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A NEW VOLE FROM EASTERN MONGOLIA

WITH ONE PLATE

BY

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On his return to Tientsin from a recent expedition to the region in eastern Mongolia, north of Kalgan, Mr. Arthur de C. Sowerby, who has for several years been making zoölogical explorations in the interests of the Smithsonian Institution, wrote me as follows concerning a peculiar yellowish species of *Microtus*:

In addition to *Microtus angustus* Thomas, obtained by Anderson in the same region, I obtained several specimens of what I take to be a new vole. This animal I found to be an inhabitant of the open country, where it lives in holes in the walls of the camps and huts; at least, it was only around buildings that I could catch any. This is probably the reason why Anderson did not secure any, as he collected in exactly the same locality as I did. If you find it to be a new species would you mind naming it after my assistant Warrington, who "spotted" it first? He was sitting in our tent and heard a noise. On looking up he saw the little animal run out under the flap. We promptly got traps out, and inside an hour had two or three specimens. This vole is diurnal while *M. angustus* is nocturnal.

The animal proves to be a hitherto undescribed member of the subgenus *Phaiomys*, forming with *M. brandti* (Radde) a group in some respects intermediate between typical *Phaiomys* and true *Microtus*. In compliance with Mr. Sowerby's request it may be known as:

MICROTUS WARRINGTONI, new species

Type.—Adult male (skin and skull) No. 175861 U. S. National Museum. Collected at Tabool, Mongolia (altitude 4,000 feet), 100 miles north of Kalgan, August 13, 1912, by Arthur de C. Sowerby. Original number, 508.

Diagnosis.—Like *Microtus (Phaiomys) brandti* (Radde) in color and in its combination of the external and dental peculiarities of *Phaiomys* with an unmodified, true-*Microtus*-like skull; size considerably greater than in *M. brandti*, the difference between the two species about like that existing between *M. (Phaiomys) mandarinus* and *M. (P.) johannis*.

Color.—Upperparts cream-buff faintly but evidently "lined" with blackish and irregularly darkened by appearance at surface of the blackish-slate hair bases (2.5 mm.), the general effect not far from

slate-color; cheeks, inner surface of ears, and lower portion of sides clearer and more buffy; underparts not strongly contrasted, pale cream-buff much clouded by the slate-gray basal color; feet and tail whitish cream-buff, the tail just perceptibly more yellowish above than below.

Skull and teeth.—In general form the skull (plate 1, fig. 1) differs notably from that of *Microtus blythi* (plate 1, fig. 2), *M. raddei*, *M. mandarinus* (plate 1, fig. 3) and *M. johannis* in its narrower, more angular braincase, less spreading zygomata, relatively greater depth at region of anterior zygomatic root, deeper, shorter rostrum, and essentially perpendicular upper incisors.¹ In lateral view the profile does not differ appreciably from that of *Microtus agrestis*, though the skull is obviously broader than in the European species. As compared with a skull of *Microtus mandarinus* with same condylo-basal length that of the type of *M. warringtoni* has the zygomatic breadth 2 mm. less, the interorbital breadth .6 mm. less and the depth at front of m^1 .6 mm. greater. Auditory bullæ large and inflated, with wide meatus, their form much more as in *M. agrestis* than as in *M. mandarinus*. Interorbital region narrow but not abruptly constricted, with two low ridges in the type, these joined to form a low median crest in an older individual. Palate normal, as in *M. mandarinus*. Teeth with the usual *Phaiomys* pattern: m_1 with 5 closed triangles and a very short, rounded, anterior loop.

