

## Protecting Trees from Winter Voles Feeding

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It is time to protect young trees from vole damage. When green foliage is no longer present, voles turn to other plant parts such as tree bark and inner wood of young trees.

Voles are small, mouse-like rodents found throughout Nebraska. Though commonly called meadow or field mice, their one inch long tails, stocky build, and small eyes distinguish them from true mice.

While they may cause some landscape damage, keep in mind voles are an important food source for many predators like snakes, hawks, owls, foxes, coyotes, and mink. Mortality rates for voles are very high. Life expectancy in the wild often does not exceed two months, with few living longer than 16 months.

Voles do not hibernate. All winter, they feed on plant seeds as well as leaves and stems of grasses, and occasionally roots and bulbs. They can actively feed on turfgrass beneath snow cover, although turf recovers fairly quickly once spring growth begins.

The most economic damage voles do is feeding on and girdling young trees which can kill them. High populations and vole tunneling may undermine retaining walls, causing them to collapse.

Voles usually damage woody plants from late fall through early spring. They tunnel through snow, and may gnaw on trees and shrubs up to the height snow accumulates. Individual tooth marks, about one-sixteenth inch wide and three-eighths inch long, may be visible on the wood after winter.

The gnawing marks left by voles will be irregular in appearance and at various angles. In contrast, rabbits leave tooth marks that are about one-eighth inch wide and very regular.

The best way to protect young trees is exclusion. Use one-fourth inch hardware cloth or plastic cylinders to protect individual trees.

The cylinders should be tight to the ground or buried two to three inches deep and extend higher than the expected snow depth in winter. If rabbits are a concern, cylinders should extend about 18 inches above the expected snow depth.

When making the cylinder, overlap the edges at least one inch and fasten securely so gaps do not form where voles can squeeze through. Cover the tops of the tubes to prevent trapping birds.

If plastic wraps are used, remove these during spring and replace them the following November. Cylinders of galvanized hardware cloth should last about five years. Make them large enough in diameter to accommodate expected trunk growth if they are to be left in place during the growing season.

To help reduce vole populations, make the habitat less suitable to them. High populations cannot become established without food and protection from predators.

Keep weedy areas mowed and avoid deep mulch layers near trees and shrubs as these harbor voles. Know that voles often thrive under weed barriers laid on the ground to control weeds around shrub and tree plantings.

Voles are often attracted to spilled bird seed since grains are a favorite food. Find ways to reduce spillage from bird feeders and clean up spilled seed on a regular basis. If possible, move bird feeders to areas less susceptible to vole damage or easier to clean up.