#### ALTERNATIVES

# A MOUSE- AND PESTICIDE-FREE HOUSE

#### BY CAROLINE COX

Mice are cute, no question about it, but they are annoying when they help themselves to your food or set up housekeeping in your attic. Poisons aren't necessary when you need to get mice out of your house. Instead of resorting to pesticides, try making it hard for mice to get inside your house, making it hard for mice to find hiding places or food, and removing mice that are already inside.<sup>1</sup>

## Telling Mice Apart

The house mouse, and sometimes the deer mouse, are the most trouble-some mice in the Pacific Northwest.<sup>2,3</sup> They look similar, but the deer mouse has a white belly while the house mouse's belly is light brown or buff.<sup>4</sup>

#### The Life of the House Mouse

The earliest record of house mice comes from Turkey in 6000 BC. They had spread into Europe by the time European voyagers began their travels, and are now distributed around the world.

These small rodents have been called a mammal "weed." They live almost anywhere; mice have been found happily living in a frozen food locker and in a coal mine. They also reproduce quickly. They can breed all year long when they live indoors, and produce up to a dozen babies in a litter. They eat almost anything.<sup>4</sup>

Several aspects of house mouse behavior can help you when you're dealing with a mouse problem. They are stay-at-home creatures; one study found that an average mouse only traveled distances up to 12 feet from its home. They are usually more active at night than during the day, but in buildings without bright lights they can be

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active any time. They spend most of their time behind or underneath objects and when they move between these objects they usually travel along walls or other structures that give them a little cover.<sup>4</sup>

# Hantavirus Concerns

Hantavirus pulmonary syndrome is an uncommon but serious disease spread from mice to people when people breathe in dust contaminated by droppings, urine, or saliva from an infected mouse. The disease can also be spread when people touch contaminated objects and then touch their nose or mouth. In many cases of hantavirus syndrome, deer mice have been the carrier. House mice have not been identified as carriers. About a hundred cases have been reported in the Pacific Northwest.

Because of hantavirus, the Centers for Disease Control and Prevention (CDC) recommend precautions when cleaning up mouse-infested areas. CDC recommends that you wear gloves and wet contaminated areas and dead mice with household detergent or bleach solutions before cleaning them up. Be sure to wash the gloves before removing them.<sup>5</sup> For details, visit the CDC web site (http://www.cdc.gov/ncidod/diseases/hanta/hps/noframes/

prevent3.htm).

### Keeping Mice Out

"Exclusion is the most successful and permanent form of house mouse control," according to the University of California Statewide IPM Project. Keeping mice outside should be your goal. Effective steps you can take include the following:

• Eliminate all gaps and openings larger than 1/4 inch.<sup>3</sup> A pencil eraser is a convenient way to check to see if holes are big enough for a mouse to fit through.<sup>7</sup> Use metal or concrete materials to seal up cracks in foundations and fill openings around vents, pipes, and utility cables. Don't use chewable materials (plastic, rubber, vinyl, or wood) for repairs. Don't assume any holes are out of reach, as mice "can jump 12 inches high, run up the sides of buildings and cross cables and wires."<sup>1</sup>



If a pencil eraser fits in a hole, there's room for a mouse. You can use steel wool to plug up a hole (like the one around the conduit in this picture) so mice can't squeeze through.

 Repair broken windows, doors, and screens, and make sure all of them close tightly.<sup>2,3</sup>

# Keeping Mice Uncomfortable

If mice "have few places to hide, rest, or build nests and rear their young, they cannot survive in large numbers." Steps to take in order to

make your house inhospitable to mice include the following:

- Look around your house from a mouse's point of view. Wherever possible, eliminate places where mice could find shelter.<sup>3</sup>
- Remove blackberries and other brush near your house.<sup>2</sup>
- Prune shrubs near your house away from the ground. Avoid planting ivy because it can shelter mice.<sup>2</sup>



Examples of food containers that can be reused for mouse-proof storage.

# Keeping Mice Hungry

To avoid sharing your food with mice, try these simple techniques:

- Make sure garbage cans have tight lids.<sup>2</sup>
- Get a supply of mouse-proof containers. Empty coffee cans, jars with screw lids, and empty plastic milk jugs work well. Or, you can purchase heavy plastic containers with tight-fitting lids. Store food purchased in plastic bags or cardboard boxes in these containers. Refrigerators are also mouse-proof.
- Keep pet food in mouse-proof containers. Clean up spilled and uneaten food often.<sup>2</sup>
- Store lawn and garden seeds as well as bone meal and other organic fertilizers in mouse-proof containers.<sup>2</sup>
- Clean up fallen fruits, nuts, and seed pods in your yard.<sup>2</sup>

### Getting Rid of Mice: Traps

Once you've blocked up openings mice use to get inside your house and have stored your food carefully, you can trap any mice that are still giving you trouble.<sup>1,2</sup> Mouse traps are effective tools and are preferred over poison baits, according to Washington

State Cooperative Extension, because poison baits can harm children and pets; poisoned rodents may die inside walls and under floors and create unpleasant odors there; and mice may not even eat enough of a poison bait to make it effective.<sup>2</sup>

Mouse traps are available in a wide variety of styles, including traps designed for quickly killing mice, as well as live traps. Trap manufacturers include Woodstream Corporation (www.victorpest.com), Kness Manufacturing Co. (www.kness.com), and Tomahawk Live Trap (www.livetrap.com).

Traps should be placed in areas where mice are active. Look for tracks, droppings, or gnaw marks.<sup>2</sup> If you're not sure where the mice live, you can sprinkle a thin layer of flour, then check for tracks the next day.<sup>7</sup>

Place traps between five and ten feet apart and move them every few days if they're not catching mice. Place them with the trigger next to walls.<sup>2</sup> Behind objects and in dark corners are also successful locations.<sup>3</sup> Use lots of traps so that all mice can be caught in a short time.<sup>3</sup> Put traps out baited but unset until the bait has been taken at least once; then rebait and set them.<sup>9</sup>

Peanut butter,<sup>2</sup> chocolate,<sup>10</sup> gum drops, nuts, oats, or dried fruit are good baits.<sup>2</sup>

Be sure to keep traps out of reach of children and pets.<sup>1</sup>

If you choose to use live traps and then release the mice you catch, remember that mice have returned to homes from distances of 3/4 of a



An example of a live trap.

mile.11 Take them far away!

## Getting Rid of Mice: Cats

Many experts agree that cats have a hard time eliminating existing populations of mice because it's too easy for mice who are familiar with their surroundings to hide from cats. They are more effective at preventing mice from moving into your house.<sup>3,7</sup>

# Getting Rid of Mice: Birds

Hawks and barn owls eat lots of mice, especially when they are feeding their young. If you live in an area appropriate for owls, setting up a nesting box will encourage barn owls to raise their young near your house.<sup>7</sup>

#### Conclusion

The pesticide baits often recommended for killing mice are "toxic to humans" and "can cause the death of pets, livestock or desirable wildlife."<sup>3</sup> Nonchemical techniques for dealing with mice are successful, and it's not difficult to put them into practice. Try them!

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