

at a glance

- Small, heavy-bodied rodents, voles have short legs and tails; small, rounded ears; and coarse, blackish to grayish-brown fur.
- Full-grown voles average 4½ to 5½ inches long, including the tail.
- Vole feeding activity causes significant damage in landscapes, lawns, and gardens.
- Voles are sometimes called meadow mice.
- Voles are active year-round.
- Voles can be managed without chemicals or with chemicals called rodenticides.

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Managing Voles in Idaho Lawns and Landscapes

Introduction

The meadow vole (figure 1), or meadow mouse (*Microtus pennsylvanicus*), is the most common vole species in Idaho. During most years, voles are not a significant problem, and populations are partially controlled by predators. Minor peak populations occur approximately every 4 to 6 years, and epidemic populations occur about every 10 to 12 years. Voles can reproduce year-round, and population explosions last about a year.

Voles damage pastures, lawns, and landscapes by feeding on roots and stems, grass, seeds, and underground reproductive structures such as bulbs and tubers. They damage and kill trees and shrubs by girdling—removing the bark from the trunk or stems near the base.

Vole Management

Routinely monitor lawns for signs of feeding activity from early spring until late fall. Shallow tunnels and runways (figure 2), clipped shoots or leaves, and gnawed stems, bark, and roots are signs of possible vole activity.

Nonchemical practices

Eliminate habitat. Vegetation modification practices in early spring through late fall include the following:

- Mow or burn ditch banks, barrow pits, and fence lines.
- Clear weeds and debris from windbreaks and other affected areas.



Figure 1. Vole (meadow mouse). Photo by Danielle Gunn



Figure 2. Vole infestation with feeding area, runways, and entry hole. Photo by Danielle Gunn

Exclude voles from trees, shrubs, and flowerbeds.

- Surround plants with $\frac{3}{8}$ inch netted wire installed 6 inches below soil level and to approximately 6 inches aboveground.
- Install aluminum flashing or other materials around areas of concern to serve as entry barriers.

Use wooden mousetraps to eliminate infestations, starting in early spring.

- Place traps flush with the ground and at right angles to surface runways.
- Stake the trap using a small chain to prevent predators from dragging away the vole and trap.
- Bait traps with peanut butter, oatmeal, or apple slices.
- Examine traps daily and remove and bury dead voles. Always wear gloves when handling voles to prevent contact with harmful organisms.
- Place traps where children and small pets cannot reach them.

Chemical practices — Hand baiting

Toxic bait can be purchased from home-and-garden and farm-supply stores. Many of these baits must be placed in bait stations (enclosed feeding devices) to prevent

consumption by nontarget animals. Place bait stations in runways or next to burrows so voles will find them while traveling their normal routes.

Always use fresh bait products. Pre-baiting with nontoxic bait that is the same size, shape, and formulation as the toxic bait may be used to increase successful control.

Use caution when applying baits where children, pets, and other nontarget animals are likely to be present as they can be affected by direct contact with the bait. Dispose of dead voles and any spilled bait so there is no chance of unintended poisoning.

Zinc phosphide. An acute poison, it acts rapidly, and a single feeding can be lethal within 12 hours. Timing of use is early spring through late fall. Zinc phosphide baits labeled for gopher control can be used for vole control. However, they must be placed directly underground in the vole entry hole or in a bait station to keep them out of reach of children, pets, and other nontarget animals.

Do not apply zinc phosphide when moisture is anticipated, and do not allow it to get wet. Moisture activates the chemical, rendering it ineffective very quickly. Zinc phosphide is toxic to humans and nontarget animals.

Anticoagulant chemical baits (Rozol Vole Bait, Rodex, Kaput). These baits are formulated using grain or other food sources that attract rodents. They are usually in the form of pellets and blocks, and some are coated in paraffin to resist moisture. Some require multiple feedings for a lethal dose.

These baits can be used around homes and buildings and lawns but not where food crops are being produced or any kind of feed or food is being stored. General-use anticoagulant baits labeled for gopher control can be used for vole control, as long as they are placed directly underground in the vole entry hole or in a bait station. For use at any time of year, these baits are toxic to humans and nontarget animals.

ALWAYS read and follow the instructions printed on the pesticide label. The pesticide recommendations in this UI publication do not substitute for instructions on the label. Pesticide laws and labels change frequently and may have changed since this publication was written. Some pesticides may have been withdrawn or had certain uses prohibited. Use pesticides with care. Do not use a pesticide unless the specific plant, animal, or other application site is specifically listed on the label. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

Trade Names—To simplify information, trade names have been used. No endorsement of named products is intended nor is criticism implied of similar products not mentioned.

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