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## OCCURRENCE OF MICROTUS XANTHOGNATHUS IN ALASKA

Microtus xanthognathus (Leach), the yellow-cheeked vole, has been recorded in Alaska from the Arctic Coast near the Canadian boundry south and west into Central Alaska. Eastward its range extends through the northern parts of Canada to Hudson Bay. In spite of its wide distribution, relatively few specimens have been collected and little is known of its life history. During field investigations in the summer of 1952 twelve specimens were collected in the vicinity of Castle Rocks near the northwest corner of McKinley Park. An additional specimen has been obtained from a trapper living a few miles west of the Park.

Except for the red-backed vole (*Clethrionomys rutilus dawsoni*), the yellow-cheeked vole was the most abundant small rodent in the area. The only other microtines collected were the brown lemming (*Lemmus trimucronatus*) and two species of *Microtus*, still to be identified. In addition to the twelve specimens collected by trapping, parts of several others were obtained from the scats of marten (*Martes americana actuosa*) and from the crop of a great grey owl (*Scotiaptex nebulosa*). Trappers in the vicinity have remarked on its abundance and consider it the primary food of marten.

The yellow-cheeked vole is named for its distinctive yellow or chestnut cheek patches. Similar patches are also found near the ears. The upper parts of the body are a grizzled brown or dark sepia and underparts are greyish. The tail is faintly bicolored. It is one of the largest species of the genus *Microtus*. Average weight of five adult females was 135 gms. and the greatest weight was 158 gms. An adult male weighed 144 gms. Of six adult specimens collected, measurements of total length varied from 186 to 226 mm., tail length from 45 to 53 mm. and the hind foot from 24 to 26 mm.

Consideration of the range of the yellow-cheeked vole indicates that it is found in both tundra and boreal forest. The vicinity of Castle Rocks where the present collections were made is covered with a thin boreal forest, mostly of black spruce with a few scattered larch. White spruce, birch, and aspen occur in the better drained areas adjacent to streams. The ground cover is a thick mat of sphagnum moss and lichens with scattered clumps of sedge, cottongrass, and horsetail. Common shrubs include blueberry, lowbush cranberry, crowberry, and dwarf birch.

Runways and diggings were found throughout the entire area though they were most common in lowlands and wet areas. Runways frequently crossed small puddles. On one occassion a vole was observed swimming a few yards from the shore on Castle Lake. Many colonies constructed large dirt mounds, two to ten feet in diameter and one to two feet high. These were pock-marked with a maze of runways, tunnels, and holes. At one of these mounds as many as three or four voles could often be seen at one time.

Activity seemed to be largely crepuscular but some activity was continued throughout the twenty-four hour period. Voles were commonly seen and heard during daylight hours but snap traps set for them produced best results in the evening or during the night.

Food was thought to consist primarily of succulent vegetation. Horsetail and lichens were found in the few stomachs that were examined.

Three of the five females that were thought to be adult were pregnant and had prospective litters of seven, eight, and ten respectively.

Dixon (BIRDS AND MAMMALS OF MT. MCKINLEY NATIONAL PARK, 1938) reports collections of *M. Xanthognathus* on the Toklat River in McKinley by Sheldon in 1907. There have been no records from the park since that time. The Castle Rock colony, however, does extend into the northwestern edge of the park.

Osgood (N. Amer. Fauna 19: 1-100, 1900; and *ibid.*, 30: 1-96, 1909) collected specimens at Charlie Creek, Circle, Eagle, and near Fort Yukon and Stevens Village.

Rand (Nat. Mus. Canada, Bul. 100: 1-193, 1945) reports that the National Museum of Canada has only two specimens in its collection. He also observes that colonies of M. Xanthognathus are scattered and are subject to violent fluctuations in population. What were once large colonies, when revisited, have often failed to yield a single specimen.— CALVIN J. LENSINK, Cooperative Wildlife Research Unit, (University of Alaska, United States Fish and Wildlife Service, Alaska Game Commission, and the Wildlife Management Institute, cooperating) University of Alaska, College, Alaska. Received March 30, 1953.

