

James City County/Williamsburg Master Gardeners Report
Fall 2006

Subject: VOLES AND MOLES UPDATE

Identification:

Moles are insectivores. They continuously tunnel as they look for earthworms and grubs; they rarely surface, as they are essentially blind and quite timid. Since they live underground away from predators, they do not need to reproduce rapidly and only have one litter a year.

Voles are herbivores, small tunneling rodents that voraciously eat nuts, seeds, bark, bulbs, roots, and stems. They are commonly called meadow or field mice. They are distinguished from true mice by their stocky build and short tails. The breeding season for all voles encompasses most of the year, although peaks occur in spring and fall. They normally have five to ten litters per year and average three to five young per litter.

To tell the difference between a vole from a mole, notice the mole's lack of visible eyes and ears, the hairless snout, and the large, specialized forefeet, with powerful digging claws on thick legs that are turned outward. Voles' eyes are big and black like a mouse and they have mouse-like feet. Voles are more likely to be seen since they are unafraid of daylight and the surface of the ground.

Except for the tunnels detracting from a lovely lawn, moles are beneficial in that they eat grubs. Voles, however, are destructive to many plants and trees.

Control:

Moles: Do nothing – beneficial

Trapping – most effective, using traps specific to moles

Cultural – pack soil –reduce moisture

Biological – Such as Milky Spore, may reduce food supply but, other food, earthworms, are still available.

Voles: Trapping – Standard house mouse trap. Peanut butter bait and cover. Place traps adjacent and perpendicular to holes and runways.

Exclusion – Vole Block by Permatill. Use with new plant material.
Great for aeration of soil

Fence seedlings and young trees. Place hardware cloth cylinders around the trunk of trees and shrubs, dug into the ground at least six inches deep.

Bulbs – mesh basket

Repellents – Hot stuff such as cayenne pepper products– short term.

Biological –Your cat or rat snake.

Chemical – Rodenticides labeled for outdoor use. Caution for pets and non- target wild life.

Zinc phosphide baits – little danger of poisoning wildlife by their eating the dead voles, in contrast to anti-coagulants (Warfarin based) which cause internal bleeding and hemorrhaging leading to death.

(If you use poison baits, place the poison bait directly into burrow openings, or in a bait container, to reduce the hazard.)

Testimonials of product use:

Bob Stiffler, gardening correspondent for the Virginian Pilot, wrote in 2002 about a recipe for eliminating voles from Tony Avent, operator of Plants Delights mail order nursery in North Carolina. He uses **Rozol**. It's a bait, but safe around cats and dogs. "Put some in the vole holes you see; they're about the size of a quarter. Cover the hole with a bucket, or pot. Every 10 feet put out more Rozol, whether there's a hole or not, and cover. Repeat the process every two weeks. You've got to be more persistent than they are. After two years, you will be rid of voles".

A local area grower of flowers for commercial purposes suggests the use of a product named **Rodetrol**. Made from a corn by-product, it is not harmful to cats, dogs, and birds. When the first sign of holes appears, put a tablespoon of the product down the hole and cover. Be diligent, and you should see a definite decrease in the amount of holes and damage.

References: www.Voles.com; University of Minnesota Extension Service; Virginian Pilot; Bob Annette, master gardener, Hampton, VA; The American Rhododendron Society of MA – The Rosebay Volume 27.