

## Making small changes can lead to big results when addressing issues with rodents.

Our conflicts with rats and mice are as old as civilization itself. These commensal rodents have been an object of vilification by human cultures, past and present. Yet few other groups of species have been more successful in holding their own in the face of continuous and aggressive eradication and control efforts.

There are two main tenets for successfully managing conflicts with rats and mice. The first is to identify the source of food and then remove or interrupt it. Regardless of the control method used, rodents will return if the food supply isn't controlled or eliminated. The second is to remove or reduce access to denning areas and loafing spots.

### Reducing conflicts with rodents within a building

- Remove access to food. Store human food and pet food in rodent-proof storage containers and monitor for activity in food storage areas and areas where they may loaf or nest.
- · Control trash and food spillage.
- Block off access to the structure by closing exterior open areas around doors, windows, HVAC, and other gas, electrical, water, or cable service entry points.
- Treat active areas with repellents and continue to do so until there is no sign of activity.

### Reducing conflicts with rats in a yard or community space

This will require approaches that are different from control within a building. If there is evidence of rat activity in a yard or community space, there will be a source of food as well as debris or vegetation that is providing cover for access to denning that they are utilizing nearby.

- 1. Remove or block access to any food sources: from feeding of birds, feeding of pets, or from compost and trash/garbage storage.
- 2. Alter the habitat to reduce the attractiveness to rodents. Remove vegetative cover or other material and debris that is providing concealment, travel corridors or nesting/loafing areas.
- 3. Locate and disrupt burrow area(s) by utilizing a nontoxic repellent:
  - a. Dig up the area and mix in the repellent with the dirt from the burrow mound.
  - b. Lightly pack the dirt mixed with the repellent so that the rodents must dig through and encounter the repellent. Urine-soaked kitty litter can work well in this case.

# 10 tips for reducing rodent conflicts

- Dispose of and contain garbage in metal or heavy plastic containers with tight lids that are rodent-resistant or chew-proof.
- 2. Place trash outside shortly before pickup, especially if not stored in rodent-proof container; don't leave plastic garbage bags out overnight.
- 3. If site-specific problems with rodents arise, remove the material providing cover. This may require removing vegetation such as ivy and tall grass or relocating or removing wood piles and debris—anything that could give rats cover to burrow or mice to nest.
- Store all human and pet food and foodstuffs in metal or glass containers with tight lids. Don't leave extra pet food out.
- 5. Sweep up food remains and garbage inside and outside your home.
- 6. Control access to compost and reduce or control the amount of bird feed spillage (if birds are being fed).

- c. It is possible a repellent such as Nature's Defense, Critter Ridder or DeTour might be effective when used in conjunction with continued disruption from digging up or altering the burrow area.
- 4. Aside from completely physically excluding rats from an area, no single repellent or method will likely be 100% effective by itself. It will be necessary to combine the approaches listed here in order to be successful for the long term. After removing access to the food source, alter the habitat and use a repellent to persuade the rodents to move on from the area. Have a plan for monitoring and responding to activity to prevent reestablishment.
- 5. If attempts have been made to physically exclude rats, as well as to restrict access to food and nesting opportunities, and the rat population is still significant, utilizing a fertility control product to humanely reduce the number of individuals might be considered. (See ContraPest description below.)

### Products that may be helpful for excluding or repelling

NOTE: This is not a product endorsement list, but a list of products that may be helpful in reducing conflicts when used in concert with reducing access to food and harborage. Use in accordance with label directions.

- 1. Urine soaked kitty litter (use outside to deter rats and mice)
- 2. Bonide Mouse Magic (packets; indoor use for mice)
- 3. Nature's Defense (outside and inside for mice and rats)
- 4. Critter Ridder granular form (outside for mice and rats)
- 5. For significant problems, a more concentrated repellent is available—DeTour repellent for rats (applied on structure and within burrow).



- 6. Physical exclusion products:
  - a. Galvanized wire mesh ¼ inch square (16 gauge preferred for excluding rats)
  - b. Aluminum flashing
  - c. Copper mesh for stuffing entry points on structures
  - d. Xcluder products for a number of different types of potential entry points on a structure
- 7. SenesTech's ContraPest is a fertility control product for reducing rat populations. It is available to the general public via the ContraPest online store. (In California, Connecticut and New York, the product must be applied by a licensed pest control operator).

- 7. Inspect your basement, house and garage for cracks and holes that might be potential entry points. Seal any openings larger than ½ inch with mortar (if concrete or brick), the appropriate in-kind replacement material, or repair/replace with rodent-proof material.
- 8. Make sure you have screens on windows and to inspect windows and screens for holes and proper fit.
- Keep outside doors closed; use robust threshold and perimeter trim and, when necessary, a metal or rodent-resistant threshold trim to prevent rodents from gnawing and entering underneath or around door entryways.
- 10. Don't provide hiding places for rodents. Store materials such as lumber and boxes on a rack with a clean, open area underneath, and get rid of unused materials and junk that may provide harborage.

#### Alternate forms of control

Some communities have had success reducing rodent populations by creating habitat for predators. According to Raptors Are the Solution, a single barn owl can catch 1,400+ rodents a year. Consider providing the habitat, including perches or boxes, that supports these predators, but make sure to cease all rodenticide use in the area.

### Do not use poison bait or confinement traps such as glue boards

These methods are the most inhumane forms of lethal control and should not be used. They cause significant and lengthy suffering for the rodents they are used on, and they also present welfare impacts (including lethal consequences) for other animals.

Rodenticides present poisoning threats for animals who encounter and consume the bait, and they have sublethal and lethal effects on animals who prey on rodents that have consumed rodenticides.

Glue traps/glue boards and other types of confinement traps cause animals to die slowly from a combination of stress and dehydration. Additionally, these devices can entrap and kill other small animals such as bats and birds.



For more information, visit humaneworld.org/wildmice and humaneworld.org/wildrats.