



Managing Woodchuck Problems in Kentucky

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Often called a groundhog or whistle pig, the woodchuck (*Marmota monax*) is one of Kentucky's most abundant mammals. Woodchucks rank fourth in game animals pursued throughout Kentucky and provide a tasty meal when boiled or fried.

Woodchucks' extensive burrowing activity provides homes for other game and fur-bearing animals. In some areas, rabbit populations are directly linked to the number of vacant burrows available as denning sites. When woodchucks move from abandoned pastures and odd areas into fields, gardens and orchards, they can damage home gardens or vegetable crops, especially beans, peas, and squash. They can damage fruit trees by gnawing or clawing on the trunk. Their burrowing activities also create holes and mounds of soil, which present hazards to livestock, farm equipment, and humans.



Good woodchuck habitat can be found throughout Kentucky. Woodchucks prefer a mixture of open farmland, woods, fencerows, and roadsides. They live in burrows usually located in fields, along roadsides or stone fences, at the base of trees, and around building foundations. Main entrances to burrows are easily identified by mounds of excavated dirt adjacent to a 10- to 12-inch diameter hole. Burrow systems are extensive and each system has at least two entrances. Some secondary entrances may be hard to identify because they are dug from below ground and do not have mounds of dirt beside them (Figure 1). These entrances often serve as escape holes.

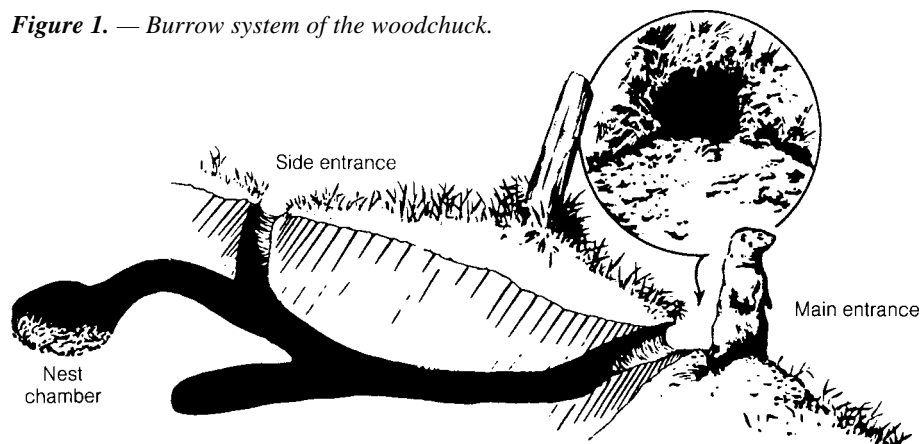
Woodchucks use burrows for mating, hiding from predators, and hibernation. One branch of the burrow system leads to a nest chamber containing dried grass. This dead-end nest chamber is sealed with soil during the winter and serves as a hibernation chamber.

Woodchucks are most active during early morning and late afternoon when they are feeding. They are vegetarians

Animal Facts and Biology

Woodchucks are members of the squirrel family. When these heavy-bodied rodents are surprised, they emit a loud, shrill whistle and dive into a burrow; hence the name whistle pig. The woodchuck is easily distinguished by its well-furred, compact, chunky 20- to 27-inch body; short legs and toes with long, curved, well-developed claws; short tail; and grizzled or frosted, brownish-gray appearance. Adult woodchucks weigh between 5 and 10 pounds. Like other rodents, they have a pair of large, chisel-like front teeth.

Figure 1. — Burrow system of the woodchuck.



and eat a variety of broadleaved weeds, including dandelions and plantain. Woodchucks are particularly fond of legumes, including alfalfa and vetch, clover, peas, and beans. When not actively feeding, woodchucks can be seen basking or dozing on rocks, stone fences, and logs during the warmest part of the day.

In late August and September, woodchucks have voracious appetites as they prepare to hibernate. This deep sleep, when body temperatures drop and heart rate slows to four beats a minute, usually begins in October and continues through February. After hibernation, males usually emerge first and may travel some distance in search of a mate. Once a mate has been located, breeding occurs during March. In April, four to five young are born. The young woodchucks remain in the den for about two months.

Woodchucks are not great travelers. They usually do not range more than 50 to 100 feet from the den, although their home range may exceed 40 acres. Most activity is concentrated around the burrows. Burrow systems may be 5 feet deep and 25 to 30 feet in total length.

