

OCCASIONAL PAPERS OF THE MUSEUM OF  
ZOOLOGY

UNIVERSITY OF MICHIGAN

ANN ARBOR, MICHIGAN

UNIVERSITY OF MICHIGAN PRESS

DESCRIPTION OF A RACE OF DESERT WOODRAT  
(*NEOTOMA LEPIDA*) FROM SONORA

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THE desert woodrat (*Neotoma lepida* Thomas) has heretofore not been recorded from Sonora. Specimens collected by me in 1933 in the Pinacate Mountains, northwestern Sonora, Mexico, represent an undescribed race of the species. Its known range is thus extended a considerable distance to the south.

I wish to express my appreciation to the staff of the Carnegie Desert Laboratory, and especially to the Director, Dr. Forrest Shreve, for much help and guidance during the course of the field work in the region.

*Neotoma lepida bensoni*, new subspecies

TYPE.—Adult male, skin and skull, No. 67373, Museum of Zoology, University of Michigan; from Papago Tanks, Pinacate Mountains, Sonora, Mexico; collected April 26, 1933, by Philip M. Blossom; original number 586.

DIAGNOSIS AND COMPARISONS.—A small, dusky-colored race of *Neotoma lepida* with large ears and thinly-haired tail. Compared with *N. l. auripila*: decidedly darker and duller in color, less buffy, feet dusky instead of white, tail nearly uni-

color instead of bicolor; similar in size; similar in most skull characters, but interorbital breadth less and maxillary tooth-row shorter.

COLOR.<sup>1</sup>—Type: Upperparts, including head, near Sepia; neck near Sepia faintly overlaid with buff; base of dorsal hairs Slate-Gray. Sides, Avellaneous faintly mixed with dusky bounded below by a prominent stripe of Pinkish Cinnamon. Ears thinly clad with Fuscous-Black hairs; skin of upper portion of ears dusky-pigmented. A faint band between Fawn Color and Wood Brown runs over shoulders and down fore-legs to the wrists. Cheeks and area about eye, Wood Brown. Most vibrissae Fuscous-Black, a few white. Throat with prominent spot of Pinkish Cinnamon. Underparts, Light Pinkish Cinnamon. Pectoral and inguinal region with a few white hairs. Hind legs and dorsal surface of hind feet to the toes, dusky. Ventral surface of hind feet, except for a few white hairs on ankles, Sepia. Toes white. Tail thinly haired, nearly unicolor; above, Fuscous-Black, below, Drab near the base, shading distally into Fuscous.

There is some variation in the amount of dark pigmentation. The type and paratype are essentially alike; the specimen from Elegante Crater is considerably darker and with less buff. The buffy pigmentation of the underparts is especially variable in intensity.

MEASUREMENTS (in mm).—Type, paratype, and the specimen from Elegante Crater respectively: Length, 284, 277,—; tail, 134, 116,—; hind foot, 27, 28,—; ear from notch, 29, 30.6,—; weight in grams, 100,—,—. Skull: greatest length, 37.0,—, 38.1; condylobasal length, 32.9,—, 33.6; greatest zygomatic breadth, 19.5,—, 20.3; least interorbital breadth, 4.9,—, 4.9; length of nasals, 13.4,—, 14.5; length of incisive foramina, 8.0,—, 7.6; length of palatal bridge, 6.0,—, 6.7; alveolar length of upper molar series, 7.7,—, 7.5.

GEOGRAPHIC DISTRIBUTION.—Known only from the nearly black-colored lava of the Pinacate Mountains in Sonora, but

<sup>1</sup> Capitalized color terms after R. Ridgway, *Color Standards and Color Nomenclature*, Washington, D. C., 1912. Pp. 1-44, 53 pls.

doubtless also occurs on the Pinacate Lava Plain which extends from these mountains northward into Yuma County, Arizona. Probably limited to these lavas.

SPECIMENS EXAMINED.—Total number, 3, from the Pinacate Mountains of Sonora, Mexico, as follows: Papago Tanks, 2; Elegante Crater, 41 miles southwest of Sonoyta, 1.

DISCUSSION.—An evident relation exists between the dark color of the Pinacate lavas and the dark color of several species of desert mammals dwelling there. The white-throated woodrat, desert woodrat, cactus-mouse, and rock pocket-mouse are represented on the lava by dark races (*Neotoma albigula sheldoni*, *Neotoma lepida bensoni*, *Peromyscus eremicus papagensis*, and *Perognathus intermedius pinacate*, respectively) and represented on the adjacent pale-hued desert ranges by pale races. Breeding tests made in the Laboratory of Vertebrate Genetics of the University of Michigan, have proved that the color characters of *P. e. papagensis* are inherited. Although the woodrats and pocket-mouse have not bred in the laboratory it is highly probable that in them the color characters are inherited in the same manner as in the cactus-mouse.

The race *N. l. bensoni* is closely related to *N. l. auripila*, which the writer originally described as a distinct species.<sup>2</sup> In the assignation of *auripila* to the species *Neotoma lepida*, the writer agrees with Benson (MS) whose conclusions are based upon a considerable number of recently-collected specimens from southwestern Arizona. These specimens indicate that *auripila* intergrades with *Neotoma lepida devia* Goldman. It is probable that *Neotoma goldmani* Merriam, from Coahuila, Mexico, is actually a race of *lepida*, but intergrading specimens are not yet known.

This race is named for Seth Bertram Benson in recognition of his studies on desert rodents. Dr. Benson also first detected the distinctness of this race.

<sup>2</sup> Philip M. Blossom, "A new woodrat from southwestern Arizona and a new pocket-mouse from northwestern Sonora," *Occ. Papers Mus. Zool., Univ. Mich.*, 273: 1.

