

# TECHNICAL NOTES

U.S. DEPARTMENT OF AGRICULTURE      WYOMING      SOIL CONSERVATION SERVICE

Biology No. 119

January 1986

Subject: WESTERN JUMPING MOUSE\*

## General

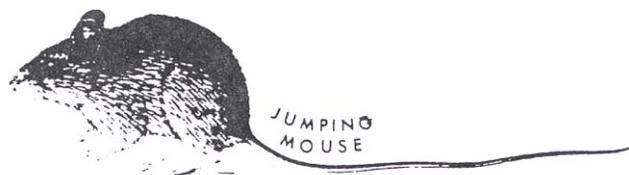
The western jumping mouse (Zapus princeps) is commonly found in moist habitats with lush vegetation, especially in areas of willows and alders which border many western streams.

## Food Requirements

The diet of the western jumping mouse in north-central Colorado was 66 percent plant material and 34 percent insects. Forbs comprise over half of the summer diet. In Wyoming, 82 percent of the diet by volume was seed fragments and 18 percent was green plants.

## Water Requirements

No drinking water requirements were found in the literature. In Wyoming, most mice were trapped within 82.0 ft (25 m) of water, although some were trapped as far as 328.1 ft (100 m) away from water. One study found that the home ranges of western jumping mice rarely extended farther than 100 ft (30.5 m) from the edge of a stream.



Prepared by: Richard Rintamaki, State Biologist

  
State Resource Conservationist

\*Information taken from Ecoregion M3113 Handbook and Habitat Suitability Index Models, Wildlife Species Narratives (literature searches), U.S. Fish and Wildlife Service, various dates between 1978-1984.

#### Cover Requirements

In Wyoming, most mice were trapped in areas where the vegetation was very dense and waist high.

Western jumping mice are active for only a few months out of the year. At 6,750 ft (2,057 m) elevation in Wyoming, the mice were active from mid-May to early August. One study found that the maximum duration of the summer activity ranged from 2.5 months at 10,500 ft (3,200 m) in elevation to 4 months at 8,500 ft (2,591 m). Heavy snow accumulation may be necessary to keep the mice from freezing in their subterranean nests during the winter. Another study states that winter nests were usually 12 to 3 ft (0.6 to 0.9 m) underground.

#### Reproductive Requirements

One study reported finding two nests in Wyoming made of dried grasses, sedges, and strips of plant fiber-one located under a large rotten log and one beneath an old stump. Summer nests may be constructed on the surface of the ground or in forbs or small shrubs.

#### Special Habitat Requirements

Western jumping mice in Wyoming were trapped almost solely in areas where the ground was damp or spongy underfoot. A few were found in dry situations, but none were trapped in areas with standing water.

#### Interspersion Requirements

Home ranges of jumping mice in southeastern Wyoming were from 150 to 1,055 ft long (45.7 to 321.7 m) and 50 to 150 ft (15.2 to 45.7 m) wide. The long axis was parallel to a meandering streambank, and the mice followed the stream border in their foraging activities. In Colorado, one study reported a mean home range of 0.76 acres (0.31 ha) for males and 0.59 acres (0.23 ha) for females.