DEN-USE BY MINK

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Abstract: Data obtained from radio-tracking a juvenile female mink (Mustela vison) for 29 days indicate that 2–3-month-old juvenile mink are not restricted to certain dens for extended periods of their first summer. Similarities such as tunnel size and depth and location of dens relative to a sedge mat were noted among 20 different den sites within a 77-acre area used by one family of mink.

This paper presents data on den-use obtained while radio-tracking a juvenile mink during a 29-day period, 1 mile Northwest of the Cedar Creek Natural History Area in east-central Minnesota. Relatively few data concerning the denning behavior of wild mink have been documented.

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METHODS

A juvenile female mink, weighing 350 g, was captured by hand on July 5, 1968, in a tunnel of an underground den. A transmitter, similar in design to those described by Mech et al. (1965) and a 3/8-inch-wide vinyl collar (Wildlife Supply Company, Saginaw, Michigan) were fit around its neck. The transmitter collar was joined to the vinyl collar with two, 5/16-inch straps of polyvinylchloride, one on each side of the mink’s neck (Fig. 1). The vinyl collar was included to make it more difficult for the mink to remove the transmitter. Total weight of the package, including an RM630 battery, was 20 g. The radio-marked mink was returned the same day to the point of capture and released. On July 16, the mink was recaptured with the use of a wire ferret (Storm and Dauphin 1965) and the transmitter battery was replaced.

The location of the tagged mink was obtained once daily during daylight hours using a portable receiver except for 6 days during the period July 5–August 4, 1968.

RESULTS AND DISCUSSION

During the first 11 days after release, the radio-tagged mink gained 90 g and appeared in excellent condition when examined on 16 July.

Six different dens were used by the tagged mink during the period July 5–July 15. Eleven different dens were used during the period July 16–July 31, 1968. Three additional dens were found prior to the time the mink was tagged. Use of the same den for 2 consecutive days was recorded only once, but five dens were re-used after an interval of at least 1 day. Gunderson and Beer (1953:148) reported that mink in Minnesota are usually born in late April or early May. Thus it appears that 2–3-month-old juvenile mink are not restricted to a particular den for extended periods during their first summer.

Observations by Marshall (1936:385) indicated that each of two females used only two dens regularly during the winter. Male
mink, however, did not use the same dens repeatedly, but tended to use the most convenient dens available. Errington (1943: 814) reported that many dens were used by mink litters before family break-up in mid- or late summer. He found that dens were used for varying lengths of time (up to several weeks) but were used for shorter periods late in the season. When potential den sites were available, the new den was usually within 100 yards of the old one.

The straight line distance between different dens used during 2 consecutive days in this study ranged from 109 yards to 934 yards and averaged 388 yards. All of the den sites were located within a 77-acre area.

Each den was situated at the junction of the sedge mat and upland, and within 200 yards of open water. One entrance was usually located within a few yards of the sedge mat; ground water was often visible in this entrance. Tunnels extended onto higher ground and the other entrances were distributed in an irregular pattern along the tunnel system. Some entrances were easily located by following runways in the dense grass while others were quite inconspicuous. Eight dens were examined in detail by excavating the tunnel systems. For these, number of entrances found per den site ranged from two to five and averaged 2.9. Den tunnels did not extend more than 1 ft below the ground surface, perhaps due to the high water table. Diameter of the tunnels ranged from 4 to 6 inches. Origin of the dens was not determined but it is likely that most had been previously excavated and occupied by muskrats (*Ondatra zibethicus*).

**LITERATURE CITED**


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