

RUTGERS COOPERATIVE EXTENSION

NEW JERSEY AGRICULTURAL EXPERIMENT STATION

Voles in the Vegetable Garden

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Damage:

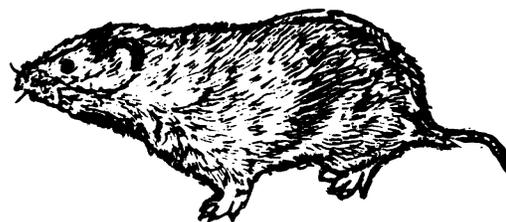
Voles eat a wide variety of crops and plants, with a preference for grasses. Voles eat many field crops, especially when populations are high. In late summer and fall, voles store seeds, tubers, bulbs, and rhizomes in their tunnels. Voles also cause damage by the extensive tunnel systems that they build, resulting in root destruction and interfering with crop irrigation by displacing water and causing levees and checks to wash out.

Description:

Voles reach a length of 5 to 7 inches at maturity. Their dense fur is grayish to brownish, and the underparts are generally gray, sometimes mixed with yellow or buff.

Life History:

Voles do not hibernate, so they are active day and night throughout the entire year. They construct a complex tunnel system, with surface runways and numerous burrow entrances. A single tunnel system may contain several adults and young.



Vole

A vole's life span is short, ranging from 2 to 16 months. Breeding occurs primarily in spring and summer, and they may produce from one to five litters per year, each litter averaging three to six young. Females mature in 35 to 40 days.

Control:

1. Eliminate weeds, ground cover, and crop litter in and around the garden, lawn, and other cultivated areas. This reduces the availability of food and cover for voles, thus decreasing the capacity of these areas to support them.

2. Lawn and turf must be mowed regularly, especially if the garden is nearby. A weed-free or vegetation-free strip is an excellent buffer around areas to be protected. The wider the buffer strip, the less likely voles will cross it into the garden area.
3. Frequent tillage in the garden removes cover, destroys existing runways or tunnels, and will eliminate a high percentage of the existing population.
4. Several effective baits have been developed for vole control, usually labeled for noncrop areas. Rates and method of application vary; read and follow all label directions and restrictions.
5. Wire or metal barriers, at least 12 inches high, with a mesh size of 1/4 inch or less will exclude voles from a garden area. Bury the bottom edge 6 to 10 inches to prevent voles from digging beneath the barrier.
6. Mouse traps (snap-back traps, Fig. 1) can be effective in reducing the vole population. Place the trap perpendicular to the runway with the trigger end in the runway. Apple slices or a peanut butter-oatmeal mixture make good baits.
7. In general, fumigants are not effective due to the complexity and shallowness of the tunnel systems. Repellents and frightening agents have not proven effective, either. However, "Bonide Rabbit, Deer and Field Mice Repellent*" is labeled for voles.
8. A section of roofing shingle placed over the burrow opening and baited with an apple slice will attract voles. A trap can also be placed under this shingle, because voles are readily attracted to shingles or pieces of plywood placed on the ground. Shingles should be bent to form an A-shaped roof. Plywood or flat material should have small blocks under the corner to allow for a crawl space. These items can also serve as bait sites. Leave in place a few days before baiting to allow the animals to become accustomed to them.
9. Cats are natural enemies of voles. Keeping a cat near vole-infested areas will help reduce these pests.

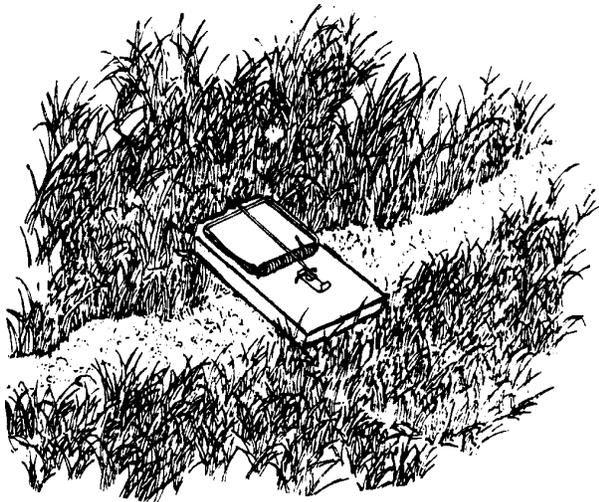


Fig. 1. Snap-back trap, set perpendicular to vole runway

* Information in this reference appears with the understanding that no discrimination is intended and no endorsement by RUTGERS COOPERATIVE EXTENSION is implied.