### PHENACOMYS IN MINNESOTA

Examination of two specimens in the U. S. National Museum (Biological Surveys Collection) that were reported by Swanson, et al., in THE MAMMALS OF MINNESOTA (Minnesota Dept. Conserv., Tech. Bul. No. 2: 90-91, 1945) as the yellow-nosed vole, *Microtus chrotorrhinus*, shows one to be the phenacomys vole, *Phenacomys intermedius*.

This specimen, USNM 274491, was collected by Shaler Aldous in 1940 at Ely, Minnesota. The dorsum is bright yellowish-brown, very much like examples of *mackenzii* from Ft. Smith, Mackenzie, and quite unlike the dull colored *levis* of the Rocky Mountains. This comparison eliminates *soperi*, as described by Anderson (Canadian Field-Nat., 56: 58-59, 1942), and I conclude that the specimen must be referred to *ungava*. The skull (badly broken) agrees with Anderson's description of *soperi* in the slight depression of the rostrum, but other features, including large size, wide interorbital region, and short, broad rostrum are characters of *ungava*.

Anticipating formal approval of the changes in the International Rules of Zoological Nomenclature that were proposed to the 13th International Congress of Zoology at Paris in 1948, Hall and Kelson (Univ. Kansas Publ., Mus. Nat. Hist., 5: 395-396, 1953) evoked the "page priority" rule and revived the name *celatus* to replace *ungava*. However, the "first reviser" rule remains in effect, and *ungava* must be used.

The other specimen, USNM 236431, collected by Vernon Bailey at Burntside Lake, Minnesota, in 1921, is correctly identified as *Microtus chrotorrhinus*. It agrees with New Hampshire and Quebec examples of *chrotorrhinus*.

The two specimens discussed above apparently remain the only specimens of Microtus chrotorrhinus chrotorrhinus and Phenacomys intermedius ungava reported from Minnesota.— CHARLES O. HANDLEY, JR., U. S. National Museum, Washington, D. C. Received March 25, 1953.

## BREEDING OF PEROMYSCUS FLORIDANUS IN CAPTIVITY

Because of the paucity of information about the life history of the gopher-mouse, *Pero-myscus floridanus*, the following notes on its breeding in captivity seem worth recording.

One male and one female of *Peromyscus floridanus* were received by the Laboratory of Vertebrate Biology in the year 1933. These had been captured by H. B. Sherman at Gainesville, Florida. Over the period from 1933 to 1935 this pair of animals produced a litter in each of the months of December, January, March, April, June, August, September, October, February, and March. Of the offspring that survived to marking age there were two litters of one young, five litters of two, and three litters of three. This makes a total of 21 young in ten litters, or an average of 2.1 young per litter. No information is available that any mortality occurred before the time of marking, but it is possible that some loss may have taken place. Some of the offspring were mated among themselves and also proved to be fertile. The animals were gentle though rather nervous.—LEE R. DICE, Institute of Human Biology, University of Michigan, Ann Arbor, Michigan. Received March 10, 1953.

#### OBSERVATIONS ON THE BIG PINE KEY COTTON RAT

Other than the original description (Allen, Jour. Mamm., 1: 235-6, 1920), no mention of Sigmodon hispidus exputus, the Big Pine Key cotton rat, has been made in mammalogical literature. This isolated race inhabits an outpost of the most uninteresting country in the United States, as far as mammals are concerned, and shares its domain only with Odocoileus v. clavium, Procyon l. incautus, Rattus r. alexandrinus, and Mus musculus. The race was described on the basis of two specimens, taken in 1920 by Winthrop S. Brooks on Big Pine Key; so far as known, little additional material assignable to this pale Lower Key form has been taken since that date. The recent collection of additional material makes it possible