



Dog



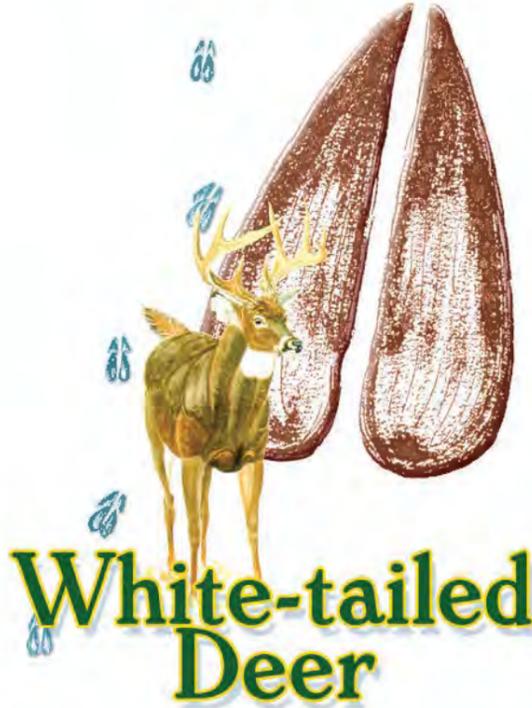
Coyote



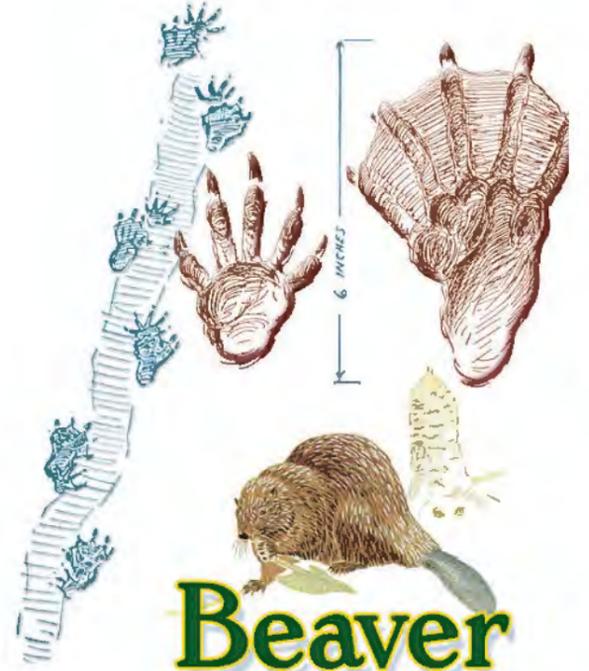
Muskrat



Red Fox



White-tailed Deer



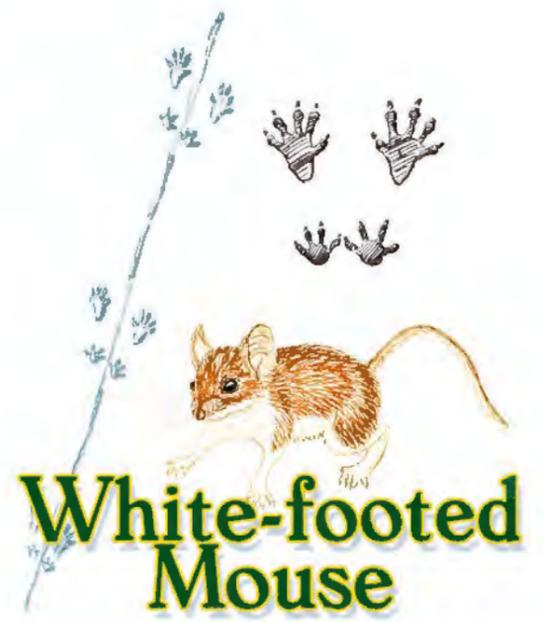
Beaver



Opossum



Raccoon



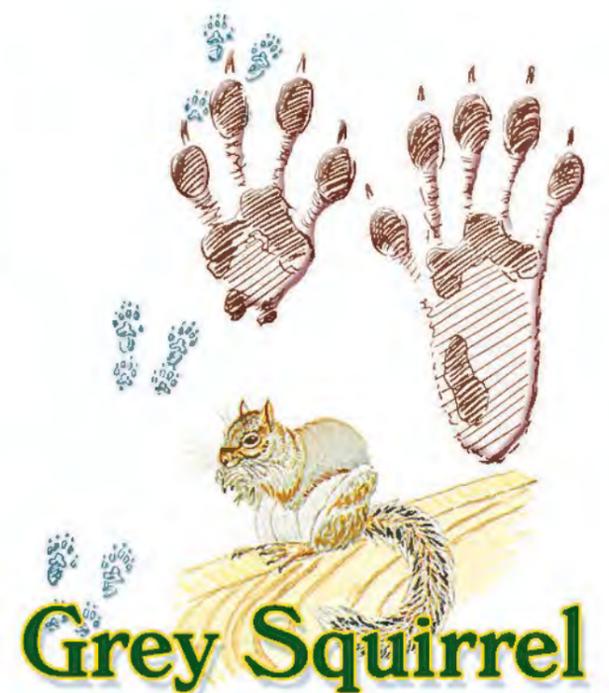
White-footed Mouse



Mink



Skunk

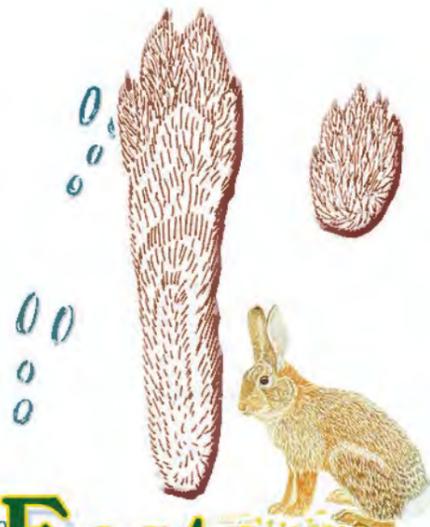


Grey Squirrel

WINTER TRACKS



Department of
Environmental
Conservation



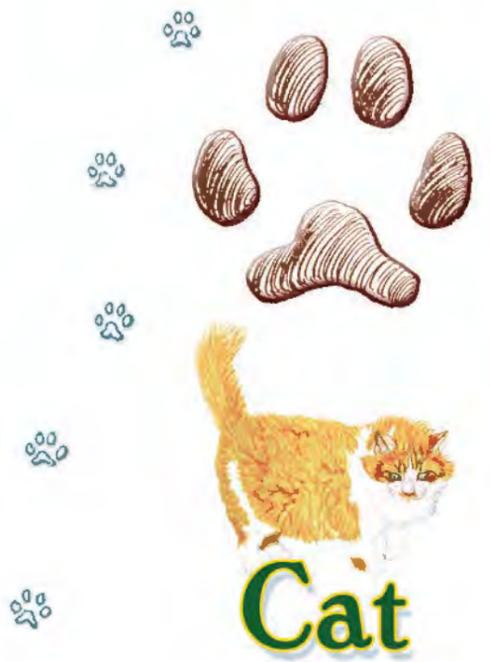
Eastern Cottontail



Turkey



Bobcat



Cat

Winter Tracks

Identifying animals by the signs they leave

There is something thrilling about taking a walk on a cold winter morning when a dusting of snow has coated the world, and you see criss-crossed over the ground the tracks of animals whom only hours before had gone about their nightly rituals. Looking over these fragile signs makes you wonder what animal was here and what was it doing? Did it stop to listen for danger, or was it stalking prey? And why did the tracks suddenly disappear?

Deciphering the mystery of animal tracks is a fascinating task that offers us a respite from our fastpaced, hi-tech world. Discovering the story behind those tracks opens our eyes to the natural world, giving us a glimpse into the life of that wild creature. In order to really read and understand animal signs, we must first slow down so we don't miss something important. Are those marks to the side from the same creature, or has another species entered the scene? Be sure to really look around for all the clues and take in the whole story written in the snow. Keep in mind when studying winter tracks that snow conditions make a difference in a track's appearance. Wet snow captures a paw print well, whereas dry powdery snow captures a less-defined print pattern.

As you learn more about the animals that share our world, you develop a respect and admiration for their ability to survive the everyday adversities they face in their natural world. Identifying animals by their tracks and signs helps educate us about the important role each species has in the balance of nature, and provides us with knowledge that can be used for determining the best way to manage and protect our wildlife populations.

Mammal Gaits and Patterns

When looking at mammal tracks it is useful to understand some of the different gaits and patterns animals display. Certain animals have distinct walks, helping identify that animal even if its track is indistinguishable. There are four major types of gaits that most animals use throughout their daily activity:

Walk—The most basic gait that nearly every animal exhibits. It is a slow means of transport and relatively energy efficient. The trail left by a walk shows alternating even-spaced prints in parallel rows with a short stride and wide straddle. There

are two types of walks: direct register, when the hind foot lands in the same spot as the front foot, leaving only one print; and indirect register, when the hind foot oversteps the front foot, in most cases only slightly.

