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NOTES ON NEOTROPICAL BATS

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THROUGH the kindness of Dr. L. R. Dice and Dr. W. H. Burt of the University of Michigan Museum of Zoology, I have been allowed to examine the collection of Chiroptera under their care and to describe and record the following specimens of unusual interest.

I am indebted to Dr. Glover M. Allen of the Museum of Comparative Zoology for important comparisons with material in his charge and to Dr. T. S. C. Morrison-Scott of the British Museum (Natural History) for valuable notes on the type of Chilonycteris psilotis.

Chilonycteris torrei continentis, n. subsp.

Type.—Collected at Laguna de Zotz, Petén, Guatemala. U.M.M.Z. No. 77085. Adult male, skin in alcohol, skull cleaned. Collected March 4, 1935, by Dr. C. L. Hubbs and Dr. H. van der Schalie.

DIAGNOSIS.—Like *Chilonycteris torrei torrei* G. M. Allen from Cuba, but forearm longer and shape of skull different.

CHARACTERS.—Externally slightly larger than *C. torrei*. Forearm and metacarpals longer but phalanges slightly shorter. The low cutaneous ridge back of the nose pad in *torrei* is greatly enlarged in *continentis*. It is very roughly V-shaped with the upper edge of the point toward the muzzle



and connected to the base of the nose pad by a narrow line. The edges are about a millimeter in height and are cut under so that they overhang the nose pad. The protuberances on the muzzle, the line of warts on the upper edge of the nostrils, and the chin lappets are the same as in *torrei*.

Another character that continentis has in common with torrei, and by which both differ from all other species of Chilonycteris examined, is the form of attachment of the wings and interfemoral membrane to the leg. In torrei and continentis the wings and interfemoral membrane are attached to the underside of the joint between the tibia and the foot. The calcaneum is not bound to the tibia and extends straight out, with a free tip beyond the membrane of from two to two and one-half millimeters. In the other species of Chilonycteris examined (fuliginosa, macleayi, rubiginosa, and personatus—the only one not seen was parnellii) the calcaneum and wing are bound to the tibia for almost a third of its length, and the calcaneum does not project beyond the free edge of the interfemoral membrane.

The skull of *continentis* is about the same size as that of *torrei*. The upper edge of the rostrum is, in profile, almost straight and then gently slopes toward the forehead. In *torrei* it is slightly concave. In *continentis* the upper edge of the narial opening is straight instead of deeply emarginate, the sides of the postorbital waist slope gradually outward instead of abruptly so, and the brain case is wider and more rounded.

Color.—General color of upper parts brownish gray; lighter below. When compared with a specimen of *torrei*, which had also been taken from alcohol and dried, *continentis* was slightly lighter with a much less reddish tinge.

MEASUREMENTS.—Chilonycteris torrei in parentheses. Forearm, 43 (38.7); second digit metacarpal, 38.4 (37.7); third digit metacarpal, 40 (36.7); first phalanx, 7.6 (8.5); second phalanx, 11.7 (14); tip, 11.4 (9.9); fourth digit metacarpal, 33 (32.3); first phalanx, 6.8 (7.8); second phalanx, 8.6 (9); fifth digit metacarpal, 30.2 (29.2); first phalanx, 8.5 (9.1); second phalanx, 5.7 (6.9). Tail, 16.2 (20.9); tibia, 16 (16.2);

calcar, 17.6 (16.6). Skull: greatest length, 14.8 (14.7); condylo-basal length, 13.3 (13.4); palatal length, 6.4 (6.7); interorbital width, 3.4 (3); width of rostrum, 5.7 (5.9); zygomatic width, 7.8 (7.5); mastoid width, 7.7 (7.8); width of brain case, 7.2 (6.9); upper tooth-row, 5.7 (5.9); width across canines, 4 (4.4); width across m³-m³, 5.1 (5.3).

REMARKS.—Chilonycteris torrei continentis is the mainland form of the Cuban C. torrei with which it agrees in all essential details. While there is but one specimen, it is so different from all other species and so close to torrei, especially in the character of the attachment of the wings to the tibia, that it seems advisable to recognize it at this time.

