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A NEW STENODERMINE BAT (PHYLLOSTOMATIDAE) FROM PERIJ

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Through attempts to identify Peruvian bats of the genus *Vampyrops* in the collections of the Louisiana State University Museum of Zoology (LSUMZ) and the Texas Cooperative Wildlife Collection (TCWC) of Texas A&M University, we concluded that the dark, medium-sized *Vampyrops dorsalis* Thomas, as defined by Sanborn (1955), was a composite of two species, one of which is without a name. This conclusion was confirmed recently when one of us (Gardner) netted both species at the same locality in south-central Peru. For the undescribed species, we propose the name:

Vampyrops nigellus, new species

Holotype.—Adult male, skin and skull, LSUMZ 16415, taken 6 May 1971 by A. L. Gardner, original number 11684. Type locality: Huanhuachayo (12° 44′ S, 73° 47′ W), about 1660 m, Departamento de Ayacucho, Peru.

Description.—Smallest of the blackish species of Vampyrops, forearm 40.1 to 44.5, greatest length of skull 24.9 to 26.8; color of dorsum blackish brown with a prominent white dorsal stripe extending from top of head to rump; four facial stripes with buffy medial pair poorly defined and lateral pair obsolete; venter paler then dorsum, the conspicously gray-frosted fur extending onto adjacent wing membranes beyond elbow and along proximal two-thirds of forearm; upper surface of forearm clothed with short blackish-brown hair; free border of narrow interfemoral membrane fringed with grayish-brown hair; skull medium sized with a narrow rostrum; upper incisors robust; upper outer incisors and lower incisors

variable; toothrows relatively straight; premolars and first two molars comparatively small; third upper molar small with poorly-developed lingual cusp; third lower molar conspicuously narrower than posterior face of the second lower molar.

Comparisons.—Vampyrops nigellus is the smallest of the dark species of Vampyrops and is easily confused with the larger V. dorsalis. However, nigellus can be distinguished readily from dorsalis by its shorter forearm, narrower skull, shorter toothrows, weaker cheek teeth, and smaller last upper and lower molars. Aside from measurements, the most conspicuous features serving to distinguish nigellus from dorsalis are the narrower rostrum, comparatively straighter interorbital region, and the smaller cheek teeth, especially the third upper molar, which is about as broad as long in nigellus but about twice as broad as long in dorsalis.

Vampyrops nigellus needs comparison with V. lineatus (E. Geoffroy St.-Hilaire), a species with similar cranial features; which, however, differs from V. nigellus by much paler coloration, longer forearm (43.7 to 50.1 as opposed to 40.1 to 44.5), relatively narrower rostrum (width across molars 9.8 to 10.8 as opposed to 10.1 to 11.2), and shorter maxillary toothrow (8.5 to 9.3 as opposed to 9.2 to 10.1—measurements of V. lineatus from Sanborn, 1955:410).

Measurements.—Selected measurements, in millimeters, of holotype, followed by means and extremes for 17 specimens of nigellus at hand, are: head and body, 65 (66.5, 65-70); foot, 11 (11.4, 9-13); ear from notch, 19 (18.2, 14.5-20); forearm, 41.3 (42.5, 40.1-44.5); metacarpal III, 40.8; metacarpal IV, 39.6; metacarpal V, 40.7; greatest length of skull, 25.0 (25.5, 24.9-26.8); condylobasal length, 22.3 (22.7, 22.2-23.9); palatal length, 11.1; postpalatal length, 8.7; zygomatic breadth, 14.4 (14.3, 13.9-15.3); postorbital constriction, 6.3; breadth of brain case, 10.7 (10.8, 10.3-11.4); mastoidal breadth, 12.2 (12.2, 10.9-12.9); breadth across upper molars, 10.3 (10.6, 10.1-11.2); breadth across upper canines, 6.0 (6.0, 5.5-6.6); length of maxillary toothrow, 9.2 (9.5, 9.2-10.1); length of mandibular toothrow, 9.9 (10.2, 9.7-10.9); length of mandible, 16.8.

Distribution.—Colombia (umbratus, Hershkovitz, 1949), probably Ecuador, and Peru.

Remarks.—According to Carter's notes and measurements, the holotype of V. oratus is smaller than the holotype of V. dorsalis; however, its dimensions are larger than most of the V. nigellus in our series of 17 specimens from Peru. The forearm of the holotype of V. oratus is considerably longer than any forearm in our series of V. nigellus (46.9 as opposed to 40.1 to 44.5). The holotype of V. umbratus (MCZ 8180) was compared

with a specimen of V. nigellus (TCWC 12173) and differs from V. nigellus in the same ways that V. dorsalis differs from V. nigellus.

We have compared *V. nigellus* with *V. lineatus* because they are similar cranially, although *V. lineatus* is not known from Peru. The specimens reported from Peru as *V. lineatus* (Allen, 1897:115; Tuttle, 1970:72) are actually *Uroderma bilobatum. Vampyrops lineatus* has been recorded from Brazil, Paraguay, and eastern Bolivia (Sanborn, 1955).

Natural history.—We have collected V. nigellus in humid forest habitats at elevations between 850 (2800 feet) and 2400 meters along the eastern slope of the Peruvian Andes. Vampyrops nigellus seems to be more abundant than V. dorsalis, even though both species have been taken together at three localities in Peru.

Specimens examined.—PERU: Divisoria, 1600 m, Cordillera Azul, Huanuco, 2 (LSUMZ 12559-60); 19 mi. S Tingo Maria, 2800 ft., Huanuco, 1 (TCWC 12173); eastern slope Cordillera Carpish, 2400 m, Carretera Central, Huanuco, 1 (LSUMZ 14226); San Jose (12° 44′ S, 73° 46′ W), Rio Santa Rosa, about 3300 ft., Ayacucho, 1 (LSUMZ 16414); Huanhuachayo (12° 44′ 73° 47′ W), about 1660 m, Ayacucho, 12 (LSUMZ 15686-87 and 16415-23).

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LITERATURE CITED

- ALLEN, J. A. 1897. On a small collection of mammals from Peru, with descriptions of new species. Bull. Amer. Mus. Nat. Hist., 9:115-119.
- HERSHKOVITZ, P. 1949. Mammals of northern Colombia. Preliminary report No. 5: Bats (Chiroptera). Proc. U.S. Nat. Mus., 99:429-454.
- SANBORN, C. C. 1955. Remarks on the bats of the genus *Vampyrops*. Chicago Nat. Hist. Mus., Fieldiana Zool., 37:403-413.
- TUTTLE, M. D. 1970. Distribution and zoogeography of Peruvian bats, with comments on natural history. Univ. Kansas Sci. Bull., 49:45-86.