Is a mouse in your house?

Mice are one pest that can be a problem on the farm and in town. With snow and cold temperatures, mice start looking for indoor quarters for food and warmth. Getting into food and the potential for disease are good reasons to keep mice out or remove them when present.

However, they can cause other problems besides contaminating food. They have been known to damage machinery and equipment stored in sheds for the winter by building nests in them and chewing through wires of high-tech electronic devices.

Mice are nocturnal animals, making it difficult to see them on a regular basis. The most obvious indicators of their presence include droppings, noises from running, gnawing or squeaking, or damage to stored food and materials for nesting.

Mice tend to feed in short distances (a maximum of only 10-25 feet) from their nest. When food and shelter are adequate, they may only feed a few feet from the nest. Mice prefer to travel adjacent to walls and other edges.

Mice are inquisitive and will investigate new objects placed in their feeding areas. Mice have keen senses of taste, hearing, smell, and touch.

Mice are prolific breeders, producing six to 10 litters throughout the year.

Mice are more common and cause more damage than rats.

Mice can transmit diseases such as salmonellosis (bacterial food poisoning). For these reasons it is important to manage mice as quickly as possible.

Mice feed on a variety of foods, but prefer cereal grains and other seeds. They also like to eat foods high in fat and protein such as nuts, bacon, butter, and sweets. Mice nibble on their food, making 20-30 visits to food sites a night.

In graduate school we had a mouse that visited our office and decided to taste a bag full of bite-sized Snickers bars. The mouse did not completely eat one Snickers, but took one bite out of each bar in the bag.

Prevention is the best strategy for management of mice.

Mice are able to enter through very small openings. Seal all openings in buildings, especially those that are a quarter-inch or greater in diameter.

Baits (rodenticides) and traps are the only effective strategies to control mice once they have established themselves in a home. However, one could argue that a good "mouser" cat may get them before they become settled in a home.

There are two concerns about using rodenticides: safety to children and pets, and the potential of a poisoned mouse dying out of reach and leaving a cadaver smell.

To reduce the risk of exposure to children and pets, rodenticides should be placed next to walls, behind objects and in secluded areas.

There are two types of rodenticides, single-dose and multiple-dose.

A single-dose rodenticide will kill a mouse a few days later after just a single bite. Single-dose products are more harmful to humans and pets and should only be used by professional pest control operators.

Multiple-dose products are usually an anticoagulant and require the mice to feed multiple times over a few days. The most effective form of a rodenticide is an extruded block.

Word of caution: Mice can carry pellets from one area to another area that may not be secured from children or pets.

Farm supply, box stores and online shopping have an endless supply of different traps, probably driven by Ralph Waldo Emerson's misquoted statement, "build a better mousetrap, and the world will beat a path to your door."

In general, there are three types of traps: snap, multiple-catch, and glue boards. Snap traps are what most people picture as the typical mouse trap. The mouse will trigger a spring device while feeding or removing a bait, and will be crushed by the sprung bar. Some individuals are uncomfortable with this device because of the physical death of the mouse.

A snap trap with a wide trigger is more effective than a small trigger. Place traps along walls, behind objects or in secluded areas where you have seen the evidence of mice, or near a bait. Traps should be placed perpendicular to the wall.

Multiple-catch traps are often used in commercial sites. These traps rely upon the mouse's curiosity. Mice often follow a lead mouse after it enters the hole. Captured mice attract other mice. Mice die in the trap from loss of body heat or food deprivation.

Baiting a trap with food such as peanut butter, a gum drop, bacon, or raisins can improve the chances of capturing mice. Once a trap is set and nothing is caught in a few days, move the trap to another area.

Glue board traps may be used but they are not as effective as snap and multiple-catch traps. They need to be placed in mice runways.

Glue boards are not effective in areas of extreme heat or cold conditions. Bait can be placed in the middle of boards to attract mice.

Even though they are sold, electronic sound devices do not work when keeping mice away since the mice will quickly become familiar with the sounds and ignore them. Also, ultrasonic sounds are directional and do not penetrate behind objects.

It is the time of year that mice may be entering homes and buildings looking for food and warmer quarters. Preventing their entrance is the best management practice. However, there are many different types of traps for capturing and removing them.

Additional information may be found at https://entomology.ca.uky.edu/e617

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