

Shrews

Gary L. Heilig Horticulture Educator
MSUE Ingham County July 2009

Shrew Control

Identification

The shrew is a small, mouse-sized mammal with an elongated snout, a dense fur of uniform color, small eyes, and five clawed toes on each foot. Its skull, compared to that of rodents, is long, narrow, and lacks the cheekbone arch on the lateral side that is characteristic of rodents. The teeth are small, sharp, and commonly dark tipped. Pigmentation on the tips of the teeth is caused by deposition of iron in the outer enamel. This deposition may increase the teeth's resistance to wear, an obvious advantage for permanent teeth that do not continue to grow in response to wear. Shrew feces are often cork screw shaped, and some shrews use regular defecation stations.

Shrews are similar to mice except that mice have four toes on their front feet, larger eyes, bi-colored fur, and lack an elongated snout. Moles also are similar to shrews, but are usually larger and have enlarged front feet. Both shrews and moles are insectivores.

Prevention and Control Methods

Rodent-proof your structures to exclude shrews from your home. Walk around the outside your structure and fill in any of the entrance holes or crevices that are visible. Mowing your lawn to decrease preferred habitat is important. Move piles of wood, brick or other debris from around the foundation of your structure. Remove any food source from around your structure to prevent the invasion of a shrew into your structure. You can trap a shrew with a mouse snap trap, small box trap or a pit trap. Set mouse traps in runways or along walls, with the trap set at a right angle to the runway and the triggers placed over the runway. Small box traps can be set parallel to and inside of runways, or parallel to walls around structures. Bait the traps with a mixture of peanut butter and rolled oats. A small amount of bacon grease or hamburger grease may increase the attractiveness of the bait. Pit trap consists of a gallon jar or a large can sunk into the ground under a runway until the lip of the container is level with the runway. Bait is not necessary. A small amount of bacon grease smeared around the top of the container may be an effective attractant, but this may also attract larger scavengers. Pit traps are more effective for capturing shrews than snap traps. Monitor traps daily, preferably in the morning before the temperature gets hot. Place cotton wool in the pit trap container to reduce the mortality of trapped animals. This is especially important to ensure the successful release of non-target animals. Since shrews are generally beneficial in consuming insects, live captured animals should be relocated to a suitable habitat more than 200 yards from the capture site. Shooting is not practical. Cats may reduce densities around your structure. However, they do not eat them so dispose of them before they start to stink. Use a plastic bag to pick up and dispose of the dead shrew. This will also reduce the potential of flea, tick and parasite or disease transmission. Owls may also consume large numbers of shrews. By mowing the yard and fields around your structures you will increase predation by cats and owls. No toxicants are registered to poison shrews. No fumigants are registered for use against shrews either.

Damage

Most species of shrews do not have significant negative impacts and are not abundant enough to be considered pests. Shrews sometimes conflict with human, however. Shrews have been reported to consume the seeds of Douglas-fir, although the seeds constitute a minor part of their diet. The masked shrew destroyed 0.3% to 10.5% of white spruce seeds marked over a 6 year period. The water shrew may cause local damage by consuming eggs or small fish at hatcheries. The least shrew sometimes enters hives and destroys the young brood. The northern short-tailed shrew has been reported to damage ginseng roots.

The combative nature of shrews sometimes makes them a nuisance when they live in or near dwellings. Shrews occasionally fall into window wells, attack pets, attack birds or chipmunks at feeders, feed on stored foods, contaminate stored foods with feces and urine, and bite humans when improperly handled. Potential exists for the transmission of diseases and parasites. It is considered smelly and noisy, making incessant, shrill clattering sounds as it runs along. On occasion it destroys stored grain products.

General Biology, Reproduction and Behavior

Shrews are among the world's smallest mammals. Because of their small size, shrews have a proportionally high surface-to-volume ratio and lose body heat rapidly. To maintain a constant body temperature, they have a high metabolic rate and need to consume food as often as every 3 to 4 hours. Some shrews will consume three times their body weight in food over a 24 hour period.

Shrews usually do not live longer than 1 to 2 years, but they have 1 to 3 litters per year with 2 to 10 young per litter. The gestation period is approximately 21 days. Shrews have an acute sense of touch, hearing and smell with vision playing a minor role. The toxic venom in their saliva helps them subdue small prey. They frequently use the tunnels made by voles and moles. During periods of occasional abundance, shrews may have a strong, although temporary, negative impact on mouse or insect populations. Many predators kill shrews, but few actually eat them. Owls in particular consume large numbers of shrews. Some shrews exhibit territorial behavior. Depending on the species and the habitat, shrews range in density from 2 to 70 individuals per acre (1 to 30/hectare) in North America.

Information updated by Gary L. Heilig, Ingham Co. MSUE Horticulture Educator



“MSU Extension programs and materials are open to all without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, marital status, or family status.”