Preventing and Controlling Woodchuck Damage

Control is most effective in the spring, when active burrows are easily located, young woodchucks have not yet scattered, and there is less likelihood of damage to other wildlife. In late summer, fall, and winter, other game animals may use the burrows for protection.

The most effective types of woodchuck control are shooting, trapping, and fumigation. Fencing may help reduce woodchuck damage; however, woodchucks are excellent climbers and can easily crawl over fences. No poisons are registered for controlling woodchucks in Kentucky.

Shooting

In rural areas, woodchucks can be easily controlled by shooting them with a rifle. Shooting provides sport

for hunters as well as a source of edible meat. Woodchucks are considered a varmint and may be legally shot anytime of the year if they are damaging your property. You must have a valid Kentucky hunting license to shoot any wild animal.

When you see a woodchuck at its burrow entrance, walk casually in its general direction (not directly toward it). When the woodchuck dives into its burrow, run quietly within about 25 yards of the burrow entrance and prepare to shoot. The woodchuck will usually pop its head up to have another look and can then be shot. If you use a large caliber rifle with a telescopic sight, woodchucks can be shot from a considerable distance.

Trapping

Live traps, Conibear traps and steel leg hold traps (Figure 2) are effective in capturing woodchucks. Trapping is the best method to use near buildings or where fumigation may create a poison or fire hazard. Place live traps covered with dark canvas and baited with apples or carrots near the burrow entrance. Block the trap door open for several days to allow the animals to take the bait regularly. Once this has happened, set the trap.

The No. 220 Conibear trap is particularly effective in controlling woodchucks. This trap kills the animal quickly, so take care to avoid capturing dogs, cats, and other domestic animals. Place the trap in a burrow entrance so the woodchuck will pass through it, tripping the trigger (Figure 3). No bait is required for this type of trap. If children or pets are present, place the trap at the burrow opening so it is flush with ground level and then cover the entrance with a cardboard box to prevent capture of other species.

Woodchucks are strong animals; thus a No. 2 steel leg hold trap is required to hold them. Near the burrow entrance, excavate a small area just large enough to place the trap (Figure 4). Set the trap with the pan slightly below the soil surface so it will be flush at ground level when covered with soil. Place a piece of wax paper over the trap pan and under the jaws. Sift very fine soil over the trap to conceal it so it does not look unnatural. No bait is necessary. Be sure to check traps twice daily and treat captured animals humanely.

Figure 2. — Traps (clockwise from bottom): snap trap, Conibear trap, Sherman trap, cage trap, leg hold trap.



Figure 3. — Placement of Conibear trap.

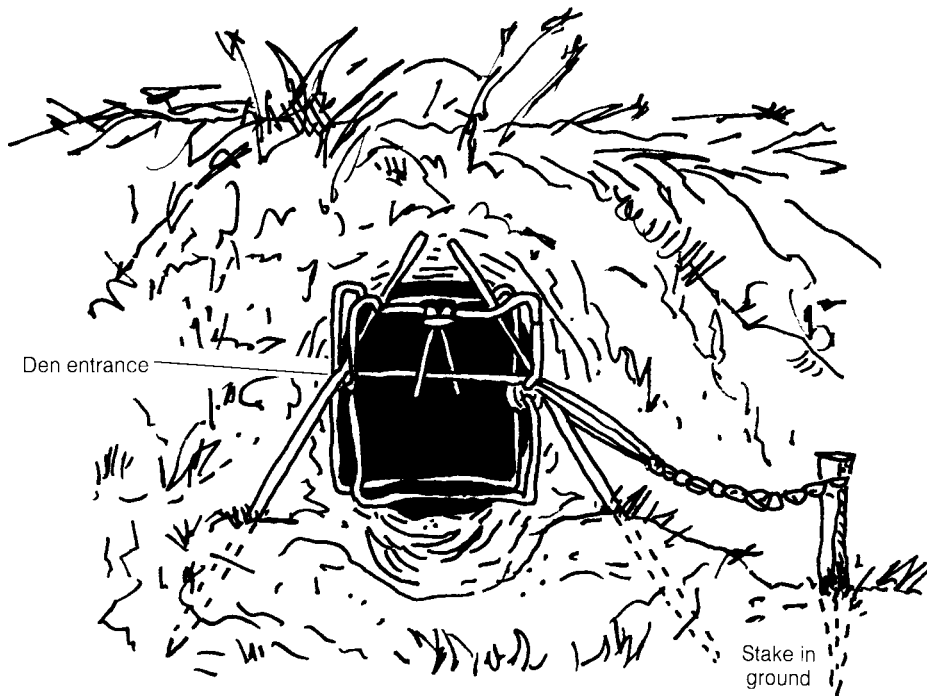
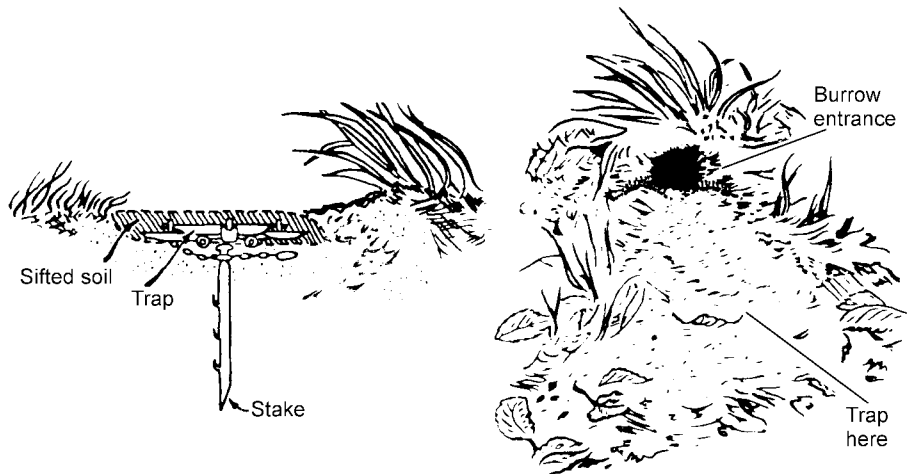


