



How to manage vole damage on lawns, trees and shrubs

Quick facts

- Voles can cause damage to small trees and shrubs.
- They can have multiple litters in a year, and every 3 to 5 years there is a population boom.
- Lawn damage is most visible in the spring.
- Prevent and manage vole damage through yard sanitation, reseeding grass, tree guards, trapping and pesticide application.

Voles

Voles, also known as field mice, are small brown rodents very common in yards and fields. They are about the size and shape of a mouse, and have small ears and a short tail. Minnesota has several species of vole, the most common being the meadow vole (*Microtus pennsylvanicus*) and the prairie vole (*Microtus ochrogastor*).

Their presence is most often observed in the late winter and early spring right after the snow melts, when their grassy trails are exposed and areas of dead grass appear. Voles do the most harm to small trees and shrubs when they chew on the bark, often hidden below winter snow.

Life cycle

- Like most rodents, voles do not live long.
- They are very productive breeders.
 - One female vole can have 5–10 litters in a year, averaging 3 to 5 young.
 - They may nest in shallow grass-filled nests on the ground, or dig a small tunnel about 4 to 5 inches down to nest.
- Vole populations cycle. Every 3 to 5 years there will be a population boom.
 - Mild winters with good snowfall can help to increase vole populations.
- Voles are a prime food source for many predators such as snakes, hawks, owls, foxes and badgers.

Identifying vole damage

- Voles spend a great deal of time eating grass and roots and making trails. These surface runways are one of the easiest ways to identify voles.
 - Usually seen in early spring just after snowmelt, a series of criss-crossing trails can be viewed on the surface.

- There may be larger patches of dried grass that serve as storage areas for extra food and nesting materials.
- Voles will also make small holes about 1 inch across to get to tubers and bulbs.
- Voles sometimes use mole tunnels, which causes moles to be blamed for eating roots instead of the white-grubs they actually eat.
- Vole damage may also be noticed on trees and shrubs where they have chewed through the bark near the ground. The vole's front teeth will leave $\frac{1}{4}$ inch side-by-side grooves in the wood.



Vole tunnels in snow



Vole runway

Preventing and managing vole damage

Voles may go unnoticed for a large portion of the year. In an average year, it may not even be worth the effort to control the population.

Yard sanitation

Voles are very common and total prevention is impossible, but general yard sanitation may help keep vole numbers down.

- Remove woodpiles and other debris from the ground that may be hiding places for voles.
- Keep grass trimmed short and bushes trimmed up from the ground.
- Bird feeders are another attraction for voles. Remove them or keep the ground very clean.

Reseeding grass

While lawn damage is most visible in the spring, it is rarely permanent.

- Rake up the dead grass and reseed the area.
- As the surrounding grass grows, it will cover up the trails.

Tree guards

Prevent vole damage to tree bark by encircling the tree with a light colored tree guard.

- The guard should be tall enough to reach above the snow line in the winter.
- The base should be buried in the soil or have a soil ridge around the base.
- Make sure that the guard is loose enough so that it does not constrict the tree.

Trapping

In small areas, trapping may be an effective way of reducing vole populations.

- Standard mouse snap traps set along runways or near tunnels will catch some animals.
- Bait with peanut butter.
- Cover the traps so that pets and children do not accidentally find them.

Pesticides

Reduce large vole populations with toxic baits.

- There are some pesticides available for home use. Be sure to read the label before you buy any pesticide and again before you use the pesticide.
- Vole baits should be placed inside bait stations to reduce the risk of non-target species ingesting the bait.
- Most pesticides recommended for voles are restricted and can only be used by certified pesticide applicators.
- Contact your local Extension educators for more information about pesticide use.

CAUTION: Mention of a pesticide or use of a pesticide label is for educational purposes only. Always follow the pesticide label directions attached to the pesticide container you are using. Remember, the label is the law.

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