

Rediscovery of the Rock Vole (*Microtus chrotorrhinus*) in Minnesota

The rock vole, *Microtus chrotorrhinus*, has long been included on lists of Minnesotan mammals, on the basis of a single specimen taken by Vernon Bailey in 1921 at Burntside Lake in St. Louis County. Swanson (1945, pp. 90, 92) reported a vole obtained at Ely by Shaler Aldous in 1940 as of this species, but Handley (1954, p. 260) re-identified it as a heather vole, *Phenacomys intermedius*. Subsequently, these two specimens have remained the only records of the two species in the state. Thus, more than 50 years have elapsed since the rock vole has been detected in Minnesota.

Two *Microtus chrotorrhinus* were trapped on 9–10 August 1973 at 17 mi N, 1 mi W Grand Marais, NW ¼ sec 29, T 64 N, R 1 E, elevation 1758 feet, Cook County, Minnesota, which is approximately 75 miles east of Burntside Lake. Both specimens were taken in association with a long narrow bed of boulders deposited by the Rainey Lobe of Wisconsin glaciation (9,000–10,000 years Before Present. Grout et al. (1959, p. 114) described this particular rock stream, the largest in the county, as consisting of boulders of granophyre and gabbro. Dominant vegetation near the center of the bed consisted of dry lichens that covered the boulders, and reindeer "moss" (*Cladonia*). Balsam fir (*Abies balsamea*), black spruce (*Picea mariana*), white cedar (*Thuja occidentalis*), white pine (*Pinus strobus*), aspen (*Populus*), paper birch (*Betula papyrifera*), mountain maple (*Acer spicatum*), prickly rose (*Rosa acicularis*), blueberries (*Vaccinium*), and red raspberries (*Rubus strigosus*) grew among the moss-covered rocks near the edge of the rock stream. The adjacent forest community also included thimbleberry (*Rubus parviflorus*), bunchberry (*Cornus canadensis*), Clinton's lily (*Clintonia borealis*), and clubmoss (*Lycopodium*). In some places, boulders covered with moss and leaf litter extended well into the dense forest.

The first rock vole was captured on the evening of 9 August in a trap set on the forest floor approximately 25 feet from the open rocks. The second was trapped during the early morning hours of 10 August at a hole between two large boulders near the edge of the rock stream and forest. Both were captured in Museum Special snap-traps baited with a mixture of peanut butter

non-breeding, subadult male with testes 3 by 4 mm. Neither animal displayed evidence of molt. Ectoparasites collected from the two rock voles include fleas (*Peromyscopsylla catatina* and *Megabothris quirini*), mites (*Laelaps alaskensis* and *Laelaps kochi*), ticks (*Ixodes angustus*), and chiggers (*Trombiculidae*).

External and selected cranial measurements (all in millimeters) for the female and male are as follows: total length, 160, 132; length of tail vertebrae, 46, 40; length of hind foot, 21, 19; height of ear from notch, 16, 15; greatest length of skull, 26.1, 24.3; zygomatic breadth, —, 14.2; alveolar length of upper toothrow, 6.3, 5.6; least interorbital constriction, 3.5, 3.6; length of nasals, 7.4, 6.6. Weights were 33.0 g and 21.8 g, for the female and male, respectively.

In addition to the two *Microtus chrotorrhinus*, one *Sorex arcticus*, two *Sorex cinereus*, four *Blarina brevicauda*, three *Eutamias minimus*, two *Peromyscus maniculatus*, seven *Clethrionomys gapperi*, and one *Napaeozapus insignis* were captured in the 167 traps set in this area for 3 days. *Tamiasciurus hudsonicus* was abundant in the surrounding forest. It is noteworthy that *Microtus pennsylvanicus*, an abundant microtine elsewhere in northern Minnesota, was not detected at this locality.

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Literature Cited

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