

DESCRIPTION OF A NEW SPECIES OF COTTON RAT (*SIGMODON MINIMA*) FROM NEW MEXICO.

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AMONG the small mammals collected by Mr. F. X. Holzner and myself on the Mexican border, in connection with the operations of the International Boundary Commission, are two specimens of a species of cotton rat, which, in my opinion, is distinct from any heretofore described.

In the grassy hollows and flats between the most southern spurs of the Apache Mountains, in an arid, treeless region, having an altitude of 1,500 metres (exactly 1,496 at the monument), it was a surprise to find any species of *Sigmodon*. Many of their old runways were seen, however, in the dry and dusty grass; but nearly all of the holes were abandoned. Industrious trapping, persisted in for several weeks, resulted in the capture of but two adult male specimens. Mexican miners in the vicinity told us that only a few months before the species had been abundant, but seemed to have died off; indeed, we frequently saw their remains in the grass and picked up parts of skeletons and one or two additional skulls.

This new species has many points in common with *Sigmodon fulviventor*, recently described by Dr. J. A. Allen, from Zacatecas, Mexico.* It is still smaller than that species, being about the size of De Saussure's "*Hesperomys toltecus*" (= *Sigmodon hispidus toltecus*).† On capturing these specimens I was at once struck by their resemblance to *S. fulviventor*, the type of which I had closely examined in the American Museum of Natural History in New York, the resemblance consisting not only in the fulvous tone of coloring, especially of the under parts, but in the distinctly bristly character of the hairy coat and the dense hairiness of the ears and tail, in all of which particulars it differs

* Bull. Amer. Mus. Nat. Hist., II, No. 3, p. 180, October 21, 1889.

† Allen. *L. c.*, III, 1891, p. 207.

* Proceedings National Museum, Vol. XVII—No. 994.

radically from its geographically nearest neighbors—*Sigmodon hispidus texianus*, (Aud. and Bach.) and *S. hispidus arizonæ*, (Mearns).

SIGMODON MINIMA, new species.

Type.—No. 21187, U. S. N. M. (Coll. International Boundary Commission). Adult male, from Upper Corner Monument, New Mexico, on the Mexican boundary line, 100 miles west of the initial monument on the west bank of the Rio Grande. Collected by Edgar A. Mearns and Frank X. Holzner, April 26, 1892.

Description of type.—Coat bushy and hispid; under-fur darker plumbeous than in *S. hispidus texianus* or *S. hispidus arizonæ*; coarse outer coat more bristly, especially on sides of head and neck; ears, feet, and tail densely hairy; tail not distinctly bicolor. Color above grayish, the individual hairs being ringed with gray and brown, the brown annuli being blackish in their middle portion, fading to light-yellowish brown on their edges; under surface of body clayey buff; feet yellowish gray; ears densely clothed with grayish hairs on inner surface, with their convex surface black anteriorly and buff posteriorly; tail brownish black, somewhat lighter below, the hairs almost concealing the annuli.

Another specimen (No. 1760, male adult, from the same locality, collected by Mearns and Holzner, May 13, 1892) differs only in being ochraceous buff below, with a little more of the fulvous tinge on rump and flanks, thus approaching more closely to the coloration of *Sigmodon fulviventris*.

Dimensions.—Measurements (in millimeters) of No. 21187, adult male: Length, measured from nose to end of vertebrae of tail, 223; tail, measured from root to end of vertebrae, 94; to end of hairs, 104; height of ear above crown, 14; distance between eyes, 12; diameter of eye, 5; length of longest whisker, 30; from tip of nose to eye, 16; to center of pupil, 18.5; to ear, 30; to tip of ear, 46; to occiput, 37; to end of outstretched hind limb, 183; fore limb, measured from olecranon to end of longest claw, 33; length of fore-foot, 15; longest claw of fore-foot (chord), 3.9; hind limb, measured from knee-joint to end of longest claw, 53; length of hind-foot, 28; longest claw of hind-foot, 3 mm. Measurements of No. 1760, adult male: Length, 223; tail to end of vertebrae, 91; to end of hairs, 97; height of ear above crown, 12; above notch, 16; distance between eyes, 12; diameter of eye, 5; longest whisker, 26; from top of nose to eye, 16; to center of pupil, 19; to ear, 30; to tip of ear, 46; to occiput, 34; to end of hinder extremity, 180; fore limb from olecranon, 33; length of fore-foot, 14; longest claw of fore-foot, 3; hind limb from knee-joint, 53; length of hind-foot, 27; longest claw of hind-foot, 4.2 mm.

Cranial and dental characters.—As compared with *S. hispidus texianus*, the only species before me for comparison, the brain-case is higher and narrower, the skull more constricted between the orbits, with shorter nasals, their bases being nearly even with the posterior border of the incisive foramen instead of well behind it. The dentition is very much heavier.