How to identify animal tracks, burrows and other signs of wildlife in your neighborhood

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Skunks, and many other local animals, often leave obvious excavations in lawns.

Lawns are biological deserts where few species can live, but those that can survive there often reach high numbers. Lawn grubs – the milk-white, C-shaped caterpillars of a few beetle species – particularly love the lack of competition found in a carpet of grass. Polka dots of dead thatch are one sign of these grubs, but if you have a biodiverse neighborhood, many animals will consume this high-calorie treat before you ever notice them.

Skunks and raccoons will dig up each grub individually, leaving a small hole that healthy grass can refill quickly. Moles – fist-size insectivores more closely related to bats than rodents – live underground where they virtually swim through soil, leaving slightly raised trails visible in mowed lawns. In spring and fall, moles make volcanoshaped mounds with no visible opening.

Though most of the smell communication is lost on humans, the contents of the feces can tell a lot about the inhabitants of a neighborhood.

Domestic dog poop is usually just a big, homogeneous lump because they eat processed food, but wild canid feces is often full of bones and fur. Coyote feces is usually lumpy and larger than fox feces, which has pointy ends. Once it has weathered a bit, it's easy to break open to find identifiable remains such as vole, rat and rabbit. Use care when inspecting feces, since it may transmit parasites.

Depending on time of year, the contents and shape of feces can vary considerably. Raccoon feces lacks the pointy ends and is often filled with seeds, but wild canids may eat lots of seeds, too. Deer feces is usually small, fibrous pellets, but those pellets may form clumps.

If you are lucky, you might find a pellet of bone and fur regurgitated by an owl near the base of a tree. Carefully break it apart and there's a good chance you'll find the skull of a vole or rat.



The items inside an owl pellet can tell you something about the smaller animals in the neighborhood, as well as the owls.

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Look closely at living and dead trees to find evidence of even smaller neighbors. A fine, uniform, granular sawdust pushed from tiny holes in bark can indicate beetle larvae feces, or "frass." A large mass of frass at the base of a tree likely indicates carpenter ants.

In contrast to dusty frass, aphids slurp sap so rich in sugar that their feces coats surrounding surfaces in, essentially, maple syrup.

All of these insects attract many species of birds. Woodpeckers are hard to miss as they loudly hammer holes into trees. But don't blame them for tree decline – they eat the things that are killing the tree.

Look for dead trees

Dead trees are a key feature of wildlife habitat, like a bus stop, and host different occupants throughout the day and over the year.



Dead and dying trees are useful for many animals, from woodpeckers that excavate holes to eagles, crows and other birds that build nests in them. This acorn woodpecker creates holes to store acorns.

Eric Phelps via Wikimedia Commons, CC BY

For example, a tree buzzing with cicadas in my yard this summer is quite healthy but has one big, dead branch that has been an important way station for wildlife over the past 20 years.

A decayed cavity at the base of the branch is polished smooth with the activity of generations of squirrels, while the tip is a favorite perch of all the neighborhood birds. By night, it is visited by a great horned owl, who, I somewhat sadly note, may be scanning for my porch skunk.

Decomposers: The neighborhood cleaning crew

This brings us to the decomposers. Animal carcasses are evidence of the neighborhood's wild population, too, but they typically don't last long. Insects make quick work of dead animals, often consuming the soft parts of a carcass before it is even noticed by humans.

Long after most activity around the carcass has ceased, exoskeletons left behind by the decomposers will remain in the soil. Dermestids, including the carpet beetles often found in our homes, leave fuzzy larval exoskeletons. Fly pupae look like brown pills. And sometimes adult carrion beetles keep a home underneath partially buried bones for years.



A collection of beetles found around Austin, Texas. Beetles are common decomposers. $\label{eq:proposers} \textit{VPaleontologist/Wikimedia Commons, CC BY-SA}$



Carrion beetles and flies feeding.

Benoit Brummer/Wikimedia Commons, CC BY

Earthworms, feasting on nutrient-soaked soil, may leave a squirt of mud like a string of hot glue, while ants will leave piles of uniformly sorted sand. Snails will visit carcasses periodically to eat the bones, leaving trails that sparkle like thin, impossibly long ribbons in the morning sun.

From snails to skunks, squirrels to cicadas, most of our neighbors are quiet and seldom interact with us, but they play important roles in the world.

As we get to know them better, through their digging, eating and decomposing, and sometimes by watching them in action, we can better understand the animals that make our own lives possible and, maybe, understand ourselves a little better, too.

Steven Sullivan does not work for, consult, own shares in or receive funding from any company or organization that would benefit from this article, and has disclosed no relevant affiliations beyond their academic appointment.

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