

How To Identify the Wildlife Species Responsible for Damage in Your Yard¹

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Although many homeowners enjoy wildlife in their yards, there are situations where wildlife can become a nuisance. In some circumstances, wild animals can cause extensive damage to lawns and gardens. Learning to identify which species is responsible for this damage is the first step in finding a solution to the problem. See the [EDIS publication, WEC323](#), titled “Overview of How to Stop Damage Caused by Nuisance Wildlife in Your Yard” for a complete outline of the steps to finding solutions to nuisance wildlife problems in your yard.

In this publication we provide information on the first step toward putting a stop to problems caused by nuisance wildlife: identifying the culprit. Here we provide images of wildlife damage in residential settings to help you determine which species may be causing similar problems in your yard.

Animal Scat and Tracks

Although some animals are active during the day and highly visible (i.e., many birds and a few mammals), most wildlife is fairly secretive. In cases where observations of the animals themselves are challenging, you may be able to identify the culprit by the droppings it leaves behind. The size, shape, and color of wildlife droppings can provide important clues. Small feces pellets the size of rice grains could be from rats, mice, chipmunks, or bats. Rounded, pea-sized pellets with rough texture are likely from rabbits. Slightly larger, smoother, oval droppings are likely from

white-tailed deer, whereas smaller oval pellets could be from squirrels. Fox and coyote scat is typically 2 inches long and 1/2 inch in diameter, segmented, with tapered (pointed) ends. It usually contains hair and often bits of bone. Bobcat scat is usually about 4 inches long, segmented, and blunt at the ends. Raccoon scat has blunt ends and is uniform in thickness (1 inch in diameter). Feces from wild hogs is variable in size and shape (depending on the recent diet of the animal), but tends to be similar in shape and consistency to that of dogs. The color of feces can indicate how long ago it was left behind: fresh feces are usually moist and shiny whereas older feces tend to be dry, dull, and grayish. Take photos of the scat you find in your yard and compare your photos with photos of scat from known species of wildlife on the internet. For more details on identifying scat you can visit the Internet Center for Wildlife Damage Management at <http://icwdm.org/Inspection/Scat.aspx>, or North Woods field guides http://www.northwoodsguides.com/animal_scat_notes.htm.

Wildlife can also be identified from the tracks they leave behind. If the ground is hard in the area where wildlife damage is occurring and no tracks are visible, you might consider sprinkling baking flour on the ground so that new tracks will be more obvious. Again, taking photos of this animal sign can allow you to compare with photos of known animal tracks on the internet. The Purdue University Extension website has many images of wildlife tracks

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that can be used for making comparisons: <http://www.ag.purdue.edu/entm/wildlifehotline/pages/TrackID.aspx>.

Soil Disturbance

Diggings are an easily observable sign that wildlife is present. In most residential settings, a few diggings are not problematic. But there may be situations where extensive soil disturbance or the location of one or more large burrows is problematic. A close look at the size, shape, and location of diggings can reveal which type of wildlife is responsible.

If you have just one or a few small holes (less than three inches in diameter), they were likely dug by chipmunks, voles, Norway rats, or snakes. Larger holes (6–12 inches in diameter) located near the base of trees, logs, or walls were likely made by red foxes, skunks, armadillos, or coyotes. The presence of tracks or trails leading in and out of the burrow and the odor nearby may help differentiate among these possibilities.



Figure 1. The entrance of an armadillo burrow is typically round and 7 to 8 inches across, matching the shape of the armadillo carapace. Credits: Karan A. Rawlins, www.forestryimages.org

A large hole (6–12 inches in diameter) accompanied by a large mound of sandy soil is characteristic of a gopher tortoise. Gopher tortoises forage above ground but spend long periods of time underground in the large burrows they dig for shelter. Gopher tortoise burrow entrances are wider than they are tall to accommodate the dimensions of the tortoise shell, and a large pile of excavated sand is almost always present in front of the entrance.



Figure 2. The entrance of a gopher tortoise burrow is flat on the bottom and rounded on top, matching the shape of the gopher tortoise carapace.

Credits: David Moorhead and Chuck Bargeron, www.forestryimages.org

Pocket gophers (often called “sandy-mounders” or “salamanders”) are secretive animals that live underground, creating tunnel systems 6–12 inches below the soil surface. They are herbivores (plant eaters), feeding on roots and fleshy plant parts. Pocket gophers excavate soil from the tunnel system and mound it into large (10 inches in diameter) asymmetrical, crescent-shaped heaps. No entrance hole is visible: a plug of soil may be seen offset from the center of the mound.



