PROCEEDINGS

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TWO NEW POCKET GOPHERS OF GENUS THOMOMYS.

BY E. A. GOLDMAN.



Continued studies of the pocket gophers of the genus *Thomomys* have resulted in the segregation of two geographic races hitherto included in the general range of *Thomomys bottae toltecus*. For the loan of the type and topotypes of the subspecies mentioned, for comparison in this connection, I am indebted to Dr. H. E. Anthony, American Museum of Natural History.

Thomomys bottae extenuatus, subsp. nov.

SULPHUR SPRINGS VALLEY POCKET GOPHER.

Type.—From Willcox, Cochise County, Arizona (altitude 4,000 feet). No. 17872/24809, ♂ adult, skin and skull, U. S. National Museum (Biological Survey collection); collected by Vernon Bailey, November 27, 1889. Original number 712.

Distribution.—Desert plains of the Sulphur Springs Valley and adjoining territory, in southeastern Arizona.

General characters.—A small, rather dull buffy subspecies; mammae, pectoral two pairs, inguinal two pairs. About like Thomomys bottae toltecus of the Casas Grandes River Valley, northwestern Chihuahua, in color, but smaller, and cranial characters distinctive. Similar to Thomomys bottae modicus of the Altar Valley region, Pima County, Arizona, but general color near cinnamon buff, instead of wood brown, and cranial details different. Compared with Thomomys bottae mutabilis of the Verde River Valley, Arizona: Smaller, and much duller in color, combined with differential cranial features.

Color.—Type (nearly full winter pelage): Upper parts in general near cinnamon buff (Ridgway, 1912), thinly mixed with black on head and over back; forearms and thighs near light ochraceous buff; under parts overlaid with light buff; muzzle blackish; ears encircled by black; feet white; tail nearly unicolor, thinly clothed with whitish hairs.

Skull.—Similar to that of T.b. toltecus, but smaller; basioccipital narrower:

audital bullae more fully inflated, bulging farther below level of basioccipital; upper incisors usually more strongly decurved (usually more
procumbent in toltecus). Not very unlike that of T. b. modicus, but smaller;
rostrum relatively broader, less constricted at point of union between
maxillae and premaxillae, as viewed from above; nasals broader, less
wedge-shaped posteriorly, the sides therefore more nearly parallel; bullae
usually more fully inflated; dentition about the same. Differing from that
of T. b. mutabilis mainly in smaller general size, combined with larger
audital bullae.

Measurements.—Type: Total length, 203 mm.; tail, 67; hind foot, 27.5. An adult female topotype: 198; 67; 29. Skull (type): Occipitonasal length, 36.5; zygomatic breadth, 22.5; breadth across squamosals (over mastoids), 20; interorbital constriction, 7.2; length of nasals, 11.8; maxillary toothrow (alveoli), 7.5.

Remarks.—The range of T. b. extenuatus is restricted mainly to the desert plains of the Sulphur Springs Valley, which form a somewhat isolated interior basin near the top of the continental divide.

Specimens examined.—Total number, 11, all from Arizona as follows: Dos Cabezas, 1; Fort Bowie (near west base of Chiricahua Mountains), 6; Fort Grant, 2; Willcox (type locality), 2.

Thomomys bottae opulentus, subsp. nov.

TAWNY POCKET GOPHER.

Type.—From Las Palomas, on the Rio Grande, Sierra County, New Mexico. No. 167318, \circ adult, skin and skull, U. S. National Museum (Biological Survey collection); collected by E. A. Goldman, October 24, 1909. Original number 20675.

Distribution.—Rio Grande Valley from Socorro south at least to Las Cruces, southwestern New Mexico.

General characters.—A rather large, rich ochraceous tawny subspecies, with a moderately heavy skull; upper incisors strongly decurved; mammae, pectoral two pairs, inguinal two pairs. Similar to Thomomys bottae toltecus of the Casas Grandes River Valley, northwestern Chihuahua, but color richer, nearer ochraceous tawny, and cranial characters distinctive. Size about as in Thomomys bottae fulvus of the Mogollon Plateau region of Arizona, but colors lighter, the back less heavily overlaid with black; cranial features also divergent. Differing from Thomomys bottae ruidosae of Ruidoso, New Mexico, in larger size, richer, more rufescent coloration, and cranial details.

Color.—Type (nearly full winter pelage): Upper parts between tawny and ochraceous tawny (Ridgway, 1912), purest on shoulders and along upper part of sides, the head and median dorsal area thinly overlaid with black; forearms, lower part of sides, and thighs ochraceous buff; under parts overlaid with light ochraceous buff; ears narrowly encircled with black; feet white; tail thinly clothed with fine buffy white hairs, with a trace of brown above, becoming naked near tip.

Skull.—Similar to that of T. b. toltecus but more elevated in upper profile

across anterior roots of zygomata, the rostrum more depressed and sloping more strongly downward anteriorly; audital bullae about the same; upper incisors usually shorter, more strongly decurved, the ends tending to recurve (upper incisors somewhat procumbent in toltecus). Not very different from T. b. fulvus in general size and form, but averaging somewhat heavier; zygomata less strongly bowed outward posteriorly, the sides more nearly parallel; rostrum usually more depressed anteriorly; audital bullae slightly larger; upper incisors more recurved. Compared with that of T. b. ruidosae the skull is decidedly larger, more massive, and differs otherwise in about the same characters as from fulvus.

Measurements.—Type: Total length, 234 mm.; tail, 76; hind foot, 33. An adult male from Garfield, New Mexico: 238; 74; 32.5. Skull (type): Occipitonasal length, 40.7; zygomatic breadth, 25.3; breadth across squamosals (over mastoids), 21.1; interorbital constriction, 7; length of nasals, 13.9; maxillary toothrow (alveoli), 7.8.

Remarks.—Typical T. b. opulentus is readily distinguished from any of its geographic neighbors by rich, light tawny coloration. Specimens from Socorro and San Marcial are very variable in color, some of the darker individuals exhibiting gradation toward the darker subspecies T. b. fulvus and T. b. ruidosae, which range in that region to the west and east of the Rio Grande Valley, respectively. Although nearer to opulentus, specimens from this section apparently form the most direct connection between fulvus and ruidosae.

Specimens examined.—Total number, 31, all from New Mexico as follows: Cuchillo, 1; Garfield, 5; Lake Valley, 2; Las Cruces, 1; Las Palomas (type locality), 2; San Marcial, 4; Socorro, 16.



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