

Holes in the Lawn

When holes and excavations mysteriously appear in lawns, it is helpful to note the season, location, and size. These are helpful clues when trying to identify the culprit and prevent further damage. The following information should help match the holes to the cause.

BIRDS

If you are very observant, you may see small holes as if something was poked into the ground, but no mounds or loose soil. These are probably caused by birds looking for food.

EARTHWORMS

If the soil in your yard has a healthy population of earthworms, you may find 1 inch high piles of small, granular pellets of soil. These castings were passed through the body of earthworms the night before and were brought to the surface as tunnels were cleared. They are more common in spring and fall when soil moisture and temperatures are conducive to earthworm activity. There is usually no hole in the top.

INSECTS

There are many insects that spend the winter in the soil, during which time they transform from a larva into an adult. In the spring and early summer, especially after a rain, you may see nickel-size holes caused by their emergence. These holes may be surrounded by small mounds of loose soil and fecal pellets. Examples include cicadas and June beetles.

SOLITARY BEES

There are also insects that prefer to live in the ground during their adult stage. Many bees, for example, are solitary and will dig cylindrical tunnels in loose soil as they create chambers for egg-laying. These holes are typically between ¼

and ½ inch wide and are found where vegetation is sparse. The entrance may be surrounded by a mound of loose soil as high as 2 inches.

CICADA KILLERS

Cicada killers are large wasps that hunt cicadas and use them to feed their developing young. Females create a ½ to 1 inch diameter tunnel into which they drag immobilized cicadas. They prefer areas that are dry and bare but may also be found where grass is maintained very short. You may notice a small, u-shaped mound of dirt at the entrance as well as lines in the soil where cicadas have been dragged.

CRAYFISH

If you live near water, you may find 2 to 4 inch high towers made of balls of mud, with a 1 inch wide hole in the top. These are the work of crayfish, which are nocturnal and tunnel in areas where there is a lot of soil water movement.

VOLES

Voles are small rodents, also called meadow mice or field mice. They do not hibernate, so they may be seen any time of the year. They construct surface runways as well as underground tunnels and eat a variety of plant material. Tunnel entrances are 1 to 1½ inches in diameter and no mound of soil is present.

SQUIRRELS

Tree squirrels will bury and dig up nuts in the lawn. Holes are typically 2 inches in diameter, shallow and there is no mound of soil around them.

CHIPMUNKS

Entrances to chipmunk tunnels are usually found in less conspicuous places such as near stumps, buildings, brush piles or log piles. They are about 2 inches in diameter.

RATS

Entrances to rat tunnels are also found in less conspicuous places such as near shrubbery or wood piles. They are as large as 3 inches in diameter.

MOLES

As moles create deep tunnels, or encounter roots, rocks or hard to compress clay soils in shallow tunnels, they push the excess soil out of the tunnel and to the surface. These so-called mole hills can be from 2 inches to 24 inches tall and are volcano shaped. Over time, they may flatten and become a bare area.

SKUNKS AND RACCONS

Damage from skunks and raccoons occurs at night. They dig holes in lawns and gardens, looking for grubs and other insects. The holes are typically cone-shaped and 3 to 4 inches wide, but the area disturbed may be as wide as 10 inches. Both of these rascals have been known to peel back newly laid sod.

GROUND HOGS

Ground hogs have been known to visit vegetable gardens and help themselves to broccoli, carrot

tops, and beans. They are active during daylight hours. Their burrow entrance is usually 10 to 12 inches in diameter and is distinguished by a large mound of excavated dirt.

ARMADILLOS

Armadillos eat mostly insects, earthworms, and spiders. They are active from sunset to early morning hours and will root in lawns, vegetable gardens and flower beds, looking for food. Holes are typically 1 to 3 inches deep and 3 to 5 inches wide, but the disturbed area can be as wide as 3 feet. Their burrow is up to 15 feet long and has an entrance that is 7 to 8 inches in diameter.

Prepared by Chuck Burgess, HGIC Information Specialist, Clemson University.

This information is supplied with the understanding that no discrimination is intended and no endorsement by the Clemson University Cooperative Extension Service is implied. All recommendations are for South Carolina conditions and may not apply to other areas. Use pesticides only according to the directions on the label. All recommendations for pesticide use are for South Carolina only and were legal at the time of publication, but the status of registration and use patterns are subject to change by action of state and federal regulatory agencies. Follow all directions, precautions and restrictions that are listed. (New 12/05).