Wildlife Damage Management Fact Sheet Series

Woodchucks

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The woodchuck *(Marmota monax)*—also known as the groundhog or whistle pig—is one of the largest members of the squirrel family and is closely related to other North American marmots. Historically, woodchucks were less common than they are today. As forests were cleared for farms, pastures, and orchards, settlers provided suitable habitat and the woodchuck population expanded. Today, this highly adaptable mammal commonly inhabits farm fields, idle lands, and suburban neighborhoods.

General Biology

The woodchuck has a compact, chunky body supported by relatively short, strong legs. Its tail is short and bristly. Its forefeet have long, curved claws that are adapted for digging ground burrows where it seeks refuge and hibernates during winter months. Woodchucks have yellowish-brown to blackish-brown fur. Like other rodents, they have chisel-like incisor teeth that are used to nip off vegetation. From tip of nose to end of tail, woodchucks are approximately 20 to 27 inches long and weigh 5 to 12 pounds.

Woodchucks hibernate during the winter, beginning with the first heavy frosts, which usually occur in October. They emerge from hibernation during late February or March when mating season begins. After a 30-day gestation period, young are born in April or early May. Litters average three to four young, and by mid-June or early July the young leave their home burrows and establish their own territories, usually moving into old, abandoned dens. The average life span of woodchucks is four to five years. Primary predators include hawks, owls, foxes, bobcats, coyotes, dogs, weasels, and humans.

Woodchucks often can be observed basking in the summer sun during the warmest hours of the day. They climb well and often sleep on fence posts, stone walls, large rocks, fallen logs, and grassy areas, all of which are close to their burrow entrance. Even feeding woodchucks normally do not travel farther than 50 yards from their dens. There are exceptions; male woodchucks have been known to travel long distances to find a mate. Occasionally, woodchucks will travel several hundred yards to forage in time of drought or to eat fallen orchard fruit.

Habitat and Food Habits

Woodchucks dig burrows, which they use to bear and raise young and escape from predators. Dens are typically located in open fields, meadows, pastures, fencerows, and woodland edges. In suburban areas, woodchucks commonly burrow under barns, sheds, and porches. Often woodchucks will take up residence under stone walls, woodpiles, or porches, using several auxiliary dens for shelter. The burrows dug by woodchucks are 8 to 66 feet long and 2 to 5 feet deep. They normally have two or three entrances, although there may be as many as five. The main entrance can be identified by the mound of excavated dirt and stones surrounding the entrance. A single chamber, used for sleeping and rearing young, is formed at the end of the main burrow. Another room is used for urination and defecation. In this way the den is kept relatively clean and free from disease. Secondary entrances are dug from inside the burrow and usually do not have dirt mounds. Other species such as skunks, raccoons, and foxes will remodel vacant burrows and use them to bear and raise young. In addition, rabbits may seek shelter in dens, particularly during the winter when woodchucks are hibernating below.

Woodchucks are herbivores and eat a wide variety of vegetation, including grasses, weed shoots, clover, alfalfa, and soybeans. They will also consume garden vegetables such as cabbage, beans, peas, and carrots and fruits such as apples, cherries, and pears. Woodchucks prefer early morning and evening hours for feed-

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ing because they depend on dew and plant moisture for their water intake.

Description of Damage

Woodchucks can become a nuisance when their feeding and burrowing habits conflict with human interests. They frequently damage vegetable and flower gardens, agricultural crops, orchards, nurseries, and areas around buildings. Damage to crops can be costly. In addition, mounds of dirt and holes at burrow entrances can be hazardous to farm equipment and livestock. Woodchucks are excellent climbers. They can damage fruit trees and ornamental shrubs as they gnaw or claw woody vegetation in orchards. Similar to ground squirrels, woodchucks may strip bark at the base of trees near their burrow entrance to mark their territories.

Laws and Regulations

The woodchuck is an unprotected species in New York State. Unprotected species may be taken at any time without limit. A hunting license is required, however, to hunt unprotected wildlife with a bow or firearm. Given current Environmental Conservation Law in New York State, woodchucks captured in live traps must be humanely euthanized or released elsewhere on the landowner's property. Only licensed nuisance wildlife control operators may transport wildlife off the property and will do so for a fee. Contact your local Department of Environmental Conservation (DEC) office for the name of a licensed nuisance wildlife control officer in your area.

