



Tunnels and Holes from Moles and Voles

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If you have rodents making tunnels in your yard, it's important to figure out which critter is the culprit so that you can use the proper management practices. Vole and mole damage look quite different from one another, so they should be easy to identify and then manage appropriately.

IN THE HOME LAWN

Voles - Voles are small brown rodents about the size and shape of a mouse. They have small ears and a short tail. Voles are common in yards. They eat grasses and roots and leave trails. We usually observe their small surface tunnels winding through lawns right after snow melt.

Moles - Moles are also small rodents; they have small eyes, concealed ears, and front feet designed for digging. Unlike voles, moles are mostly predatory, eating earthworms, grubs, and other soil-dwelling arthropods. Moles have deep below-ground tunnels as well as surface tunnels. Entrances to mole tunnels may have mounds of excavated soil, often called molehills, near them.

DAMAGE

Voles - Where voles are present, the grass is usually eaten to the soil line, leaving the crown of the grass plant intact and healthy. In time, new leaves will emerge from the crown and fill in the bare areas. If no new growth is noticed after the rest of the lawn is actively growing, the affected areas can be reseeded with a high quality lawn seed mixture, selected for the affected environment (shady vs. sunny, dry vs. wet soil).



Vole damage in lawn. Photo credit: Troy Salzer

Voles do not limit themselves to lawns. They often feed on the outer part of the trees and woody shrubs. If severe, vole damage on plants can cut off the plant's transport system for energy and other important resources, eventually leading to the plant's death. Just like in grass, this damage is often hidden by snow cover. There is little you can do to cure damage, but you can prevent the plant from experiencing further damage.



Left: vole damage on Spirea bush Photo credit: Troy Salzer Right: Extensive vole damage on an amur maple (branch diameter: four inches). Photo credit: Adam Austing

Moles - Even though moles do not eat plants, their tunnels can cause damage by disturbing plant roots. Moles dig tunnels just under the soil surface, searching for grubs, worms, and insects to eat and unintentionally damage or destroy grass roots along the way. This results in the death of the grass directly above the tunnels. Where the moles create entrances to their underground tunnel network you might also see molehills, which are mounds of dirt that the mole has pushed to the surface from below ground.



Molehills in a residential lawn. Photo credit: Troy Salzer

PREVENTION AND MANAGEMENT

Voles - Voles are very common, but there are ways to discourage them from taking up residence in your yard. Continue to mow the lawn while it is actively growing. Avoid mowing the grass shorter

than two inches as this may expose the crown of the grass plant to severe temperature extremes resulting in winter injury. Eliminate any weeds, wild grasses, or litter from around the yard so it does not provide food and cover.

Large vole populations can most effectively be reduced using toxic baits. There are some available for home use. Bait should be placed inside bait stations to reduce the risk of non-target species ingesting the poison. When using bait stations, check them several times a week and replace any bait that has been consumed. Be sure to read and follow all directions and precautions on the label. Bait stations should be used with extreme caution because they may pose a threat to children and pets.

If voles have damaged your lawn, patience is key. Lawns typically fill in once the weather warms. Remember that voles are always present and most of the time it is not worth the effort to try to control them.

Moles - Moles use and reuse some, not all, of their surface tunnels repeatedly. To determine if a tunnel would make a good trapping site, determine whether it is currently in use. Step on a tunnel to compress the soil. If a mole is actively using it, the mole will raise the soil or turfgrass within approximately 24 hours.

Moles feed on soil-dwelling insects, so the presence of moles could be an indicator that you have an abundance of soil-dwelling insects. You can attempt to manage moles by managing their food source. Consider treating your lawn for white grubs (scarab beetle larvae) if you find large numbers of white grubs under your turfgrass. Just like voles, keeping the lawn mowed at recommended heights of 3-3.5 inches will reduce habitat and cover from predators.

CONCLUSION

Vole and mole damage are fairly easy to distinguish from one another. Once you determine which rodent is the culprit responsible for the tunnels in your yard, you can proceed with management.

ADDITIONAL RESOURCES

Here are a few additional resources with some good information on controlling voles and moles:

<https://extension2.missouri.edu/g9440>

<https://extension.umn.edu/planting-and-growing-guides/how-trap-moles>

<https://extension.umn.edu/planting-and-growing-guides/vole-damage>

<http://z.umn.edu/voles>

