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## DESCRIPTION OF A NEW ROCK POCKET-MOUSE AND A NEW DESERT-MOUSE FROM SOUTHERN ARIZONA

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On Black Mountain, an isolated butte of dark-colored lava near Tucson, Arizona, the rock pocket-mouse and the desertmouse are represented by dark-colored races. Some darkcolored specimens of the woodrat, *Neotoma albigula*, have also been taken on Black Mountain, but there are too few specimens available for a critical study of this species.

The field work in the Tucson region was conducted in cooperation with the Carnegie Desert Laboratory. Specimens for comparison were kindly loaned by the California Museum of Vertebrate Zoology and by the United States Biological Survey.

## Perognathus intermedius nigrimontis, new subspecies

Type.—Adult male (skin and skull), No. 63682, Museum of Zoology, University of Michigan; from Black Mountain, 10 miles south of Tucson, Pima County, Arizona; taken April 11, 1931, by P. M. Blossom; original number 239. Beside the type there are 45 specimens from the type locality.

Diagnosis.—Body size and skull characters like *Perognathus intermedius intermedius*, but color averaging much

darker. Less dark in color and more reddish than P. i. rupestris.

Color of Type.—Upperparts near Avellaneous,¹ heavily mixed with black. Sides and underparts between Avellaneous and Vinaceous Fawn, except pectoral region and throat, which are Pinkish Buff. In some individuals a narrow lateral line separates the color of the sides from that of the underparts. The tail above is Fuscous; below it is white, shading distally into Drab.

Measurements of Type. (In mm.)—Length, 175; tail, 105; hind foot, 19.7; ear from notch, 7; weight, 11 grams. Skull. —Greatest length, 23.5; mastoid breadth, 12.7; interorbital constriction, 6.7; length of nasals, 8.9; parietals,  $8\times3.4$ .

Skull.—Like that of *Perognathus intermedius intermedius*. Geographic Distribution.—Known only from the dark-colored lavas in the vicinity of Tucson, Arizona. Specimens from the dark-colored lava of Tumamoc Hill, in the Tucson Mountains, are indistinguishable from those from Black Mountain. The dark color of this form is apparently correlated with the prevailing dark tone of its rock habitat, to which it is strictly confined.

Relationships.—This mouse is closely related to *Perognathus intermedius intermedius*, which occurs in rocky situations in the deserts of Arizona, New Mexico, and northern Mexico.

There is some color variation in the series from Black Mountain, and the color of the underparts is especially variable. Some individuals are much darker than the type, which has about the average color tone of the series.

The palest individuals of nigrimontis are about as light in color as four specimens of typical intermedius from Mojave and Coconino counties in northwestern Arizona, kindly loaned for comparison by the United States Biological Survey. The average color of nigrimontis is, however, much darker than that of intermedius. Compared with 4 specimens of rupes-

<sup>1</sup> Color names capitalized are from R. Ridgeway, Color Standards and Color Nomenclature. Washington: 1912, pp. i-iii, 1-43.

tris, kindly loaned by the California Museum of Vertebrate Zoology, nigrimontis is less dark and more reddish in general color tone.

### Peromyscus eremicus pullus, new subspecies

Type.—Adult female (skin and skull), No. 63802, Museum of Zoology, University of Michigan; from Black Mountain, 10 miles south of Tucson, Pima County, Arizona; taken March 17, 1931, by P. M. Blossom; original number 270. There are 13 paratypes from the same locality.

Diagnosis.—Body size and skull characters like *Peromyscus* e. eremicus and *Peromyscus* e. anthonyi, but the general color tone of the upperparts much duller and darker. Dorsal stripe not evident.

Color of Type.—Upperparts near Chaetura Drab washed with Cinnamon. This color extends down over the sides to form a lateral line of Fawn. Underparts Neutral Gray, except a narrow pectoral stripe of Cinnamon. Tail Mouse Gray all around.

Measurements of Type. (In mm.)—Length, 186; tail, 99; hind foot, 19; ear from notch, 19. Skull.—Greatest length, 25.2; zygomatic breadth, 13.3; interorbital constriction, 11.5; length of nasals, 9.2; length of palate, 3.8; maxillary tooth row, 3.8.

Skull.—Like that of Peromyscus e. eremicus and Peromyscus e. anthonyi.

Geographic Distribution.—Known only from Black Mountain, 10 miles south of Tucson, Pima County, Arizona. Specimens of *Peromyscus eremicus* from the dark-colored lava of Tumamoc Hill near Tucson are somewhat intermediate in color between *pullus* and *anthonyi*, but are nearer *anthonyi*.

Relationships.—Osgood<sup>2</sup> designates the region about Tucson as an area of intergradation between *Peromyscus e. eremicus* and *P. e. anthonyi*. A comparison, however, of 19 specimens from the Tucson region (except Black Mountain) with speci-

<sup>2</sup> Osgood, W. H. 1909, "Revision of the Mice of the American Genus Peromyscus," North American Fauna, No. 28, p. 240.

mens of *eremicus* from the type locality, Colorado Desert, California, and with the extreme of *anthonyi* from Hermosillo, Sonora, shows that the Tucson specimens average close to the color tone of *anthonyi*, and are darker and richer in general color tone than typical *eremicus*. I would, therefore, place the Tucson region within the range of *anthonyi*.

The series of *Peromyscus eremicus* from Black Mountain averages distinctly darker than *anthonyi*. The type of *pullus* has been chosen as representing about the average color tone of the Black Mountain series. There is considerable variability in color in the series and some individuals are paler and others are darker than the type. The palest colored individual of *pullus* is very close in color to the extreme of *anthonyi* from Hermosillo and, therefore, the desert-mouse of this lava butte averages very dark in color.