude $41^{\circ}-42^{\circ}$ W. A small tributary of Rio Gavião (right bank), upper Rio de Contas, State of Bahia, not far from the boundary of the State of Minas Gerais, and in the dry *caatinga* region. *Mus pyrrhorhinos*.

SÃO SALVADOR DOS CAMPOS DOS GOITACAZES, VILLA DE: This is the present city of Campos, in the State of Rio de Janeiro. Dysopes perotis.

TAPEBUÇÚ, FAZENDA: Latitude 22°-23° S., longitude 41°-42° W. An old farm situated between the towns of the Barra de São João and Macaé, near the coast, in the State of Rio de Janeiro. *Phyllostoma superciliatum*.

TIMICUI: Latitude 15°-16° S., longitude 39°-40° W. Beach on the Rio Belmonte, above Boca d'Obu, in the State of Bahia. Vespertilio caninus.

VIÇOSA, VILLA: Latitude 18° - 19° S., longitude 39° - 40° W. This is the present town of Marobá, on the mouth of the Rio Peruipe, State of Bahia. "It is five leagues from the Mucuri to the river Peruipe; before you reach the isthmus on the sea coast, the road leads to Villa Viçosa" (Wied, 1820b, pp. 204–233). Didelphis aurita, Phyllostoma obscurum.

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