

Mice & rats

A humane approach to pest control

As winter approaches, mice and rats start looking for warm places for shelter. And what better spot than a nice warm home with lots of crumbs in the kitchen? Once they move in, they will generally increase their population to take advantage of the available food supply.

If you are not into sharing your home with rodents, there are ways to encourage them to leave with a minimum amount of suffering for everyone.

1. Stop feeding them

Mice are drawn to your home because you offer food, water, and shelter. Completely eliminate these, and your problems will be over.

Begin by removing food sources. Grains, legumes, sugar, candies, pastas, nuts, and other dry foods should be stored in upper cabinets, where mice don't have access. Or place foodstuffs in glass or metal containers, not in plastic. Rodents can chew through hard plastic. An alternate solution is to store dry food in a metal trash can with a tight fitting lid.

Syrup and jam jars should be washed off before the containers are put away. Keep fruit, potatoes, and onions in a hanging wire basket, or mouse-proof cupboard. Drawers are often difficult to mouse-proof, so don't keep edibles there. Consider getting a breadbox for bread and other baked goods.

Don't overlook things like dry pet food, bird seed, and garden seeds. Don't leave pet food bowls out at night. Also keep compost and garbage cans securely covered.

Mice and rats are nocturnal, and prefer to do their feeding at night while you are asleep.

2. Seal cracks and holes in the kitchen

A mouse can squeeze through holes that are no bigger than the diameter of its head – around the width of a dime, and young mice can fit through pencil-sized cracks of a 1/4 inch. Rats can fit through quarter-sized holes. Rodents will chew through wood and caulking, so seal openings with course steel wool, plaster, cement, sheet metal, or metal screen.

The first priority is to keep them off the counters, and away from the sink where they can find water to drink. Inspect your counters and upper cupboards for holes and cracks. Stoves, especially older ones, can provide mice with easy access to the counter. You may need to place pot lids over each burner at night to block them. You can also place a roll of metal screen in any gaps between the stove and the counter. Another option is to try using an ultrasound device on the counter. See below for more about these.

After the counters are secure, focus on the rest of the kitchen. The cupboard under your kitchen sink is often a point of access. Check for openings around pipes, etc.

Mouse-proofing your kitchen will probably

solve most of your rodent problems. If they can't find anything good to eat, they will have to seek out a better place to live.

3. Make your home uninviting

Once you have eliminated the free food, and sealed the kitchen, one of these techniques may work to give them a final hint to leave.

Essential oil of peppermint — Mice (and ants) do not like this odour. Put a few drops of peppermint oil on cotton balls, and place them at strategic points around your house.

Ultrasound devices — A small box that makes 'noisy' ultrasonic waves beyond the hearing range of humans, cats, and dogs, but well within the hearing range of rodents. If the original attractant, such as food, is present, the rodents may learn to tolerate the noise. A device is only good for one room, and the waves don't turn corners. This creates sound shadows, and the rodents



may simply shift their activity to these low noise shadows. Ultrasound is considered nontoxic and safe for children, dogs, and cats, but it should never be used near rodent pets. Available at hardware stores.

Cats — Borrowing a friend's cat for a few days may deter mice from staying around. Just a cat's smell may be enough. But be aware that many cats are very effective predators. They will not generally attack adult rats, but if let outside, they may attempt to kill small birds, wild rodents, and baby rabbits. They also tend to play with (read: torture) their prey, making for a slow, drawn out death.

4. Secure your outside walls

Once you are confident that the rodents have left, work on making the exterior walls of your house into a fortress. If you live in an apartment or in an attached house, you may have to work with your neighbour(s).

Rats and mice can run along or climb wires, ropes, cables, vines, shrubs, and trees. Make sure there are no openings high up on your walls or trim the vegetation around your home, leaving about a two foot gap. Check for gaps around any wires or cables that enter your home. Mice can climb almost any rough, vertical surface such as wood and brick.

They can even enter right through the front door! Check for gaps in the weather-stripping around doors. Gaps can be fixed with new weather-stripping that fits better. To deter rats, put metal grates over floor drains in the basement.

See www.veg.ca/mice for more information, updates and links.

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Traps and poison

Trapping and poisoning rodents can cause a lot of suffering, and there is always the possibility of trapping a nursing mother, leaving her young to starve in the nest. These methods can also endanger companion animals and children. And the suffering is often for naught because unless you mouse-proof your house, you will have a continual problem. The female house mouse averages 7-10 litters annually.

Glue traps — A 1983 test that evaluated the effectiveness of glue traps found that trapped mice struggling to free themselves would pull out their own hair, exposing bare, raw areas of skin. The mice broke or even bit off their own legs, and the glue caused their eyes to become badly irritated and scarred. After three to five hours in the glue traps, the mice defecated and urinated heavily because of their severe stress and fear, and quickly became covered with their own excrement.* Animals whose faces become stuck in the glue slowly suffocate, and all trapped animals are subject to starvation and dehydration.

Poison — This can lead to a slow death preceded by great suffering for the targeted animals, and some may end up dying inside a wall where their bodies will decompose, giving off odour and attracting other pests. One woman I know ended up tearing apart a large section of her living room to try and find a mouse carcass that was causing a terrible stench in her home. Most poison takes 4 or 5 days to kill a rodent, and most kill via anti-coagulation. This means that the rodent dies from internal bleeding. The use of poisons can also result in the painful deaths of cats, dogs, and other animals who either ingest the poison by mistake or eat the bodies of poisoned rodents.

Quick-kill snap traps — These traps aim to snap shut, breaking the rodent's neck. The Guelph Humane Society recommends these as the most effective and humane option for killing rodents. "A humane death occurs when the animal dies instantly, without pain or panic." To avoid mice being maimed instead of killed, they suggest: 1. Placing them baited but not set until the bait has been taken for a few consecutive days. 2. Tying the bait down so that the mouse has to really grab it. 3. Not over-using a trap. 5. Placing several at once.

Rat Zapper — According to the company that makes them (www.ratzapper.com), the it works much like a stun gun. When the mouse or rat steps into the trap, it triggers a high voltage charge. The rodent is instantly rendered unconscious, and then killed quickly by muscle constriction (the heart and lungs stop functioning). They cost at least \$30 and require batteries.

Live capture traps — It is very important to check these traps every few hours, as frightened rodents, with their high rate of metabolism, quickly become thirsty and hungry. Once animals are captured alive, they must be released somewhere. According to the Guelph Humane Society, "it is questionable whether a house mouse would survive if released outside, even if the temperature was mild." See our web version for the best live capture traps to buy (or make yourself).

* Franz, S.C., and C.M. Padula, "A Laboratory Test Method for Evaluating the Efficacy of Glueboards for Trapping House Mice," Vertebrate Pest Control and Management Materials: Fourth Symposium, American Society for Testing and Materials, 1983, pp. 209-225.