

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

SIX NEW SKUNKS OF THE GENUS *CONEPATUS*.

BY C. HART MERRIAM.

The seemingly inexhaustible collections of Mexican mammals made by E. W. Nelson and E. A. Goldman for the Biological Survey of the U. S. Department of Agriculture contain large series of skunks of all three genera—*Mephitis*, *Spilogale* and *Conepatus*. Among the latter are several that appear to be new. One of these (*Conepatus tropicalis*) has two dorsal stripes and is closely related to *C. mapurito* from Bogota. It belongs, apparently, to Gray's *Marputius*, which seems to be a valid subgenus. The others are characterized by a single broad dorsal band and by cranial peculiarities that seem to be of sufficient weight to demand independent subgeneric recognition. The group may be characterized as follows:

Subgenus **Oryctogale** nob.

Type.—*Conepatus leuconotus* (Licht.) from Vera Cruz, Mexico.

Characters.—Snout very long, overhanging the incisors a full inch (25 mm.), with a large naked pad on upper side for rooting in the ground; soles of hind feet entirely naked to heel. Color black, with a single white median dorsal band, beginning on top of head between ears (or midway between eyes and ears) and reaching posteriorly to tail; tail

white except at base underneath, which is black.* Skull relatively high; anterior nares large and obliquely truncate (broadly open as seen from above); ascending arm of premaxillæ reduced to a slender oblique splint; nasals and maxillæ ending posteriorly on essentially same plane; anterior part of nasals (in profile) essentially in fronto-nasal plane (not upturned or pugged); postorbital constriction slight; antorbital foramen single throughout.

The new forms are:

***Conepatus leuconotus texensis* subsp. nov.**

Type locality.—Brownsville, Lower Rio Grande, Texas. Type No. $\frac{34857}{47122}$ ♂ ad., U. S. National Museum, Biological Survey Collection. July 20, 1892. F. B. Armstrong. Original No. 70.

Range.—Coast strip of Texas from Rockport, Aransas County, to mouth of Rio Grande; may extend southward into Tamaulipas.

Characters.—Similar to *leuconotus* but somewhat larger, with white dorsal area more restricted, usually contracting on rump to a narrow stripe and in some specimens disappearing altogether, leaving the rump largely or wholly black. Usually a narrow white line connects the white dorsal area with the white of the tail. Black of underside of tail more extensive than in *leuconotus*, usually spreading over sides of base, and reaching out on underside at least one-third and often one-half the distance from base to tip [in *leuconotus* ending opposite toes of outstretched hind feet].

Measurements.—Average of 4 males from type locality: total length 825; tail vertebræ 365; hind foot 86. Average of 4 females from same place: total length 708; tail vertebræ 292; hind foot 76. Largest skull of ♂: basal length 77; zygomatic breadth 55.5; palatal length 35; upper molar on outer edge 10. Largest skull of ♀: basal length 66; zygomatic breadth 48; palatal length 31; upper molar on outer edge 9.5.

***Conepatus sonoriensis* sp. nov.**

Type locality.—Camoá, Rio Mayo, Sonora, Mexico. Type No. 95,914, ♀ yg. ad., U. S. National Museum, Biological Survey Collection. October 29, 1898. E. A. Goldman. Original No. 13,213.

Range.—Northwestern Mexico from Valparaíso Mountains, Zacatecas, northwesterly over Sinaloa (specimens from Santa Cruz de Alaya) and into Sonora for an unknown distance (specimens from Camoá, Rio Mayo).

Characters.—Size large (hind foot in ♂ about 85; in ♀ about 80);

*Sometimes a few black hairs are inconspicuously mixed in the white of the tail. In some specimens of *C. leuconotus texensis* the white dorsal band fails on the rump; with this exception the color-pattern as above described is constant throughout the group.

white dorsal band broad throughout; tail long, the black at base beneath very short, falling short of outstretched feet; skull long and relatively slender; frontals even more elevated than in *leuconotus*; upper molar and sectorial large.

Remarks.—In cranial characters the relationship of this species to *C. leuconotus*, of eastern Mexico, is surprisingly close, particularly in view of the fact that their ranges are on opposite sides of the continent, separated by a broad interval inhabited by a very different species. Unfortunately no skull of the male from the type region is available for comparison. Skulls of females resemble those of female *leuconotus* and *texensis* but are narrower throughout, with narrower anterior nares and shallower postorbital constriction.

Measurements.—♂ yg. ad., from Valparaiso Mountains, Zacatecas: total length 715; tail vertebræ 300; hind foot 84. Average of 3 young adult ♀ topotypes: total length 647; tail vertebræ 276; hind foot 79. Skull of typespecimen (♀ yg. ad.): basal length 66.5; zygomatic breadth 43; palatal length 33; upper molar on outer edge 8.5.

***Conepatus mesoleucus mearnsi* subsp. nov.**

Type locality.—Mason, Mason County, Texas. No. $\frac{2154}{2681}$, ♀ ad. Merriam Collection. February 20, 1886. Ira B. Henry.

Range.—Tableland of Mexico and adjacent southern part of the United States, from Jalisco (Guadalajara and Zapotlan) and southwestern San Luis Potosi northward to central Texas (Llano and Mason) and central Arizona (Phoenix and Fort Verde). Specimens from Colima appear to be nearer *mesoleucus* than *mearnsi*.

Characters.—Similar to *mesoleucus* but skull and molar teeth decidedly smaller.

