
Preventing Rodent Damage in Greenhouses

Rodents can cause a lot of damage in the greenhouse. They can feed on germinating seed and young plants as they emerge from the soil. Rodents also feed on roots, bulbs, shoots and leaves of many plants in the greenhouse. They can also chew holes on plastic pots and create tunnels through the growing media. For those growing fresh produce in the greenhouse such as salad greens, micro-greens, tomatoes etc., rodents can create food safety concerns because of possible contamination. FDA food safety regulations require growers to take effective measures to exclude rodents from finding entry into the greenhouse.

It is important to determine the species of the rodent causing problems in your greenhouse. The most common rodent pests in the greenhouse in Massachusetts are the white footed mouse and the meadow vole. Chipmunks may also sometimes find their way into the greenhouse.

White Footed Mouse: The white footed mouse has white feet, white underside and brownish upper surface. They also have relatively large eyes and ears. They are nocturnal and omnivorous but their diet consists largely of seeds, nuts and berries. White footed mice are excellent climbers and often forage in trees. In the greenhouse they cause damage by feeding on germinating seeds.

Meadow Voles: Meadow voles are about 5½ to 7½ inches long (including tail length). The fur has variable color ranging from grey to yellow-brown with black tipped hairs and a bicolored tail. They are usually found in grassy areas. They are active at all hours but are most active early morning and late afternoon. They are generalist herbivores and largely subsist on vegetation including shoots, roots and grass. They mainly damage plants above the soil. In the greenhouse they cause damage by feeding on shoots of young plants.

Chipmunks: Chipmunks are small underground squirrels with five black stripes and two light stripes along the back. The belly is white and the tail is flattened. They undergo hibernation during the winter in burrows and emerge in the spring and are active during the day. Sometimes they emerge from their burrows and forage above ground on warm winter days. They feed mostly on seeds, nuts and fruit. They are sometimes common visitors in the greenhouse in the spring where they feed on germinating seeds.

Rodent Proofing: The first step to control rodents in the greenhouse is exclusion or rodent proofing your greenhouse. Some of the rodents such as mice can get in through an opening as small as ¼ inch. Use fine mesh screen around the perimeter of the greenhouse at least 6 inches deep and bend outward at a 90° angle.

Sanitation: Sanitation will also do a great deal to control rodents. Clean up the natural vegetation close around the greenhouse. Remove debris such as plant matter, trash, and piles of waste lumber or abandoned appliances. Do not stack firewood near the greenhouse. These provide good harborage for rodents. Do not store bird seed, pet food, or seeds in the greenhouse. Keep trash cans in the greenhouse covered (keep the lids on).

Traps and Baits: If rodents are already in the greenhouse trapping can be effective if the populations are low. Traps are effective non-toxic methods of rodent control. The most common traps include the snap traps and the glue board traps. Traps should be set with a good understanding of the behavior of the rodents. Rodents are creatures of habit and prefer to follow the same runways they usually use. Identify the runways and place the traps there. Use baits for on the traps to attract the rodents: peanut butter or uncooked oatmeal for mice or a piece of an apple for voles (Cortland apple works best). Wear gloves when placing the trap so that the rodents would not smell human scent.

If trapping fail to reduce the population one can use toxic baits (rodenticides) which are more effective in controlling the rodent population. The Rodenticide baits include Zinc phosphide and anticoagulant baits. Make sure you read and follow the label.
