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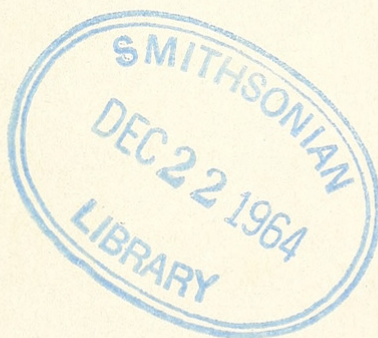
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MAMMALS COLLECTED BY THE LOS ANGELES COUNTY
MUSEUM EXPEDITION TO NORTHEASTERN
VENEZUELA, 1958

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By BERNARD B. BUTTERWORTH¹ AND ANDREW STARRETT²

ABSTRACT: Fifteen species belonging to six orders of mammals, collected in northeastern Venezuela by a Los Angeles County Museum expedition in 1958, are recorded along with pertinent measurements and reproductive information where available. *Phyllostomus elongatus* is reported from Venezuela for the first time.

INTRODUCTION

In the summer of 1958, the Los Angeles County Museum sent an expedition, consisting of Stephen C. Bromley, Arnold S. Menke, and the senior author, to northeastern Venezuela to make general collections of animals. A small number of mammals was collected, chiefly in two localities: (1) in the State of Monagas, on Highway 8, the main highway from Maturín to Barrancas, about 42 kilometers southeast of Maturín; and (2) in the Territorio Federal Delta Amacuro, approximately 140 kilometers northeast of Barrancas.

The camp at the first locality was situated between the Río Guanipa and the Río Tigre, in an area of grasslands interrupted by dense jungles of palms and philodendrons which followed the rivers and their tributary streams. Some tall grasses bordered cultivated areas. Much of the flat open grassland was under water due to the seasonal rains, and what was not actually submerged was marked with many large puddles of standing water. During the time the expedition was located in this area, from June 14 to July 15, it rained for at least a part of each day.

The second locality, which was accessible only by boat or helicopter, was on the Caño Mariusa, one of the many interconnected rivers (caños), 100 to 150 yards wide, which flow from the Río Orinoco and drain northeastward into the Atlantic Ocean. Deep, impenetrable jungle extended to the edges of the caños and prohibited entrance to the shores except in rare instances. The jungle was many-storied with large trees which had buttress and adventitious roots, and penetration was impossible because of the dense vegetation, swamps and mosquitoes. Tides occurred in the caños, along which great masses of water hyacinth flowed continuously toward the ocean. Collecting in this area was done mainly by motorboat. During the expedition's stay at Caño Mariusa, from July 17 to August 14, it rained frequently.

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Several species of aquatic mammals were seen, but not collected, in the Orinoco and in the vicinity of the second campsite. Manatees were observed in the Orinoco during the trip by boat from Barrancas to Caño Mariusa. Unidentified porpoises, possibly of more than one species, were seen on several occasions, both in the Orinoco and in the caños. One was shot but not recovered. On August 7, in the middle of the afternoon, the senior author watched three large otters playing in the water near the edge of one of the caños. They avoided capture, but the combination of the large size of these animals and their diurnal activity suggests that they may have been *Pteronura* (see Cabrera and Yepes, 1940:156-157).

In the accounts which follow, all measurements are in millimeters. Those listed, unless otherwise specified, are the standard external measurements: total length, tail length, hind foot length and height of ear from notch, in that order. The specimens listed are now in the collections of the Los Angeles County Museum.

ACCOUNTS OF SPECIES

MARSUPIALIA

Didelphis marsupialis marsupialis Linnaeus

Specimens—One adult female with pouch young. 42 kilometers southeast Maturín, July 12.

Measurements—864, 460, 59, 58

Although several individuals were seen around the Monagas locality, only one specimen was captured. It was caught, still alive, in a Schuyler Rat Killer baited with bananas and set at the edge of a dense forest at the base of a thick mass of vegetation. The marsupium of the animal contained twelve young, which averaged 77 millimeters, total length.

CHIROPTERA

Rhynchonycteris naso (Wied)

Specimens—Eleven (five in alcohol), nine adults and two juveniles. 140 kilometers northeast Barrancas, July 22 to August 3.

Measurements—Forearm (two adult males, four adult females): 35.3, 35.5, 34.2, 34.5, 35.3, 38.0.

