

15, 16, 30, 31, 34, 40, 43. *Ophiopus arcticus*, 6, 10, 39, 43. *Amphiura sundevalli*, 43. *Ophiopholis aculeata*, 4, 15, 16, 26. *Ophiocten sericeum*, 13, 15, 17, 19, 22, 25, 28, 32, 36, 38, 43. *Ophiura robusta*, 5, 6, 7, 8, 9, 10, 14, 15, 16, 19, 21, 25, 28, 30, 32, 37, 43. *Ophiura sarsii*, 17, 22, 25, 27, 28, 34, 36, 37. *Stegophiura nodosa*, 13, 22, 29, 43.

ECHINOIDEA: *Strongylocentrotus dröbachiensis*, 1, 2, 4, 10, 11, 16, 20, 21, 22, 23, 25, 28, 29, 30, 32, 37, 40, 41, 42, 43.

CRINOIDEA: *Heliometra glacialis*, 4, 10, 16, 17, 32, 33, 43. *Poliometra proluxa*, 40, 41.

Note.—Worthy of special mention are two small specimens of *Strongylocentrotus dröbachiensis* (Figs. 1–4) from Clavering Island on which, on the aboral surface, the pedicellariae are so very numerous as to be more conspicuous than the spines.

ZOOLOGY.—A new pocket gopher from New Mexico.¹ E. RAYMOND HALL, University of California. (Communicated by E. A. GOLDMAN.)

In the spring of 1935 Miss Annie M. Alexander accompanied by Miss Louise Kellogg collected for the Museum of Vertebrate Zoology a series of *Thomomys* from the Rio Grande Valley near Albuquerque, New Mexico. Specimens from this general region had been referred to *Thomomys aureus* Allen, but this was at a time when that name was used in a more inclusive sense than it is at present. It was, therefore, no surprise to find that the gopher from Albuquerque could not be referred to *aureus*; indeed it was knowledge of this probability and curiosity as to the true identity of the pocket gopher there which led Miss Alexander to make special effort to obtain the specimens. Comparisons reveal that the animal from Albuquerque pertains to an unnamed race which is larger, and different in other respects, from *fulvus*, *tularosae*, *pervagus*, *opulentus* and *aureus*, the subspecies of *Thomomys bottae* (see Goldman)² whose ranges adjoin that of the new form. For the privilege of making direct comparisons with *opulentus* I am obliged to Major E. A. Goldman and Dr. H. H. T. Jackson of the United States Bureau of Biological Survey. To Dr. H. E. Anthony of the American Museum of Natural History I am similarly obliged for lending the original series used in naming *Thomomys toltecus*.

***Thomomys bottae connectens*, new subspecies**

Type.—Male, adult, skull and skin; no. 66627, Mus. Vert. Zool.; Clawson Dairy, 5 miles north of Albuquerque, 4,943 feet elevation, Bernalillo County, New Mexico; May 6, 1935; collected by Annie M. Alexander, original no. 2981.

¹ Received January 3, 1936.

² Proc. Biol. Soc. Washington 48: 135, 150. 1935.

Range.—Valley of the Rio Grande in central New Mexico, probably from northern Socorro County northward to Bernalillo.

Diagnosis.—Size: Large (see measurements). Color: In fresh summer pelage cinnamon buff (color terms after Ridgway)³; whitish below with plumbeous areas and with cinnamon buff extending onto pectoral region, and sometimes to other sections of the underparts; insides of cheek pouches and usually nose, blackish; postauricular patches small. Winter pelage with a reduced amount of cinnamon buff on the upper parts producing a "gray" coat. Skull: Large; rostrum broad and its length amounting to more than 67 percent of zygomatic breadth; nasals posteriorly truncate; hamulus of lacrimal large; interpterygoid space V-shaped and provided with median spine.

TABLE 1.—MEASUREMENTS IN MILLIMETERS OF ADULT TOPOTYPES AND TYPES OF *T. b. connectens* AND *T. b. toltecus*

Catalogue number	<i>Connectens</i>								<i>Toltecus</i>		
	66638	66642	66635	66636	66634	66627	66628	Average	5440 4305	5386 4304	Average
Sex	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂
Total length	240	232	257	270	267	256	256	261	—	—	—
Length of tail	72	66	76	73	74	68	70	72	—	—	—
Length of hind foot	32	31	36	35	35	35	35	35	29 ^b	27 ^b	28 ^b
Basilar length	37.2	35.5 ^a	44.5 ^a	42.5	41.1	42.7	40.0	42.2	37.5	38.2 ^a	37.9
Length of nasals	14.7	13.5	17.8	17.4	16.7	17.0	16.8	17.1	14.2	14.8	14.5
Zygomatic breadth	25.3	25.4	31.0 ^a	31.1	30.3	29.5	—	30.5	28.2	28.7	28.5
Mastoid breadth	20.9	20.9	25.5	24.3	24.5	23.7	22.8	24.2	21.6	23.8 ^a	22.7
Breadth of rostrum	8.8	7.2	11.1	10.2	11.0	10.3	10.0	10.5	8.4	9.1	8.8
Interorbital constriction	6.9	7.2	7.2	7.2	7.4	7.3	7.7	7.4	6.7	6.5	6.6
Maxillary tooth-row	9.1	8.3	9.8	9.4	9.1	9.4	9.3	9.4	8.5	8.0	8.3
Extension of premaxillae posteriorly to nasals	2.1	2.9	2.2	2.2	3.3	3.2	2.6	2.7	3.3	3.4	3.4
Depth of skull	16.3	15.5	19.0	17.9	18.3	18.0	17.3	18.1	15.9	16.6	16.3
Length of rostrum ^c	17.7	16.9	21.8	21.7	24.4	21.2	19.7	21.8	18.0	17.5	17.8

^a Estimated.

