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*** START OF THE PROJECT GUTENBERG EBOOK A NEW POCKET GOPHER (GENUS THOMOMYS), FROM EASTERN COLORADO ***

**A New Pocket Gopher (Genus Thomomys)
from Eastern Colorado**

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BY

E. RAYMOND HALL

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**A New Pocket Gopher (Genus Thomomys)
from Eastern Colorado**

[Pg 83]

By

E. RAYMOND HALL

The pocket gophers of the species *Thomomys talpoides* in east-central Colorado have long been referred to the subspecies *Thomomys talpoides clusius* Coues with type locality at Bridger Pass, Wyoming. Recently, two subspecies, *T. t. attenuatus* and *T. t. rostralis* (see Hall and Montague, Univ. Kansas Publ., Mus. Nat. Hist., 5(3):25-32, February 28, 1951) were named from along the Wyoming-Colorado boundary with the result that the populations of *Thomomys talpoides* in east-central Colorado are separated from *T. t. clusius* of Wyoming by the geographic ranges now ascribed to the recently named *T. t. attenuatus* and *T. t. rostralis*. The subspecific identity of the animals from east-central Colorado thus is left in doubt. Examination of pertinent materials was made in the expectation that the names *Thomomys talpoides macrotis* F. W. Miller (Proc. Colorado Mus. Nat. Hist., 9:41, December 14, 1930) and *Thomomys talpoides cheyennensis* Swenk (Missouri Valley Fauna, 4:5, March 1, 1941) would apply to the specimens, the identity of which is in doubt. This examination discloses instead, as set forth in more detail below, that neither of the two names mentioned immediately above does apply; the Coloradan specimens in question are referable to an heretofore unrecognized subspecies which may be named and described as follows:

***Thomomys talpoides retrorsus* new subspecies**

Thomomys clusius, Warren, The Mammals of Colorado, G. P. Putnam's Sons, New York, p. 80, 1910; Cary, N. Amer. Fauna, 33:132, August 17, 1911.

Thomomys talpoides clusius, Bailey, N. Amer. Fauna, 39:100, November 15, 1915; F. W. Miller, Proc. Colorado Mus. Nat. Hist., 9:41, December 14, 1930; Warren, The Mammals of Colorado, Univ. Oklahoma Press, Norman, p. 162, 1942.

Type.—Male, subadult, skull and skin, No. 69840 Biological Surveys Collection, U. S. Nat. Hist.; from Flagler, Kit Carson County, Colorado; obtained on November 26, 1894, by Clark P. Streater; original No. 4460.

Range.—Western end of the Arkansas Divide in Colorado from eight miles south of Seibert westward to Colorado Springs

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Diagnosis.—Size medium (see measurements); upper parts grayish brown; underparts lighter; skull small; tympanic bullae moderately inflated and angular anterolaterally; interpterygoid space narrowly U-shaped; pterygoid hamuli without transverse enlargement; nasals truncate posteriorly; premaxillary tongues projecting posteriorly behind nasals for distance of eight-tenths (0.5-1.1) of a millimeter.

Comparisons.—In comparison with *T. t. fossor* and *T. t. rostralis*, which occur farther west, selected differences of *T. t. retrorsus* are: lighter color; larger skull; more inflated tympanic bullae; greater relative (to length of skull) breadth across upper incisors, rostrum, and zygomata. The difference in color is greater in comparison with *fossor* than with *rostralis*.

In comparison with *T. t. macrotis* (specimens from the type locality), *T. t. retrorsus* is indistinguishable in color, length of tail, and length of tooth-row, but averages smaller in all other measurements. There is no overlap in length of body, basilar length, zygomatic breadth, mastoidal breadth or length of nasals. The temporal ridges, which mark the limits of the temporal muscles, are straight as opposed to curved and are lower. The tympanic bullae are more angular anterolaterally in *T. t. retrorsus*.

From *T. t. attenuatus* to the north, *T. t. retrorsus* differs in darker (more brown) color, consistently longer body, relatively (to length of skull) shorter rostrum and nasals. Linear measurements of the two latter structures and length of tail are approximately the same in the two subspecies but all other measurements average more in *T. t. retrorsus*. Also in the latter the temporal lines are approximately parallel instead of being bowed outward in their middle extent and instead of being more widely separated posteriorly than anteriorly.

From *T. t. cheyennensis* to the northeast, *T. t. retrorsus* differs in slightly darker (more brownish) color, consistently shorter body and rostrum, usually a more narrowly V-shaped interpterygoid space, and smaller average dimensions of the skull, notably in mastoidal breadth and length of the rostrum.

Remarks.—Miller's (Proc. Colorado Mus. Nat. Hist., 9:42, December 14, 1930) mention of a specimen taken on November 9, 1930, "near the head of Beaver Creek in extreme northeastern Elbert County" refers to the specimen, No. 2426 Colo. Mus. Nat. Hist., which is labeled as "8 mi. N. E. Agate, Elbert Co., Colo." Specimens from Colorado Springs, in the collection of the late E. R. Warren, have not been examined but the fact that Cary, Warren 1942, and Bailey (see under synonymy above) each referred the specimens to *clusius* instead of to the darker *fossor* gives basis for tentatively referring the specimens to *T. t. retrorsus*.

Grateful acknowledgment is made to those persons in charge of the mammal collections of the

Denver Museum of Natural History and the Biological Surveys collection of mammals in the United States National Museum for permission to examine and report upon the material listed below (see specimens examined). The study here reported upon was aided also by a contract between the Office of Naval Research, Department of the Navy, and the University of Kansas (NR 161-791). Essential comparative materials were obtained with assistance from the Kansas University Endowment Association.

Measurements.—Measurements of the type, a male, are followed by the measurements of three adult females (69835, 69839 and 69838) from the type locality. Total length, 216, 207, 210, 200; length of tail, 59, 58, 64, 56; length of hind foot, 28, 28, 28, 26; basilar length of skull, 32.8, 32.2, 32.3, 30.8; zygomatic breadth, 23.1, 22.5, —, 20.5; least interorbital breadth, 6.0, 6.7, 6.2, 6.1; mastoidal breadth, 18.2, 18.8, 17.7, 17.7; length of nasals, 13.0, 13.7, 13.9, 14.0; breadth of rostrum, 7.6, 7.9, 7.4, 7.2; length of rostrum, 14.8, 15.6, 15.7, 16.0; alveolar length of maxillary tooth-row, 7.6, 7.2, 7.7, 7.6.

Specimens examined.—Total number, 13, all from Colorado, as follows: *Elbert County* (Colorado Mus. Nat. Hist. [= Denver Mus. Nat. Hist.]): Bijou Creek, "near El Paso Co. line", 3; 8 mi. NE Elbert, 1. *Lincoln Co.* (U. S. Biol. Surv. Coll.): Limon, 1. *Kit Carson Co.* (U. S. Biol. Surv. Coll.): Flagler, 7; 8 mi. S Seibert, 1.

Transmitted, February 28, 1951.

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