

Rats and Mice

Rats can be a problem anywhere. They infest old buildings and crowded, unsanitary areas. They can also be a problem even where newer homes and sanitary conditions exist.

Identification: The two rats most commonly found around the Puget Sound are the Norway rat (*Rattus norvegicus*) and the roof rat (*R. rattus*), also known as the black rat. The Norway rat is a big, hefty rat and is much larger than the other rodents in the neighborhood. Norway rats can weigh 1¼ pounds, while the roof rat stays at an agile ½ pound when fully grown. Roof rats have a longer tail, pointier snout and longer ears. The Norway rat's tail is shorter than the length of the body. Both rats have naked tails, but the Norway rat's tail appears two-tone from the partially haired skin.

Life History: Rats are perfect pests. They have a high reproductive capacity and can compete well against other pests for our rubbish. Rats can reproduce all year long, depending on environment and food availability. Peak reproduction usually occurs in the fall. Both species average about eight offspring per litter. A single female rat can produce as many as 80 rats in her lifetime. Gestation and weaning of young last about two months. Baby rats can be reproductively mature within three to four months. If you do the math, you'll see that under good conditions rat populations can build quite rapidly.

Rats will eat just about anything humans eat. They get plenty to eat from home gardens, fruit and nut trees, and even parts of some ornamental shrubs and flowers. They feed on garbage that humans throw out. Use of garbage disposals attracts rats into sewer lines. They have been known

to attack other animals, such as insects, birds, fish and other mammals (including humans).

They can burrow long distances from nest to food source, thereby reducing their exposure to predators. They can scale walls and walk along telephone wires. They can survive a fall of 50 feet.

It's no surprise that they are almost impossible to eradicate.

Damage: Historically, rats have been associated with death and disease. Rats are the carrier of the Bubonic plague, along with other nasty diseases, and have been responsible for millions of human deaths. When rats are populous, they act as the perfect reservoir of disease, because they are so closely associated with our lifestyles and homes.

Most of us aren't too worried about disease but still cannot tolerate rats in and around our homes. Rats get into everything and can ruin our food and gardens. Rats contaminate our living spaces and food by leaving behind feces and urine. Rats dig into garden beds and gnaw at our electrical wires. They can do physical damage to our homes and property with their foraging, and they gnaw into paper, books, upholstery, wood, etc., which they use as nesting material.

They have also been known to bite and scratch people and even to attack small pets.

Mice

Mice don't pose as serious a problem as rats, but they can be quite a nuisance. They also eat and contaminate food with their urine and droppings. They gnaw on wiring and create fire hazards. In the garden, mice

move along mole tunnels and feed on plant roots and bulbs.

Mice can transmit disease, but the spread of disease by mice is not considered a serious health hazard.

Monitoring: Be sure to visit neglected areas of your home and yard regularly. These include crawlspaces, attics, and the nooks and crannies around pipes. The frequency of your visits should increase as temperatures drop in the fall and winter. This is when rats and mice seek shelter, and their populations increase. Look for evidence of activity, such as nibbled wood, drywall, and paper scraps. Rats leave behind droppings that are dark, elongated pellets about ½ inch long. Mouse droppings are the size of grains of rice.

Rats also tend to run along the same trails. Preferred trails of Norway rats are next to vertical edges, such as where the floor meets the wall, or along foundations at ground level. Often grease marks are left from the fur of rats and mice rubbing along the wall. Roof rats are excellent climbers and will scale walls along gutters and pipes, and will climb on wires, trees, and vines.

Management: The best way to control rats and mice is through cultural changes to deter them from nesting and foraging around your house and yard.

Don't feed them!

- Secure stored food products in rodent-proof containers, such as metal bins with tight sealing lids. Be sure to securely store animal food, such as dog food and bird seed, in a similar manner. Glass storage jars are great for preventing rodents from feeding on stored foods. Rats can chew through some plastics and wood.
- Clean up ripe vegetables and fruits from the yard. If you compost, learn how to keep rats away from your bins.
- Be sure to keep your garbage cans secure and closed. Metal cans are

best to avoid rats from chewing into the can. A bungee cord is a great way to keep the lid closed.

- Pick up pets' droppings and leftover food.

Don't give rats and mice a home!

- Remove dense vegetation that offers shelter. Blackberry patches and English ivy provide great protection for rats.
- Keep newspaper stacks, woodpiles, and hay stacks clean and away from your house. If possible, set piles up off the ground.
- Fill in burrows and holes that rats and mice may use to nest in. Rats are excellent burrowers.
- Seal up gaps or cracks along the foundation.
- Check for entrances that mice might use. They can squeeze through very small spaces.

Keep rats out of your home!

- Remove vines that attach directly to the house, such as climbing ivy, or wisteria.
- Do not let tree branches touch the roof.
- Place sturdy screen around vents and openings. The mesh size should measure no more than ¼ inch.
- Repair gaps in sewer lines and other pipes leading to the house.
- Place sturdy covering on drain holes.

If you have taken all the control measures listed above and still have a problem with rodents, you can try trapping. Snap traps are effective and are the most advisable mode for killing mice and rats. Set traps in areas where they are active, such as along wall boards and nest entrances, but do not place them in areas that could cause harm to people and pets. Be sure to follow the instructions carefully. Traps can be dangerous and painful if sprung at an inopportune time.

You will need more traps than rodents. Place the traps close to each other – 3 to 4 feet for mice, and 10 to 15 feet for rats – and move them every few days. Place them with the trigger end against walls, where rodents like to run.

Rodenticides and poison baits should be used as a last resort. If problems are serious and pesticides are warranted, contacting a pest control professional is advised.

If you use a rodenticide yourself, always read and follow the directions on the label. Poison baits can be harmful to

children, pets, and non-target animals. **If poisons are to be used, all other sources of food must be eliminated.**

Cats are effective at hunting and deterring rats and mice in your home and yard. The presence of cat urine is known to cause predator-avoidance behavior in rats and sends them scurrying. Regardless of the management tactic that is decided upon, habitat reduction and prevention are critical for reducing problems with rodents.