When considering shooting, trapping, or both to control problem animals, local ordinances must also be followed, so it is best to consult with local law enforcement authorities or your regional DEC office if you have questions regarding specific localities. In other states, consult with your state wildlife agency about laws and regulations pertaining to woodchucks before shooting or trapping nuisance animals.

Preventing Damage

Population Reduction

Although woodchuck numbers can be managed by shooting, trapping, or gassing the den, the results are usually short-term. Spring is the best time to use lethal controls because adults are active and young animals may remain in their burrow. In addition, burrows are more evident before annual vegetation conceals their entrances, and other wildlife is less likely to use burrows as shelter during spring.

Shooting can be used to remove problem woodchucks from fields, but it may be illegal or unsafe in many situations near homes. New York State law prohibits the discharge of firearms within 500 feet of a building without the owner's permission. Woodchucks can be captured using #2 foothold traps or #160 or #220 body-gripping traps placed at the burrow entrance. Body-gripping traps do not need to be baited.

Live traps, baited with apples, cantaloupe, carrots with tops, lettuce, cabbage, or ample amounts of fresh peas, can also be effective. Live traps should be set near burrow entrances. Where food is abundant, however, woodchucks may not enter cage traps for bait. A cage trap should be at least 10 x 10 x 24 inches in size. Double-door see-through traps should be at least 10 x 10 x 30 inches in size. It is a good idea to conceal the trap with canvas or grass. If baiting fails, a double-door cage trap can be set directly in the woodchuck's trail and concealed. All traps should be checked at least twice a day. Live traps should be used in areas where pets or children might be at risk. New York State law prohibits setting a trap within 100 feet of a house, school, playground, or church unless you have permission from the owner of the land where the trap is set.

Lethal controls have been reported to have had limited success in controlling woodchuck populations. Shooting and trapping will not eliminate woodchucks from a farm. In a Pennsylvania study, 1,040 woodchucks were removed from a 600-acre site over four years without significantly affecting the population. Woodchuck numbers were unaffected owing to increased juvenile survival, increased birth rates, and movement of animals onto the site from surrounding areas.

Repellents

No products are currently registered with the U.S. Environmental Protection Agency (EPA) for use as woodchuck repellents. Studies in Connecticut have shown that some commercial deer and rabbit repellents, as well as some insecticides thought to have repellent properties, were generally ineffective at preventing woodchuck feeding on crops.

Predator odors may be a useful repellent for woodchucks. For example, bobcat urine sprayed on the base of apple trees has been shown to reduce woodchuck gnawing by 98 percent relative to untreated trees. In addition, bobcat urine used in combination with electric or rope fences reduced damage to cabbage fields in New York. In this study, electric fences alone or electric fences with cloth strips sprayed with bobcat urine were nearly 100 percent effective at reducing woodchuck damage to cabbage. A single-strand rope fence sprayed with bobcat urine reduced woodchuck damage by 90 percent and is a simple, low-cost approach for homeowners.

Fencing

Fencing can be very effective at reducing woodchuck damage, but precautions must be taken to keep woodchucks from climbing over or digging under fencing. Woodchucks may be excluded from gardens and other small areas with a 4-foot-high hardware cloth fence. To prevent woodchucks from digging under the fence, the bottom of the fence should be buried 10 to 12 inches below ground or the lower edge should be bent at an L-shaped angle leading outward and buried 1 to 2 inches below ground. To prevent woodchucks from climbing over the fence, an electric wire can be added 4 to 5 inches off the ground and the same distance away from the outside of the fence. Bending the top 15 inches of wire out at a 45-degree angle can also prevent woodchucks from climbing over fencing.

Hardware cloth can be used to exclude woodchucks from under buildings, decks, and other structures. However, it may be necessary to remove existing woodchucks from under the building through trapping or the use of one-way doors. Attach the

hardware cloth to the bottom of the deck or building in question, and be sure to bury the bottom of the hardware cloth 10 to 12 inches below ground. Bending the buried section of fence at an L-shaped angle leading outward can help to prevent burrowing under the fence.

Cultural Practices

Modifying habitat in and around homes and gardens can help deter woodchucks and can increase the effectiveness of other control techniques. Eliminating brush piles and overgrown areas reduces the amount of food and cover available, making an area less attractive to woodchucks. Unfortunately, elimination of these areas may also remove valuable habitat for other wildlife.

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Illustrations by John Sidelinger

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