The specimen was collected in a very unusual way by Dr. Hubbs and Dr. van der Schalie of the University of Michigan. Late one night while fishing in the Laguna Zotz, their attention was attracted by a splashing sound, and they found this bat struggling in the water.

Lonchoglossa caudifera caudifera Geoffroy

San Felipe, Venezuela. Collected March 3, 1920, by H. B. Baker. U.M.M.Z. Nos. 53243-53244. Two males, skins in alcohol, one skull cleaned.

When this genus was reviewed the only specimens seen were from central and eastern Brazil. These two specimens from Venezuela have slightly longer forearms, measuring 36.7 and 36.8 mm. respectively, but the skull is a trifle short, its total length being but 22.8 instead of 23 mm.

Ametrida centurio Gray

Ametrida centurio Gray, Proc. Zool. Soc. London, 1847, p. 15; Gray, Ann. Mag. Nat. Hist., Ser. 1, 19 (1847): 407; Gray, Proc. Zool. Soc. London, 1866, p. 117; Peters, Monatsber. Akad. Wiss. Berlin, 1866, p. 396; Dobson, Cat. Chiroptera, 1878, p. 530, Pl. 30, Fig. 2 (head); Thomas, Ann. Mag. Nat. Hist., Ser. 7, 8 (1901): 193; Miller, U. S. Nat. Mus. Bull., 57 (1907): 171 (genus).

Obidos, Amazonas, Brazil. Collected about July 23, 1871, ¹ Sanborn, "Bats of the Genera Anoura and Lonchoglossa," Field Mus. Nat. Hist., Zool. Ser., 20 (1933): 27.

by J. B. Steere. U.M.M.Z. No. 53108. Male in alcohol, skull cleaned.

There are published references to but three specimens of this rare bat. It was described in 1847 from one specimen from Pará, and in 1901 Thomas recorded another from the same locality. In 1866 Peters described a skin in the Leyden Museum that was without a locality. The individual recorded here is the fourth known example of the species and represents a new locality record.

The specimen agrees fairly well with the published descriptions of Dobson and Peters. Dobson's statements that the "horizontal plate of the palate-bones (is) deficient behind" does not explain whether it extends beyond the last molars or not. The palate does in other specimens of the genus. His other statement that the bases of the upper incisors fill up the space between the canines may easily have been due to a poorly cleaned skull, as this is not the case in other examples.

The other species of the genus, Ametrida minor, was described by Dr. Harrison Allen² from a specimen without a locality. Dr. Glover M. Allen³ later showed that the specimen came from Dutch Guiana, probably from Paramaribo. It differs from centurio mainly by its much smaller size. The differences in the wing measurements pointed out by Dr. H. Allen appear to be due to the method of measuring and in one case to an error on his part in calculating Dobson's measurements.

The external measurements of the present specimen agree fairly well with those published. No skull measurements have ever been published, with the exception of a few for *Ametrida minor*.

MEASUREMENTS.—Forearm, 32.4; pollex with claw, 12.6; second digit metacarpal, 19.8; third digit metacarpal, 32.2; first phalanx, 10.8; second phalanx, 17.8; tip, 8.7; fourth digit metacarpal, 28; first phalanx, 12.6; second phalanx, 16; tip,

^{2 &}quot;On a New Species of Ametrida," Proc. Boston Soc. Nat. Hist., 26 (1894): 240.

³ "The Type Locality of Ametrida minor H. Allen," Proc. Biol. Soc. Wash., 15 (1902): 88.

8; fifth digit metacarpal, 29.4; first phalanx, 11.6; second phalanx, 14. Tibia, 17.1. Ear from meatus, 14.2. Skull: greatest length, 17.1; condylo-basal length, 13.6; palatal length, 5.3; interorbital width, 4.5; zygomatic width, 11.7; mastoid width, 10; width of brain case, 9.1; upper tooth-row, c-m³, 4.6; width across m¹-m¹, 7.9; lower tooth-row, 5.2.

Promops centralis Thomas

Libertad, Petén, Guatemala. Collected September 17, 1934 by O. A. Taintor. U.M.M.Z. No. 77083. Female, skin in alcohol, skull cleaned. "From hollow tree."

This is the third specimen of this bat to be recorded from Guatemala. The species was described in 1916 from one specimen from northern Yucatán, Mexico.