School Pest Solutions



Rodents

The most persistent rodent pests in schools are the house mouse, roof rat, and Norway rat. Whitefooted, deer mice, and voles (meadow mice) may also be troublesome, especially in fall and winter when they come indoors seeking shelter and a ready food supply. Rodents damage stored items, consume and contaminate food, and serve as reservoirs of several diseases. Most rodent problems can be prevented with landscape maintenance, good sanitation, pest-proofing, and monitoring with traps to catch them before they become an invasive pest. An active trapping effort is almost always effective in ridding buildings of mice. Rodenticides are not generally recommended except to reduce very high populations. Rodenticides may only be used in locked bait boxes serviced by a licensed applicator.



Norway rats are common pests.

Sanitation

- Inspect the school grounds for food sources. Remove edible plants, fallen fruit and nuts, and animal feces.
- Keep lids on trash cans and close dumpsters at night. Cover the drainage holes in dumpsters with wire mesh to keep rodents out.
- Remove debris, lumber piles, firewood, trash, and discarded items to reduce shelter for rodents. Trim all vegetation at least 3 feet from all buildings to decrease cover for rodent runways and prevent hidden access to buildings.
- Break up long stretches of dense vegetation or tall ground cover that allow rodents to travel long distances under cover.

Rodent Proofing

Also called exclusion, rodent proofing involves tightening a structure so that rodents cannot get in. A young rat can squeeze through an opening as small as 1/2-inch. Any opening that a pencil can fit through will admit a mouse. Inspect and seal doors, door sweeps, weather-stripping, cracks, gaps, and other openings where rodents may enter a building.

Traps

Trapping is preferable to using rodenticides for controlling rodents on school grounds. Traps can be used in situations where poisonous baits are not allowed; they also avoid the odor problem of rodents dying in inaccessible places. School staff do not need a license to use mechanical traps for rodent control.

Rodents often run along edges, and they routinely follow the same runways. Identify runways by sprinkling a fine layer of flour or baby powder in suspected areas to observe tracks. Place traps along walls and runways, 6- 10 feet apart, especially where objects such as a box or appliance will guide them into the trap. Roof rats and Norway rats usually fear new items in their environment; they avoid them for several days. Keep all rat traps in place for at least 1 week before moving them.

Traps used for rodent monitoring or management should be checked daily. Traps or other surfaces contaminated with rodent urine or feces should be properly disinfected or disposed of.

Baits

The bait depends on the rodent. House mice prefer peanut butter, gum drops stuck to the trigger, or rolled oats or bird seed sprinkled on the trap. When food is abundant, nesting material, such as a cotton ball tied to the trigger, can be effective. Roof rats prefer peanut butter, pieces of fruit, or shelled nuts. For Norway rats, use raw or cooked meat, fish (sardines are excellent), or peanut butter.

Snap Traps: Both the classic rodent wooden trap and the newer metal clothespin design kill trapped animals quickly. Snap traps should be placed in locked rooms or other areas not accessible to children. **Live Traps:** Several types of live traps are available. Some catch a single rodent, others reset themselves to capture several. Check live traps regularly to prevent the captured rodents from starving or dying of thirst and creating an odor problem. These traps may be expensive and the live animals must be dealt with. Rodents should not be released to the wild.

Glue Boards: These are most effective against juvenile mice in dry, dust free areas. Although rat-sized glue boards are available, captured rats can often pull themselves free. Use a tack, a small nail, wire, or double-sided tape to fix glue boards to ledges, pipes, or rafters. Do not set them near open flames or above carpet. These traps should not be set where children or domestic animals will come into contact with them. Although they are not hazardous to children, an encounter with a glue board can create a frustrating mess. Clean hands with room-temperature cooking oil. Clean hard surfaces with paint thinner or mineral spirits.

Chemical Control

In situations where trapping alone cannot resolve rodent problems, anticoagulant baits are usually effective. Because rodenticides may be highly toxic to humans, they should only be used in secure locations and contained in tamper-resistant bait boxes. As with all pesticides, it is a violation of Maine law for unlicensed persons to use rodent poisons in schools. Be sure your pest control professional follows these guidelines for using rodent poisons:

- Use rodent bait stations that are locked and firmly anchored. Place bait stations in areas inaccessible to children.
- Place rodenticides in the baffle-protected feeding chamber of the box. Never place bait in the runway.
- Bait stations should be monitored and serviced regularly, and removed promptly when rodents are no longer using them.
- Have your licensed applicator provide a map showing locations of all traps and dates of service.

Anyone making pesticide applications on school property must be licensed by the Board of Pesticides Control. See "Standards for Pesticide Applications and Public Notifications in Schools."

For More Information

Hillary Peterson
Maine School IPM Coordinator
Maine Department of Agriculture, Conservation and Forestry
28 State House Station
Augusta, ME 04333-0028

E-mail: hillary.peterson@maine.gov

Phone: 207-215-4793 Fax: 207-287-7548

Written by Kathy Murray, Ph.D.