^b Measured from the dried skin.

^c Measured between the anterior border of the nasals and the maxilla at the lateral end of the hamulus of the lacrimal.

Comparisons.—Compared with *Thomomys bottae aureus*, *connectens* is larger in external measurements, darker colored above, and below has the pectoral region strongly marked with cinnamon buff rather than white, and it is larger in every cranial measurement taken. The interpterygoid space is V-shaped rather than U-shaped; the exoccipital extends farther laterally, revealing an inverted V-shaped rather than inverted U-shaped, face of the mastoid portion of the auditory bulla; the rostrum, relative to the basilar length, is longer and wider; and the skull is more than a fourth heavier as shown by the crania of adult males without lower jaws which average 4.66 grams as against 3.33 grams.

Compared with specimens of *Thomomys bottae opulentus* from Las Cruces (1), Garfield (5), Las Palomas (1) and San Marcial (6), *T. b. connectens* is slightly less reddish above and especially below, is larger in external and cranial measurements—in many parts of the skull constantly so. The skull of *connectens* is by actual weight much heavier: males average 4.6 grams as against 2.5 and females average 2.6 grams as opposed to 1.9. In *connectens* the premaxillae extend farther behind the nasals, the external meatus is prolonged into a distinct tube, the temporal ridges approach one another more closely, the hamulus of each lacrimal bone is as large again, the exoccipital

³ Color standards and color nomenclature. Washington, D. C. 1912.

extends farther laterally revealing less of the mastoid portion of the auditory bulla, and the skull is generally more angular with better developed processes and ridges marking areas of muscle attachment.

Compared with 5 topotypes and the type of *Thomomys bottae toltecus*, *T. b. connectens* is slightly lighter colored, has much longer hind feet (on dry skins, adult males measure 33 mm. as against 29 mm.) and is constantly larger in every part measured, except for the mastoid breadth and extension of the premaxillae posteriorly to the nasals. In the two parts of the skull indicated there is a slight overlap in measurements. Relative to the basilar length each of the five adult males of *connectens* has longer nasals and rostrum, broader rostrum and a lesser width across the zygomatic arches than has either of the two adult males of *toltecus*. In *connectens* the length of the rostrum amounts to more, rather than less, than 67 percent of the zygomatic breadth. Also, in *connectens* the hamulus of each lacrimal bone is as large again and the inferior margin of the anterior opening of the infraorbital canal is continued anteriorly as a distinct ridge rather than curved upward to form part of an ellipse. Measurements, for the most part not previously available, for *toltecus* are offered above as facilitating comparison with related races.

Remarks.—Among named subspecies of *T. b. bottae* whose ranges approach nearest to that of *connectens*, probably greatest similarity is shown to *T. b. aureus*. The range of *connectens*, as known to me, however, is separated from that of *aureus* by a large area from which no specimens have been examined though the species *T. bottae* doubtless occurs in suitable environments there. The northwestern limits of range of *connectens*, then, remain to be determined. Specimens from Socorro are variously intermediate in color and to a certain extent in external measurements between *connectens* and *opulentus* but cranially they agree well with the latter.

Specimens examined.—Total number, 19 as follows: Type locality, 14; 4.5 miles south Albuquerque, 4,943 feet elevation, Bernalillo County, New Mexico, 4.

ZOOLOGY.—A note on *Dictyocaulus* from domestic and wild ruminants.¹ G. DIKMANS, Zoological Division, Bureau of Animal Industry. (Communicated by MAURICE C. HALL.)

Chapin (1925) described as *Dictyocaulus hadweni* n. sp. a nematode collected from the lungs of the American bison, *Bison bison*, at Wainright, Alberta, Canada, by Dr. Seymour Hadwen. Following the description, Chapin devoted a short paragraph to a comparison of *D. hadweni* with *D. filaria*, and differentiated *D. hadweni* from *D. filaria* by the more abrupt termination of the dorsal rays, the complete fusion of the medio-lateral and postero-lateral rays, and the longer spicules. Apparently the use of the name *Dictyocaulus filaria* should be considered as a *lapsus calami* for *Dictyocaulus viviparus*, or else Chapin really intended to compare *D. hadweni* with *D. filaria*. *D.*

¹ Received March 17, 1936.



Raymond, E. 1936. "A new Pocket Gopher from New Mexico." *Journal of the Washington Academy of Sciences* 26, 296–298.

View This Item Online: <https://www.biodiversitylibrary.org/item/123166>

Permalink: <https://www.biodiversitylibrary.org/partpdf/70649>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: Permission to digitize granted by the rights holder

Rights: <https://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.