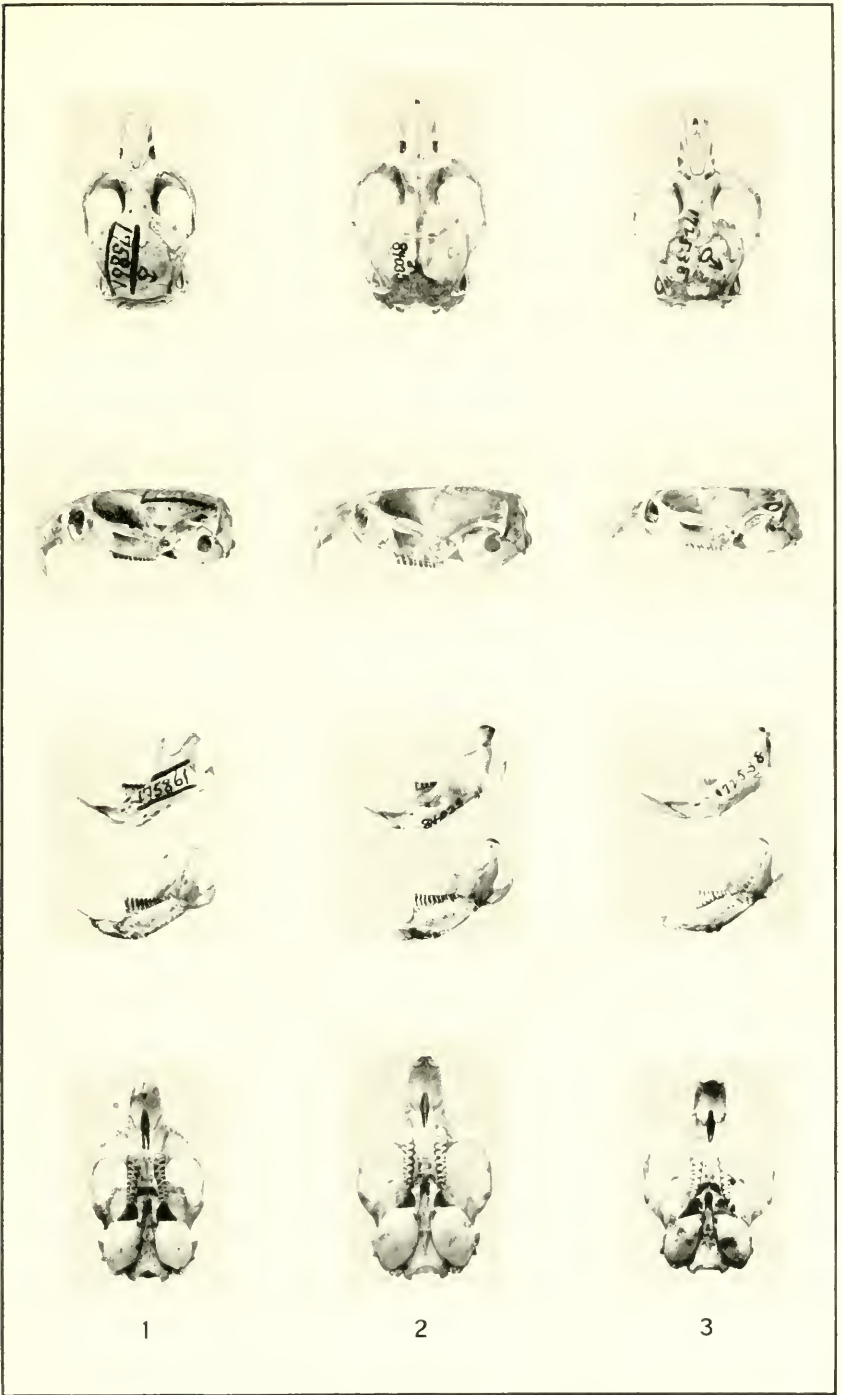
Measurements.—Type and adult female (No. 175859), the latter in parenthesis: head and body, 117 (123) millimeters; tail, 28 (29); hind foot, (s. u.) 19 (19); ear, 11.5 (11.5); condylobasal length of skull, 27.2 (27.4); zygomatic breadth, 15.2 (16.0); interorbital constriction, 3.2 (3.0); occipital breadth, 12.8. (12.8); occipital depth, 7.0 (7.2); nasal, 7.8 (7.8); diastema, 8.2 (8.6); depth at anterior edge of alveolus of m^1 , 8.2 (8.6); mandible, 17.2 (18.2); maxillary toothrow (alveoli), 6.2 (6.4); mandibular toothrow (alveoli), 6.4 (6.4).

Specimens examined.—Six, all from the type locality.

Remarks.—The color, skull, and teeth of this vole are exactly as in *Microtus brandti* as described and figured by Büchuer² from material collected in the same region of northeastern Mongolia as Radde's original specimens. The large size of *M. warringtoni* is, however, immediately diagnostic.

¹This character is approached in *M. johannis*.

²Wissensch. Resultate Przewalski Cent. Asien Reisen, zoöl., Vol. I, pp. 117-120, pl. 19, figs. 4-6.



1

2

3

SKULLS OF :

1 *Microtus warringtoni* (type)

2 *Microtus blythi*

3 *Microtus mandarinus*