Figure 3. A single pocket gopher creates many sandy mounds. Note the asymmetrical shape of each mound.

Credits: Arlo Kane

Moles also live in underground tunnel systems. They differ from pocket gophers in that they eat earthworms, beetles, grubs, and other insects that live in the soil. Foraging tunnels created just below the soil surface create raised ridges of soil that can create challenges for you when you're trying to mow the lawn. Tunnels can also kill grass if the roots become exposed to air as a result of the tunneling, and leave brown strips on the lawn. Moles can be beneficial because they feed on the larvae and adult forms of many lawn and garden pests (mole crickets, wire worms, white grubs, armyworms, etc.). But in some situations damage to lawns from extensive tunnel systems and spoil mounds (dirt excavated from tunnels) can reach nuisance levels. Soil removed by tunneling moles is deposited in small (less than 6 inches in diameter) symmetrical, volcano-shaped mounds that have an exit hole in the center.

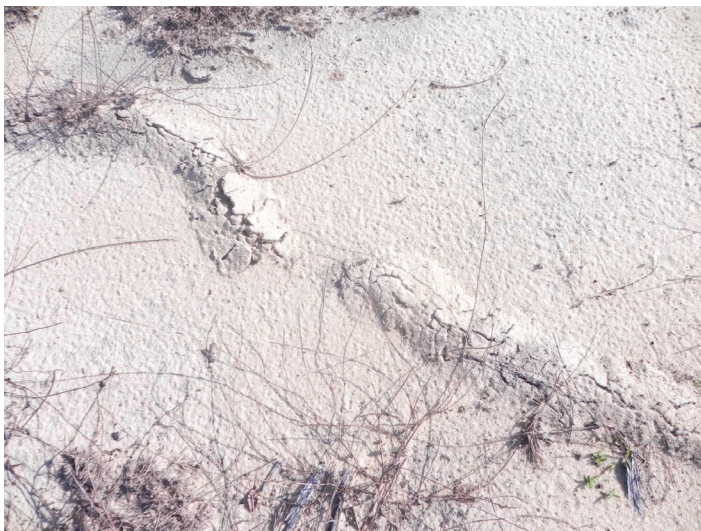


Figure 4. Foraging tunnel created by a mole.
Credits: Arlo Kane

Rooting in the soil of Florida yards is most likely caused by foraging armadillos or wild hogs. Foraging armadillos typically create many shallow holes 1–2 inches wide and



Figure 5. Foraging depression dug by an armadillo.
Credits: Eddie Powell

up to 6 inches deep as they search for invertebrates in the upper layers of soil.

Wild hogs cause more extensive damage while rooting in the soil. They create deeper holes across larger areas. Hogs also create wallows in wetter areas so they can cool off by rolling in the mud.



Figure 6. Rooting and wallowing by wild hogs.
Credits: Billy Higginbotham, www.forestryimages.com

Bark Damage

Gray squirrels can damage trees by removing patches of bark from tree trunks or upper tree branches, often up in the tops of trees.



Figure 7. Bark removal by gray squirrels.
Credits: Randy Cyr, www.forestryimages.org

Male deer can damage tree bark when they rub against stems to remove the velvet from their antlers. Bark is often

removed along only one side of the stem, at heights of 2–4 feet off the ground. Small-diameter trees are preferred for antler rubbing.



Figure 8. Damage to a small conifer caused by deer antler rubbing. Credits: David Stephens, www.forestryimages.org

Black bears cause two types of damage to trees. First, they strip the bark and then scrape the cambium from young trees with their incisors, leaving vertical scars. They create this damage while feeding on the inner bark, as well as to intentionally leave a territorial mark. Second, when they climb trees they often leave distinctive, deep grooves in the bark or cambium with their claws.



Figure 9. Damage to trees inflicted by black bear claws. Credits: David Morehead, www.forestryimages.org

Wild hogs damage bark when they scratch or rub on tree trunks. Hogs are surely responsible if mud and coarse hair remains clinging to the rubbed area. The height of the rub provides an indication of the size of the hog.



