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A NEW STENODERMINE BAT (PHYLLOSTOMATIDAE) FROM PERU

ALFRED L. GARDNER and DILFORD C. CARTER

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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VARIATION AND ECOLOGY IN A LOCAL POPULATION OF THE VESPER MOUSE (NYCTOMYS SUMICHRASTI)

HUGH H. GENOWAYS and J. KNOX JONES, JR.

Vesper mice of the genus *Nyctomys* are relatively rare, arboreal rodents restricted to Middle America (eastern Panama to southern Mexico). Little is known concerning the biology of these secretive animals. Studies of variation of the one species, *Nyctomys sumichrasti*, have been limited to descriptions of new taxa (for example, see Goldman, 1916, 1937, and Laurie, 1953) and ecological observations have been confined to faunal accounts of political units (Goodwin, 1934; Hall and Dalquest, 1963) or were made coincidental to studies of other species (Lawlor, 1969; Fleming, 1970). Birkenholz and Wirtz (1965) recorded observations on the behavior, reproduction, and early development of young in a laboratory colony of vesper mice; the male reproductive organs and accessory structures have been described by Burt (1960), Arata (1964), and Hooper and Musser (1964).

In the summer of 1964, a local population of *Nyctomys sumichrasti florencei* was discovered at San Antonio, Departamento de Chinandega, in northwestern Nicaragua. This area was visited again in the summers of 1966 and 1967, and in the spring of 1968, and the present paper details variation in this population and records such ecological information as was obtained. The first three visits to San Antonio were in the wet season, whereas the last was in the dry season. Of the 100 specimens of vesper mice collected there, the majority (55) was taken in 1966. A few mice were obtained in traps placed on the ground at the bases of trees but most were shot with pistols (dust shot) as they perched on, or scampered along, low branches and vines in dense vegetation. It is noteworthy that only 10 *N. sumichrasti* were obtained elsewhere in Nicaragua in the four years of our field work.