

Discovering Animal Evidence

There are 66 species of mammals that live in Pennsylvania, although you probably haven't seen them all. Many of these animals are secretive or nocturnal, but you may have seen some signs of them passing through the woods or visiting your backyard.

Nests

Look up!



In Pennsylvania, fox squirrels, red squirrels, and gray squirrels will often make a nest called a drey, usually in the crotch of a branch. To identify a squirrel nest look for a large bundle of leaves and sticks about the size of a basketball. The nest will be much larger and rounder than a typical bird nest. Flying squirrels will also make dreys but they prefer to nest in natural cavities or old woodpecker nests. Once abandoned, these nests may be inhabited by other small mammals like the white-footed mouse.



Who's there?

Squirrels are not the only rodents that build nests in Pennsylvania. Many mice, rats, and shrews make nests within natural cavities, old and rotting logs, or areas of exposed, rocky land known as outcroppings. They are typically made of grasses and leaves on the outside. On the inside, they are filled with soft plant



material, fur, or feathers which acts as insulation, keeping them warm in winter. Some species of mice will modify abandoned nests of other animals like the bird nest in the image on the right that has been filled with milkweed seeds.

Holes and Burrows

A Keystone Species

At 10-12 inches in diameter the woodchuck burrow is easy to spot at the edges of fields, in lawns, or in meadows. There is often more than one entrance to these extensive, multi-chambered burrows. Once abandoned, they are commonly inhabited by many other mammal species such as skunks, foxes, opossums, and rabbits. Look for scat, fur, or remains to determine if something other than a groundhog might be living in them. The ability to create habitat for many other animals makes the woodchuck a keystone species (a species that helps define an entire ecosystem).



Watch your step!



Smaller, golf ball sized holes like the two on the left could be from species like chipmunks, mice, moles, or voles. Chipmunks and mice create a burrow similar to a groundhog with multiple chambers deep into the soil. Moles and voles create burrows but will also have a system of tunnels running close to the surface that they use for feeding. The tunnels eventually age and collapse making the network of connected passages visible from above as shown in the picture below.

Star-nosed mole (top)
and a woodland vole
(bottom).



Holes and Burrows (cont.)

Something Smelly



Sometimes a hole does not lead to a burrow. On the left you can see multiple shallow pits in a lawn. A skunk dug these using its sharp front claws while foraging for small insects and other invertebrates. Closer inspection would show these only go a few inches deep and are cone shape, the perfect size for a skunk nose!



Tree Markings

An Itch to Scratch

Male deer grow a new set of antlers every year for the mating season and will rub these new antlers against young trees. It is done to remove the velvety skin covering that is present during growth and to mark their territory with their scent. We have two species of deer in Pennsylvania, the white-tailed deer and the Rocky Mountain elk. Elk are about twice as big as white-tailed deer and it is reflected in their rubs. Elk rubs will be higher and can be seen on larger trees than that of their smaller white-tailed counterparts.



An elk shedding its velvet (left), an example of a white-tailed rub (top), and an elk rub (right).



Tree Markings

This Looks Like a Good Spot

Black bears will mark trees with their scent to establish territory. They rub them with their heads and backs, bite, and claw them. On the left there are fresh marks left by a bear and once healed, the tree will be permanently marked like the photo below on the left.



Is There Something in My Teeth?

The chiseled wood on this tree indicates that a beaver lives in this area. Beavers cut trees to gain access to younger, tastier branches, to store branches underwater for winter food, and to get branches for dam and lodge construction. Beavers typically stay within 200 feet of the water's edge to look for wood.

A beaver lodge (left) and a beaver dam (right)



Scat

Scat is a term used to refer to animal droppings or waste. It can be a very useful tool to gather information about your surroundings, but only if you know what you're looking for.

Pellets

This type of scat is left by rabbits and deer. It is typically found in piles of multiple small and round pellets where the animals tend to feed.



Deer pellets in a large pile

Globular (Glob)

Large piles of scat are typical of large mammals like horses or black bears in Pennsylvania. A black bear's droppings will be about the same size as a humans.



Multiple samples of bear scat show the variety of color and composition.

Tubular (Tube)

This is a very common shape for scat left by canines, felines, rodents, raccoons, opossums, and bats. Size of the scat can help to guess the size of the animal and contents can help you determine the animal's diet. Look for fur, bones, or seeds to differentiate between herbivores, omnivores, and carnivores.



Coyote scat (top left), Raccoon scat (top right), Mouse scat (below left), Bat scat (below right).