These bats were shot, during the day, from the bark of trees which projected out over the water along Caño Mariusa and other streams. Four of the six adult females collected were gravid. One of these, which had been fluid-preserved, contained an embryo which measured 14.0 millimeters crown-rump length, and a second had a near-term female fetus (furred dorsally, but without fur on the venter) with a 15.0 millimeter forearm. Of the two non-gravid

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females, one had a young male, forearm 22.9 millimeters, clinging to its venter, and the other had a slightly enlarged uterus but showed no mammary development. The one fluid-preserved adult male had descended testes which measured 2.9 by 4.3 millimeters, and which, upon sectioning, showed mature spermatozoa in the seminiferous tubules. The young male, which was clinging to the adult female, had inguinal testes which measured 1.0 by 1.8 millimeters and showed early meiotic activity but had no mature spermatozoa in the seminiferous tubules.

***Saccopteryx bilineata* (Temminck)**

Specimens—One subadult male. 60 kilometers southeast Maturín, July 1.

Measurements—Forearm: 40.5. Cranial: condylobasal length, 15.8; zygomatic width, 10.0; postorbital constriction, 3.2; length of upper tooth row C-M³, 7.0. This bat was captured in flight with an insect net at dusk.

***Noctilio labialis minor* Osgood**

Specimens—Five: one, 42 kilometers southeast Maturín, June 18; four, 140 kilometers northeast Barrancas, August 4 and 5.

Measurements—Forearm: two adult males, 57.9, 60.0. Cranial (one adult male, three adult females): greatest length, 20.7, 20.0, 19.4, 19.5; condylobasal length, 19.5, 18.7, 18.4, 18.4; zygomatic width, 15.5, 15.1, 14.7, 14.4; postorbital constriction, 5.8, 5.4, 5.6, 5.8; length of upper tooth row C-M³, 8.0, 7.7, 7.7, 7.8; width across canines at cingula, 7.1, 6.9, 6.2, 6.1.

The first specimen was shot at 7:30 p.m. as it flew around a large tree in a grassy meadow with a number of other large bats. The other four were taken in a mist net at Caño Mariusa on two successive nights. The males had a characteristic strong musky odor which was not noted about the females. Three of the specimens are brown phase, the other two red; all have the light mid-dorsal line at least evident. These bats were heavily infested with batflies.

***Carollia perspicillata perspicillata* (Linnaeus)**

Specimens—Two. 42 kilometers southeast Maturín, July 11.

Measurements—Cranial (one adult male, one adult female): condylobasal length, 20.3, 20.4; interorbital constriction, 5.3, 5.5; length of upper tooth row C-M³, 7.5, 7.5.

These two specimens were smoked out of a hollow tree along with the *Phyllostomus* mentioned below.

***Phyllostomus elongatus* (E. Geoffroy)**

Specimens—One male. 42 kilometers southeast Maturín, July 11.

Measurements—95, 30, 18, 30. Forearm (dried skin): 64.0; metacarpal III, 60.0; first phalanx of digit III, 17.5; second phalanx of digit III, 32.0. Tragus (fresh) 10.0; height of noseleaf (fresh), 20.0 (lancet, 17.0). Cranial: greatest length, 30.1; condylobasal length, 26.5; zygomatic width, 16.9; postorbital

constriction, 5.5; mastoid breadth, 14.7; breadth of braincase, 11.3; length of upper tooth row C-M³, 11.3; width across canines at cingula, 8.2; greatest width across upper molars, 11.5; length of mandible, 20.1; length of mandibular tooth row C-M₃, 12.7.

This specimen, smoked out of a hollow tree along with the two *Carollia* mentioned above, marks the first record for this species for Venezuela, although the locality falls within the range (based on known specimens) given by Cabrera (1957:67): "From Ecuador and Dutch Guiana to Mato Grosso and the south of Peru." The measurements from this specimen fall generally within the ranges of those published for this species from Ecuador (one specimen: Sanborn, 1936), Brasil (four specimens: Vieira, 1942), and Surinam (Husson, 1962). Karl F. Koopman, who kindly compared the specimen with others of the genus in the collections of the Chicago Natural History Museum and verified the identification, wrote that it agreed well with a series of *P. elongatus* from Peru (personal communication).

***Rhogeosia tumida riparia* Goodwin**

Specimens—One subadult male, skin without skull. 60 kilometers southeast Maturín, July 1.

Measurements—Forearm: 26.6.

This specimen was caught in flight with an insect net at dusk. The identification of the skin was made by George G. Goodwin, who kindly compared it with series of specimens of this genus at the American Museum of Natural History.

PRIMATES

***Cebus nigrivittatus castaneus* (I. Geoffroy)**

Specimens—One adult male, skin without skull. 140 kilometers northeast Barrancas, July 25.

Measurements—794, 434, 124, 40.

This monkey was shot from a tall tree where it was feeding on fruit along with several other individuals, in deep jungle area off Caño Mariusa. *Cebus* were more secretive than the red howlers and were not seen in the open at any time.

