A NEW RACE OF PYGMY MOUSE (BAIOMYS) FROM ARIZONA

By Philip M. Blossom and William Henry Burt

Twenty-four mice of the species Baiomys taylori were trapped in late March, 1941, five to nine miles west of Hereford, Cochise County, Arizona. Seventeen of these were prepared as museum specimens; the others are being used in breeding experiments at the Laboratory of Vertebrate Biology, University of Michigan. The presence of this species in southeastern Arizona establishes the most northerly location at which the genus has been recorded. Previously, this mouse was known in the United States from eastern and southern Texas, where two forms of the species taylori occur, and in Mexico from Chihuahua southward.

In Arizona, the genus Baiomys (the smallest known rodent in the United States) undoubtedly is restricted to local areas. Although Blossom and others have collected in the region intensively, specimens have been taken only along a grassy roadside in the vicinity of Hereford. They were associated with the two species of cotton rat, Sigmodon hispidus and S. minimus, and they appeared to be using the runways made by their larger associates through the grass and weeds.

The plateau region of southeastern Arizona, near Hereford, is characterized principally by arid grassland and is a continuation of the Chihuahuan Biotic Province. The habitat
in which *Baiomys* was trapped is dominated by tall grass and weeds, which form, when dead, a rather heavy ground cover. Conspicuous throughout the habitat is a scattered growth of a low shrub, *Senecio longilobus*. The specimens of *Baiomys* were taken only between the estimated elevations of 4400 and 4800 feet, although the Senecio-grass association extended above and below these elevations.

The largest number of individuals secured in one collecting station was taken at a place on a roadside, nine miles west of Hereford, at an elevation of 4800 feet. Here a trapping record was kept. The station is a narrow strip of grass and weeds 20 by 1300 feet, adjoining a pastured field which is fenced. The field, because of constant grazing, probably is inhospitable territory for these mice and can be considered at least a partial barrier to their movements. One hundred fourteen live-traps, spaced about twelve feet apart and baited with rolled-oats, were set in a nearly straight line. They yielded fifteen mice, an average of one mouse to every eighty-seven feet. Trapping results indicate, to a greater extent than do the figures, that these mice are probably colonial in habit, since specimens were not evenly distributed. They were caught in definite concentrations of three or four animals to an area (commonly at or near a Senecio bush), and intervening areas were non-productive or yielded only an occasional specimen.

For the loan of comparative material we wish to thank the authorities of the following institutions: the American Museum of Natural History, for topotypes of *paulus*; the Museum of Vertebrate Zoology, for freshly taken specimens from Sonora, Chihuahua, Durango, Sinaloa, Aguascalientes, Jalisco, Nuevo Leon, and Tamaulipas; and the Laboratory of Vertebrate Biology for specimens of *subater* from Texas.

The material from Arizona represents an undescribed race for which we propose the name

**Baiomys taylori ater**, new subspecies

Pygmy mouse

**Type.**—Adult male (skin and skull), University of Michigan Museum of Zoology No. 85425; from seven miles west of Here-
No. 465

A New Race of Pygmy Mouse

ford, Cochise County, Arizona; collected by Philip M. Blossom, March 25, 1941; original number 2195.

Measurements (in mm.).—Type: total length, 108; tail vertebrae, 43; hind foot, 14; ear from notch, 11.4. Skull, greatest length, 18.0; condylobasal length, 17.0; zygomatic breadth, 9.4; interorbital constriction, 3.4; interparietal, 5.9 by 2.0; nasals, 6.4; bony palate, 2.9; palatine slits, 3.8; upper molar tooth row, 3.2.

Average and extreme measurements of the type series, including the type and sixteen paratypes, in the order given above are for twelve males: 108 (98–108); 41 (37–45); 13.4 (12.5–14.0); 10.8 (9.5–11.6); 17.5 (16.9–18.1); 16.3 (15.7–17.0); 9.4 (9.2–9.6); 3.6 (3.4–3.8); 6.1 (5.6–6.8) by 1.8 (1.5–2.1); 6.2 (5.8–6.5); 2.73 (2.45–3.0); 3.7 (3.5–3.9); 3.2 (3.1–3.4). For five females: 108 (102–115); 44 (41–46); 13.6 (13.0–14.2); 11.4 (10.5–11.7); 17.5 (17.3–17.9); 16.6 (16.2–17.1); 9.5 (9.2–9.8); 3.5 (3.5–3.5); 6.1 (5.3–6.5) by 1.8 (1.6–2.1); 6.3 (6.1–6.5); 2.8 (2.6–3.2); 3.8 (3.5–4.0); 3.2 (3.1–3.3).

Distribution.—Known only from the type locality, but may be expected in other parts of southern Arizona and in northern Sonora east of Nogales.

Description.—Color of type: general effect of upper parts dusky brown, slightly paler on cheeks and sides of body; tips of cover hairs on dorsum Cinnamon Brown, guard hairs dark brown; Cinnamon Buff of tips of cover hairs on sides and cheeks extends over underparts as a wash in diluted form; tail well haired so that scales are not evident, Dusky Brown above, gray below; tops of feet grayish; ears covered with short fine hairs, outside of ear color of back, inside and borders Cinnamon Buff; bases of hairs slate throughout except on chin, where they are white. Skull as in paulus, but slightly smaller on the average and with shorter, broader rostrum. These differences are so slight as to be of little or no taxonomic value in the small series available.

Comparisons.—Coloration darkest of the known races of the species. Especially pronounced is the Cinnamon Buff wash of the underparts. Specimens of paulus from Chihuahua
and Durango have a very faint wash on the undersurface, much less pronounced, however, than in Arizona specimens.

Remarks.—Reddish soils prevail at and immediately surrounding the locality at which these mice were taken. The dark coloration of *ater* in this region seems to be correlated with the dark reddish soils.

Specimens examined.—*Baiomys taylori ater*: from type locality, 17. *B. t. paulus*: Chihuahua, 2 miles west of Parral (2), 5 miles southeast of Chihuahua (1), 7 miles west of El Sanz (1); Durango, 5 km. southwest of Canutillo (1), 14 miles east of Zarca (2), Santuario ranch (2), Río Sestín (type locality) (4); Sinaloa, Escuinapa (2). *B. t. subsp. I*: Aguascalientes, 1 mile north of Chicolate (3); Jalisco, 9 miles north of Encarnación (6). *B. t. subsp. II*: Sonora, 10.6 miles southeast of Ciudad Obregón (1). *B. t. subsp. III*: Nuevo León, 14 miles north of Monterrey (2). *B. t. taylori*: Tamaulipas, 29 miles north of Ciudad Victoria (1), 20 miles south of Reynosa (3). *B. t. subater*: Texas, Jefferson County, 7 miles south of LaBelle (4).