Measurements.—♂ yg. ad., from Boquillas, Texas: total length 670; tail vertebræ 290; hind foot 75. Adult ♀ from same place: total length 580; tail vertebræ 220; hind foot 70. Average of 3 females from Hacienda La Parada, San Luis Potosi: total length 628; tail vertebræ 243; hind foot 72.

***Conepatus filipensis* sp. nov.**

Type locality.—Cerro San Felipe, Oaxaca (altitude 10,000 feet). No. 68,172, ♂ ad., U. S. National Museum, Biological Survey Collection. August 24, 1894. E. W. Nelson and E. A. Goldman. Original No. 6,619.

Range.—Forests of pine and oak on summit of Cerro San Felipe from altitude of 9000 up to 10,500 feet.

Characters.—Size small (hind foot in ♂ only 74); pelage soft, full and woolly; dorsal white stripe rather narrow, especially on shoulders; skull small, depressed and flattened anteriorly, the profile sloping rather evenly

from middle of parietals to front of nasals; anterior nares small; postorbital constriction strongly marked; zygomata broadest posteriorly; upper molar and sectorial smaller than in any known species except *pediculus*.

Remarks.—*Conepatus filipensis* appears to be a high mountain species. Externally it differs from its relative of the surrounding low country, *C. mesoleucus*, in much smaller size, softer, fuller pelage, and the restriction of the white dorsal area. The skull and molariform teeth are so much smaller as not to require comparison.

Measurements.—Type specimen (♂ ad.): total length 630; tail vertebrae 265; hind foot 74. Skull of type specimen: basal length 64; zygomatic breadth 47.5; palatal length 31; length of upper molar on outer edge 7.5.

***Conepatus pediculus* sp. nov.**

Type locality.—Sierra Guadalupe, Coahuila, Mexico. No. 116,953, ♂ yg. ad., U. S. National Museum, Biological Survey Collection. April 25, 1902. E. W. Nelson and E. A. Goldman. Original No. 15,123.

Characters.—Size smallest of the known species (hind foot only 61); skull and teeth smallest (in male smaller than in female of *C. mesoleucus mearnsi*); skull short; nasals very broad and flat, ending posteriorly in a straight line; anterior nares smallest; braincase strongly elevated; fronto-nasal region flat, smooth, sloping strongly downward, in profile a straight line. In the type and only specimen, there is a median circular bulge (probably abnormal) on the posterior half of the frontals.

Remarks.—Owing to its small size this species requires no direct comparison with others. The only one approaching it in the small size of the teeth is *C. filipensis* from Cerro San Felipe, Oaxaca.

Measurements.—Type specimen (♂ yg. ad.): total length 485; tail vertebrae 178; hind foot 61. *Skull*: basal length 57; zygomatic breadth 43; palatal length 27; upper molar on outer side 7.

Subgenus ***Marputius* Gray.**

***Conepatus tropicalis* sp. nov.**

Type locality.—Motzorongo, Vera Cruz, Mexico. Type No. 63,650, ♂ ad., U. S. National Museum, Biological Survey Collection. February 26, 1894. E. W. Nelson and E. A. Goldman. Original No. 5,903.

Range.—Tropical east coast of Vera Cruz and thence southeasterly to Yucatan. Limits of range unknown.

Characters.—Back with two rather narrow parallel white stripes (about 30 mm. in width, and separated by a still narrower internal stripe) reach from nape (where they unite in a nuchal patch with convex front) to hips (where they taper off to a point); tail very short, white except on basal part which is black all round, the black covering about one-third of the vertebrae above and one-half below, and presenting a V-shaped indentation on median line above.

Cranial characters.—In addition to the cranial characters mentioned in the above diagnosis of the subgenus *Marputius*, it may be remarked that the skull has a "humpy" appearance, due chiefly to the bulging frontals and depth of the postorbital constriction. The profile is sinuous, presenting three prominences and two depressions. The prominences are formed by the slightly upturned tips of the nasals, the interorbital bulge of the frontals, and a posterior prominence on the frontals behind the constriction.

Remarks.—So far as I am aware this is the only striped-backed *Conepatus* inhabiting Mexico. All the other species of the genus have a single broad white band down the back and belong to the subgenus *Oryctogale*.

Conepatus tropicalis differs strikingly in external characters and moderately in cranial characters from both *Conepatus* proper (*C. humboldti* from Patagonia) and the white-backed Mexican species here subgenerically distinguished under the name *Oryctogale*. In most respects it is intermediate between the two. Externally it has the large nose pad and naked soles of *Oryctogale*, but the dorsal stripes and tail differ from either. In cranial characters it favors *Conepatus*. The fronto-nasal region is depressed less than in *C. humboldti* but much more than in *Oryctogale*; the anterior nares are intermediate in obliquity of truncation; the antorbital foramen opens anteriorly by two or more pores as in *C. humboldti*, and the postorbital constriction is as deep as in that species.

Measurements.—Type specimen: total length 575; tail vertebræ 129; hind foot 74. *Skull*: basal length 67.5; zygomatic breadth 50.5; palatal length 32.5; length of last upper molar on outer side 8.



Merriam, C. Hart. 1902. "Six new skunks of the genus *Conepatus*." *Proceedings of the Biological Society of Washington* 15, 161–165.

View This Item Online: <https://www.biodiversitylibrary.org/item/19652>

Permalink: <https://www.biodiversitylibrary.org/partpdf/92465>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Internet Archive

Copyright & Reuse

Copyright Status: NOT_IN_COPYRIGHT

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.