***Alouatta seniculus straminea* (Humboldt)**

Specimens—Three. 170 kilometers northeast Barrancas, August 5.

Measurements—(adult male, adult female, nursing juvenile male) 1260, 640, 160, 45; 1080, 590, 135, 39; 420, 225, 68, 28. Cranial (adult male and adult female): greatest length of skull, 105, 88; condylobasal length, 115, 85; zygomatic breadth, 83, 68; mastoidal width of braincase, 42, 40; greatest width across maxillary tooth row, 26, 22; length of maxillary tooth row C-M³, 45, 37; cranial breadth, 59, 53; width of hyoid bone, 57, 27; depth of hyoid bone, 53, 27. Approximate weights: adult male, 20 pounds; adult female, 13 pounds.

These three red howlers represent a family group. A fourth member of the group, a second half-grown young, escaped. The adults were shot, out of a tree 15 to 20 feet tall, in a dense jungle off Caño Mariusa. The young animal was taken alive and subsequently died.

Red howlers were seen on several occasions along the Orinoco and caños, usually in groups of two to five animals.

CARNIVORA

Felis onca Linnaeus

Specimens—One female, skin without skull. State of Bolívar, about 20 kilometers northeast Upata, near La Grulla, no date.

Skin was purchased from nationals who had shot it.

RODENTIA

Calomys laucha Olfers

Specimens—Thirteen (five in alcohol), five adult males, four adult females and four juveniles. 42 kilometers southeast Maturín, June 21 to July 9.

Measurements—Cranial (four adult males and two adult females): condylobasilar length, 18, 17, 16, 15, 17, 17; greatest length of skull, 22, 20, 21, 18, 21, 20; mastoidal width of braincase, 10, 11, 10, 10, 10, 10; greatest width across maxillary tooth row, 2.5, 3.0, 2.5, 3.0, 2.5, 2.5; length of maxillary molar tooth row, 4.0, 4.0, 3.5, 3.0, 4.0, 3.0; zygomatic breadth, 12, 12, 12, 10, 11, 11; cranial breadth, 10, 8, 10, 9, 10, 10. All adults were in an active reproductive condition, the males had descended scrotal testes averaging 10 by 4 millimeters and all adult females were pregnant.

These specimens represent the first record for the genus from Venezuela (see Butterworth, 1960, and Hershkovitz, 1962:142ff., for further details). Hershkovitz (*loc. cit.*) refers these specimens to *C.l. laucha*.

Rattus norvegicus (Berkenhout)

Specimens—Four: three, 42 kilometers southeast Maturín, June 17 to July 15; one, on houseboat, 140 kilometers northeast Barrancas, August 9.

Measurements—(two adult males, two adult females) 310, 347, 351, 360; 155, 190, 192, 195; 38, 35, 35, 38; 23, 22, 22, 21. Cranial (one adult male): condylobasilar length, 34; greatest length of skull, 39; mastoidal width of braincase, 14; greatest width across maxillary tooth row, 5; length of maxillary molar tooth row, 7; zygomatic breadth, 17; cranial breadth, 13.

One female was pregnant, containing five embryos.

Dasyprocta rubrata flavescens Thomas

Specimens—One juvenile male. 60 kilometers southeast Maturín, June 25.

Measurements—377, 11, 73, 33.

This juvenile, only a few days old, was collected by nationals on the edge of a forest near the Río Tigre. The fur is generally dark with a reddish tinge. The long rump hairs are orange-buff at their bases, gradually deepening in color to mahogany terminally. The nape and the upper surfaces of the feet are black. We have identified the specimen, as accurately as possible from published descriptions and without comparison with other specimens, following Tate (1935) in the use of the species designation *rubrata* for this form. Cabrera (1961:585) considers this name to be synonymous with *D. aguti cayana* (Lacepede).

Hydrochoerus hydrochaeris (Linnaeus)

Specimens—Two incomplete skulls. 42 kilometers southeast Maturín, June 26.

These two skulls were found in a meadow cut by numerous streams. Two living animals were observed along the bank of Caño Mariusa, and one was found dead in the same caño. On geographical grounds, these specimens probably represent the nominal subspecies, *H. h. hydrochaeris* (Linn.) (Cabrera, 1961:583).

ARTIODACTYLA

Odocoileus virginianus gymnotis (Wiegmann)

Specimens—One. 42 kilometers southeast Maturín, June 26.

A seven point buck was butchered by nationals in the camp area. No measurements were taken on this animal. A live animal was seen at the edge of a dense jungle, 60 kilometers southeast of Maturín.

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