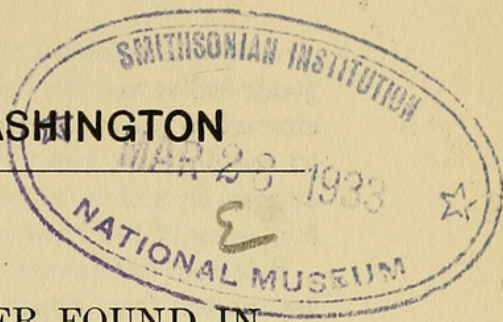


PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON



A NEW RACE OF POCKET GOPHER FOUND IN
OREGON AND WASHINGTON.

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Knowledge of the existence in the Museum of Vertebrate Zoology of the series of topotypes, obtained in 1930 by Miss Annie M. Alexander and Miss Louise Kellogg, of the several kinds of pocket gophers named from eastern Washington and Oregon, induced one of us (Orr), when visiting that region, to direct special effort toward obtaining additional specimens, from other localities, judged as probably of importance in contributing to a better understanding of the genus *Thomomys* there. One result of this effort was the taking of certain specimens, in the Wallowa Mountains of Oregon, which, when studied together with other specimens previously taken from the same mountain mass, give basis for recognition of the heretofore unnamed geographic race described below.

***Thomomys quadratus wallowa*, new subspecies.**

Type.—Male, adult, skin-and-skull; no. 54701, Mus. Vert. Zool.; Catherine Creek, seven miles east Telocaset, 3500 feet altitude, Union County, Oregon; June 29, 1932; collected by Robert T. Orr; original no. 570.

Range.—Wallowa Mountains of northeastern Oregon and adjoining mountains in southeastern Washington.

Diagnosis.—Size: small (see measurements). Color (summer pelage): near (1) Snuff Brown¹ above; sides lighter (more grayish); underparts washed with Cinnamon Buff; hind feet and tail whitish. Skull: rostrum short and broad; premaxillae extending considerably behind nasals; zygomata nearly parallel but not broadly expanded; tympanic bullae small; dorsal margin of foramen magnum evenly rounded; maxillary arms of zygomata abruptly depressed.

Comparisons and relationships.—As compared with the geographically adjacent *Thomomys columbianus* Bailey, *T. q. wallowa*, cranially, is smaller with less well developed temporal ridges, in side view has the maxillary

¹Capitalized color terms after Ridgway: color standards and color nomenclature, 1912.

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arm of the zygoma not as nearly vertical, has relatively less inflated tympanic bullae and the tip of rostrum less depressed. The two last mentioned characters show approach to *T. q. quadratus*, from which *wallowa* differs in smaller size, less well developed temporal ridges, less widely expanded zygomatic arches, more inflated tympanic bullae and in having the maxillary arms of the zygomata, in side view, not as nearly vertical.

Selected differences of *T. q. wallowa*, from *Thomomys fuscus fuscus* (specimens from Smith Mountain, Adams County, Idaho) are as follows: Auditory bullae less inflated ventrally and in mastoid portion; maxillary arms of zygomata more nearly vertical; rostrum relatively, as well as actually, shorter and broader; premaxillae extending farther behind nasals; dorsal margin of foramen magnum, without, rather than with, distinct indentation. The three last mentioned characters are ones in which *wallowa* agrees with *T. q. quadratus*. The two first mentioned features are ones in which *wallowa* is intermediate as between *quadratus* and *fuscus*. Other features in which *wallowa* resembles *fuscus* and departs from *quadratus* are: small size; narrow braincase; and narrowness across the zygomatic arches.

Four specimens, two of which are young, from Ochoco Ranger Station, 4000 feet altitude, Crook County, Oregon, deserve mention in the present connection. The locality is geographically intermediate as between the territories known to be inhabited by *quadratus* and *wallowa*. The skulls of the two adults are intermediate in general size as between *wallowa* and *quadratus* and the degree of inflation of the tympanic bullae is intermediate as between these two forms. The braincase is wider as in *quadratus*. Indeed the skull throughout is relatively wide as in *quadratus* and further agrees with that form as regards the nearly vertical position of the maxillary arms of the zygomata. The specimens are referred to *quadratus*. At the same time, they are regarded as in the nature of intergrades toward *wallowa* and on this account we think justify use of the specific name *quadratus* with the here newly proposed name *wallowa*.

T. q. wallowa itself is intermediate in cranial characters as between *quadratus* and *fuscus*. In fact, it stands very near the center of the gap which separates the two forms. By one line of reasoning these structural features of *wallowa* might justify uniting *fuscus* and *quadratus* as subspecies of a single species. However, a gap of some size, even though only about half as great as formerly thought, still exists between *fuscus* and animals of the *quadratus* type. If, and when, intermediates are found between *fuscus* and *wallowa*, as we have just described from Ochoco Ranger Station, between *quadratus* and *wallowa*, then we should have but little hesitancy in treating *quadratus* and *fuscus* as geographic races of one and the same species. However, we have seen no specimens from intermediate localities which bridge the gap between the long, narrow rostrum of *fuscus* on the one hand and the short, wide rostrum of *quadratus* and *wallowa* on the other.

Specimens examined.—Total number, 8, as follows: Anthony, Baker County, Oregon, 4; Catherine Creek, seven miles east of Telocaset, 3500 feet altitude, Union County, Oregon, 2; twenty-five miles southeast of Dayton, Blue Mountains, Columbia County, Washington, 1; Humpeg Falls, Columbia County, Washington, 1.

MEASUREMENTS, IN MILLIMETERS, OF FIVE ADULT SPECIMENS OF *Thomomys quadratus wallouvi*.

Catalog no.	Sex	Locality	Total length	Length of tail	Length of hind foot	Basilar length	Length of rostrum ²	Length of nasals	Zygomatic breadth	Mastoid breadth	Least interorbital breadth	Alveolar length of upper molar series	Breadth of rostrum
21199	♀	Columbia Co., Wash.	190	52	27	—	15.4	12.7	—	—	6.4	7.6	6.7
Type	♂	Union Co., Ore.	188	54	25	31.7	15.3	12.3	19.9	17.2	6.6	7.1	7.3
3709	♂	Baker Co., Ore.	185	56	26	30.0	—	—	—	16.6	6.7	6.7	6.5
3711	♂	Baker Co., Ore.	188	65	25	30.0	14.2	11.1	18.8	15.9	6.2	6.8	6.4
3712	♂	Baker Co., Ore.	198	64	26	31.5	—	—	20.0	17.6	6.1	6.6	6.6

²Length of rostrum as here given was taken from the middle of the anterior border of the nasals to the maxilla at the lateral end of the base of the lacrymal process.



Hall, E. Raymond and Orr, R T. 1933. "A new race of pocket gopher found in Oregon and Washington." *Proceedings of the Biological Society of Washington* 46, 41-43.

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