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Descriptions of twenty-six new species of **North American Mammals**

By DR. C. HART MERRIAM



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U. S. DEPARTMENT OF AGRICULTURE,

August 12, 1890.

SIR: I have the honor to transmit herewith No. 4 of NORTH AMERICAN FAUNA. It contains descriptions of twenty-six new species of North American mammals, nearly all of which were discovered in the course of the biological explorations conducted by the Division.

Respectfully,

C. HART MERRIAM,
*Chief of Division of
Ornithology and Mammalogy.*

Hon. J. M. RUSK,
Secretary of Agriculture.

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CONTRIBUTION TOWARD A REVISION OF THE LITTLE STRIPED SKUNKS
OF THE GENUS *SPILOGALE*.

WITH DESCRIPTIONS OF SEVEN NEW SPECIES.

By Dr. C. HART MERRIAM.

The number of specimens of *Spilogale* at present available for study and comparison is wholly insufficient to warrant a final attempt to establish and define the North American species and subspecies; at the same time it is ample to demonstrate the absurdity of 'lumping,' under one specific name, as is now the practice, all the forms inhabiting the United States, from Florida to California.

The present paper is based on the study of 39 skins and 38 skulls, derived from the following sources: U. S. National Museum, 8 skins and 9 skulls; Department of Agriculture series, 12 skins and 11 skulls; Merriam collection, 19 skins and 18 skulls.

The examination of this material shows that the members of the genus may be readily separated into two divisions, according to the general shape of the skull; one having the cranium broad and flat, with the fronto-parietal region depressed, presenting the extreme of differentiation of the genus; the other with the cranium narrower and more highly arched and the fronto-parietal region somewhat elevated, approaching the normal *Mephitine* type. The members of the latter division inhabit the Gulf States and Mississippi Valley, extending as far westward (at least) as Trego County, Kans.; the members of the former inhabit the Sonoran region of the west, from central Texas westward through New Mexico and Arizona to California, extending south to Cape St. Lucas and north to British Columbia and the Great Basin.

The eastern group, so far as represented in the meager series at hand, comprises three species, one inhabiting Florida, one Alabama, and one Kansas. How far the limits of dispersion of each form extend, and whether or not any of them intergrade, are questions that can not be

settled until specimens from intermediate localities are examined. The Florida form is the smallest and whitest; the Kansas form is the largest and blackest.

The western group comprises at least three species and two or three subspecies, but, considering the great extent of the area it inhabits, is even less fully represented in available specimens than the eastern. One species inhabits south-central (and western?) Texas; one Arizona and southern California; and one the southern part of the peninsula of Lower California.

In the genus *Spilogale*, as in the allied genera *Mephitis* and *Conepatus*, the range of individual variation is considerable, though by no means so great as has been assumed. The principal variables are four, namely, (1) cranial characters; (2) dental characters; (3) length of tail; (4) color markings. As a rule the variation in each species is between definite limits which may be defined.

The males are much larger than the females and have considerably longer tails.

Color and markings.—The color markings are constant in pattern throughout the genus, the only variation being in the quantity of white, the widest extremes being the result of the extension or suppression of some of the markings. In the young the ground color is intensely black and the markings are pure white. As age advances, the markings become creamy yellow, and in worn states of the pelage and old museum specimens the black becomes dull brown.

General remarks on cranial characters and variation.—As already stated, there are two well-marked groups in the genus *Spilogale*—one having the cranium broad and flat, with the fronto-parietal region depressed to the general plane of the top of the skull; the other having the cranium relatively narrow and more highly arched, with the fronto-parietal region somewhat elevated. (See figs. 1 and 2.)

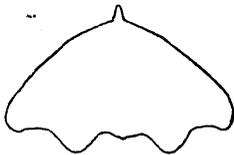


FIG. 1.—Transverse section of skull of *Spilogale gracilis*.

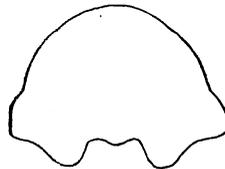


FIG. 2.—Transverse section of skull of *Spilogale ringens*.

The angle of divergence of the lateral series of teeth is greater in the narrow than in the broad skulls. As a rule, the postpalatal notch reaches the plane of the molars in the narrow-skulled forms, and falls short of this plane in the others. As a rule, also, in the narrow-skulled forms, the first and second upper premolars are not crowded, do not overlap, and are wholly in the tooth-row, while in the broad-skulled forms they are much crowded and partly overlap, or the first is turned obliquely or sideways to give the succeeding tooth more room.