Figure 4. — Placement of leg hold trap.

Near the burrow entrance, excavate a small area in a runway just large enough to place the trap.



Fumigation

Gas cartridges that produce poisonous gas (killing by suffocation) are one of the most common methods of woodchuck control. These cardboard cylinders must be ignited and placed in the burrow system. **Because of potential fire hazard and gas accumulation in homes, never use a gas cartridge in burrows under homes, tobacco sheds, buildings, dry grass, or near other combus-**

tible materials. Gas cartridges may be purchased from your local county agricultural Extension agent, U.S. Department of Agriculture, APHIS-ADC, 3231 Ruckriegel Parkway, Suite 107, Louisville, KY 40299 or the Kentucky Department of Fish and Wildlife Resources, #1 Game Farm Road, Frankfort, KY 40601.

Fumigation is most effective February through April when the soil is moist because:

1. the burrow can be tightly sealed so little gas escapes through small cracks in the soil, and
2. woodchuck reproduction has not yet occurred. Other factors determining the success of fumigation include the length and configuration of the burrow system, absorption of gas into soil cracks, and inadequate plugging of all burrow entrances.

Gas cartridges are safe if the user takes a few precautions. **Never use a fumigant in a manner inconsistent with its labeling. Failure to comply with directions may subject you to severe federal or state penalties.** Gas cartridges must be ignited by lighting a fuse. They are not bombs and will not explode if properly prepared and used. Follow these precautions before using a gas cartridge: Before lighting the fuse, ensure that the cartridge will pass easily into the burrow entrance. Always light the end of the fuse, never the cartridge directly. *Do not* hold a burning cartridge in your hand. Once the fuse has been lit, work quickly because burn time may be less than five seconds. Place the fuse-end of the cartridge into the burrow first. Avoid prolonged breathing of smoke, and handle cartridges carefully because ignited gas cartridges can cause severe burns.

- For successful control, treat burrows in the following manner:
1. Locate *all* entrances surrounding active burrows.
 2. With a shovel, cut clumps of sod slightly larger than each burrow entrance. Place a piece of sod over each entrance except the main entrance. Next to the main entrance, place a piece of sod precut to the size of the burrow entrance.
 3. Follow the written label instructions on the cartridge for ignition and placement.
 4. Kneel at the main burrow entrance, light the fuse, and immediately place the cartridge as far down the hole as possible. Use a shovel handle or stick to push the cartridge farther down the burrow without causing large amounts of loose soil to fall into the burrow, because this may smother the cartridge.

- 5.** Immediately seal the burrow by placing the piece of precut sod over the opening and tramping it down slightly.
- 6.** Wait three to four minutes and watch nearby holes. If you see smoke escaping from these holes, reseal them.
- 7.** Repeat steps 1 through 4 until all burrows are closed.
- 8.** Within two to three days, check to see if the burrow is reopened and retreat the area if necessary.