

The House Mouse

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Winter weather often sends rodents looking for a warm, dry place to live. The house mouse (*Mus musculus*) is a common pest in houses and outbuildings. It is well adapted to sharing our living space and resources and has been doing so for thousands of years. These little pests can share other things with us too: like diseases and parasites. Learning about their life cycle, habits, and preferences will help you to understand and control them.

House mice are much smaller than rats and can be distinguished from a juvenile rat by their smaller feet and head. Their fur is usually a dusty gray above and cream colored on the belly. They can also be identified by their droppings which are 1/8 to 1/4 inch (3 to 6 mm) long and rod-shaped with pointed ends. Other signs of house mice are: gnaw marks on wood, cardboard, and soft plastic; tracks/footprints (4 toes on the front 5 toes on the rear feet); rub marks (dirty areas along base boards and walls); and damaged goods such as cereals and seeds.

House mice reach sexual maturity in 35 days and the female's gestation period averages 19 days. The young are born blind and hairless except for whiskers and are weaned after about 3 to 4 weeks.

Average litter size is 6 and each female can bear



about 8 litters per year. They usually live for about a year, but have been known to live as long as 6 years.

Mice are mainly nocturnal but can sometimes be seen during the day. They have a keen sense of smell and hearing, but have poor eyesight. On a rough surface, they can run up a wall, jump 12 inches up in the air, and can jump down 8 feet and survive. A mouse requires 1/10 oz. of food per day. Free water is not necessary because they can get it from their food. However, if free water is available, they will drink it. They really like sweetened beverages such as cherry flavor Koolaid[®] and prune juice. One mouse produces 50 droppings per day.

Mice are very social. Related males and females are compatible, but unrelated mice are typically aggressive toward each other. One male dominates the territory over other lower-ranking males. The territory may also include several females and all mature mice tend to show aggression toward strangers within their territory.

Mice are very inquisitive. If something has changed position or is out of place, they will explore it and adjust their travel routes accordingly. There are two main feeding periods: at dusk and just before dawn. They will also nibble on small amounts of food anytime. They prefer to nest in dark, secluded places with abundant nesting material close by. The material may be cotton, packing material, insulation, cardboard, or fabric. Adult mice can also squeeze through an opening 1/4 inch or larger to gain entry.

The most threatening health issue with mice is their ability to spread salmonella bacteria in their droppings. This organism is a common cause of food poisoning. Some of the more common diseases transmitted by mice are rat-bite fever, leptospirosis (also known as infectious jaundice or Weil's Disease), plague, Hantavirus, and possibly poliomyelitis (polio). Mice also carry many types of tapeworms and roundworms, infectious to pets and humans. Given these potentially life threatening diseases, mice should not be tolerated in your living space.

To reduce indoor mouse populations, you should start by trying to exclude them and eliminate access to food sources, water and shelter. If this is done and the problem continues, then you really should consider population control. The old standby is the snap trap set and placed along a well-traveled wall. I usually bait traps with peanut butter, oat flakes, and bits of a raisin.

Glue boards and sticky traps are also available, but are sometimes considered less humane than snap traps. Do not touch the dead mice (or any dead animal) with bare hands. Use disposable rubber gloves or a plastic bag over your hand, bag the dead mouse, and discard in an outdoor waste receptacle. Wash thoroughly with soap and water after disposal.

Toxicants (poison baits) and anti-coagulant rodenticides can be used as well, but the dead mice may smell badly if they die inside the house. In addition, baits and rodenticides must be placed in such a way as to exclude non-target organisms. Multi-capture, live traps can work well. One of these is called the "Tin Cat". A mouse can enter but cannot exit. Once one mouse enters, other mice also become curious and enter too. With these devices, you will need to decide how to dispose of the live mice once they are caught. Pest control professionals may use carbon dioxide chambers to humanely asphyxiate the trapped mice. Drowning live trapped animals is considered inhumane by the American Veterinary Medical Association.

The presence of mice in sheds and barns often attracts other predators including snakes, owls, coyotes, bobcats, and foxes. Cats and dogs can also help control mice. This time honored tradition works fairly well, but they don't need to go hungry to encourage them to hunt. Supplemental food should always be provided. Remember, integrated pest management strategies always work best. Use as many prevention and exclusion methods as possible, then trap or bait the rest.