Figure 10. Damage to tree from wild hog rubbing. Note the dried mud on the trunk. Credits: Sasa Kunovac, www.forestryimages.org

Woodpeckers sometimes drill holes in the trunks of live trees. In particular, yellow-bellied sapsuckers may drill horizontal rows of deep holes $\frac{1}{4}$ – $\frac{1}{2}$ inch in diameter in the bark of favored trees to gain access to their preferred food, tree sap and insects attracted to this sap.



Figure 11. Yellow-bellied sapsuckers leave close, evenly spaced holes in tree trunks. Credits: Randy Cyr, www.forestryimages.org

Vegetation Clipping

Plant parts may be consumed by a variety of wildlife including rabbits, deer, and beaver. The size of tooth marks, the bite pattern, and the size of the material consumed can be helpful in determining which species caused the damage. For example, rabbits have sharp incisors that enable them to clip vegetation cleanly, but their short stature limits this damage to low heights above the ground. In contrast, white-tailed deer lack upper incisors, and therefore must rip leaves or twigs off rather than biting them, leaving behind a jagged appearance, and deer damage will occur higher up on the plant than damage caused by rabbits.

Rabbits typically clip seedlings and leaves within 15 inches of the ground, leaving a clean, angled cut on the remaining stem. Targeted stems are usually less than 1/4 inch in diameter. Tooth marks are 1/16–1/8 inches wide.



Figure 12. Rabbits leave clean, angled cuts when browsing on pine seedlings.

Credits: John Ghent, www.forestryimages.org

White-tailed deer lack upper incisors, so they typically leave rough, jagged cuts when they clip pine seedlings. No obvious tooth marks are visible.



Figure 13. Deer leave rough, ragged cuts when browsing on pine seedlings.

Credits: www.forestryimages.org

Beavers typically cut shoots, saplings, or trees off at their bases, within 2 feet of the ground. Cuts are made in larger trees inward at an angle from all edges, leaving a tapered point in the middle of the stem. Individual tooth marks are 1/8–1/4 inches wide. Most trees damaged by beavers occur close to the waterways where beavers have created a dam. Tree species beavers prefer may be entirely eliminated in the vicinity of an active lodge.

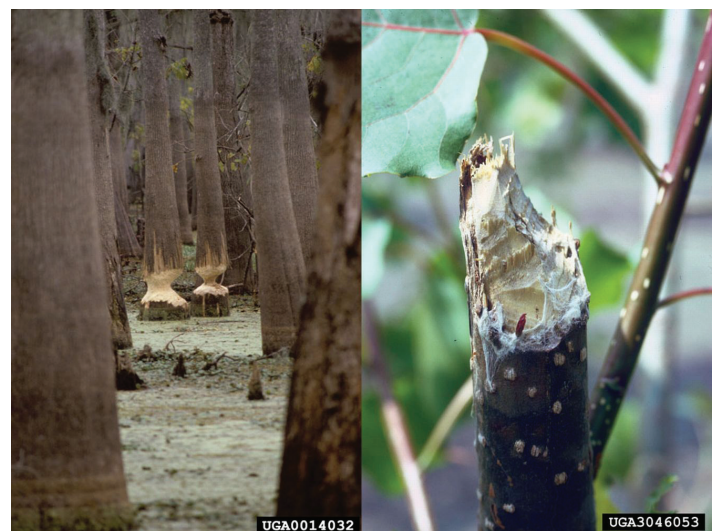


Figure 14. Beavers leave behind jagged cuts by chewing inward at an upward angle from all sides.

Credits: Gerald Lenhard and James Solomon, www.forestryimages.org

Vegetable Garden Raiding

Watermelons are a favorite food item of many omnivorous wildlife. Raccoons tend to dig a small hole in the side of the melon and rake out the contents with one paw. Coyotes bite holes and eat out the center portion of the fruit. Deer and hogs will paw the melon and break it open.



Figure 15. Damage to watermelons by raccoons and coyotes.
Credits: Donald Maynard and Gary Elmstrom

Young peanuts are favorites of deer. Because deer lack incisors, plants damaged by deer have rough, ragged breaks with shredded edges.



Figure 16. Peanut plants browsed by deer have jagged edges.
Credits: Holly Ober

Young soybeans are also susceptible to foraging by deer.



Figure 17. Soybeans topped by deer.
Credits: Daren Mueller, www.forestryimages.org

Additional Sources of Information

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