Trot—A faster mode of movement that is still relatively energy efficient. During trotting, the two diagonal feet move simultaneously (i.e., each hind foot moves at the same time as the opposite front foot). The trail left is similar to a walk's, but narrower in straddle and longer in stride. The hind foot generally lands ahead of the front foot. As speed increases, prints space farther apart.

Gallop—The fastest form of mammal locomotion, it is energy intensive and usually used for short periods. There is at least one stage when all four feet leave the ground. The straddle is much smaller than a trot's or walk's, and the prints lie in a relatively straight line in the direction traveled. A slow gallop is called a lope.

Jump—The most energy consuming of mammal gaits. Similar to the gallop, but slower, there is at least one stage where all four feet leave the ground. The animal pushes off from either the hind feet or all four feet. After leaving from its hind feet, the animal lands on its front feet with the hind legs often landing in front and to the side of the forelegs. Bounding is one type of jumping. Rabbits, squirrels, mice and rats are all jumpers.

Mammal Families and Orders

While New York is home to a wide variety of mammal species that move about and leave tracks in the winter, it is not as difficult as you may think to properly identify a print. First, learn what animals are present in your area. Next, it helps to know that mammals are classified into different families and orders, with each member having a somewhat similar track. This allows you to narrow down the field of choices by determining the grouping the print belongs to. The families, orders and types of tracks found in New York are:

Cat Family—Includes bobcat and domestic cat. Tracks are fairly rounded and show four toes on both the back and front feet. There are three lobes on the bottom of the plantar pad (on sole of foot). Unlike dogs, cats' claws are retracted when they walk so there are no claw marks. Cats directly register.

Dog Family—Includes coyote, fox and domestic dog. Leave prints similar to cats, with four toes showing on both the back and front prints. However, dog prints show only one lobe on the plantar pad and claw prints are usually visible. The entire

print is more flaring and less rounded than a cat's. The only member to directly register is the fox, the others indirectly register.

Weasel Family—Includes weasels, minks, skunks, martens, fishers and otters. Tracks show five toes on the front and hind feet with claw marks usually visible. A wide variety in species track appearance makes gait and patterns important to identification.

Rabbit Order—Includes Eastern cottontail and snowshoe hare. Leaves fairly obvious tracks with four toes on both the back and front feet. Makes a distinct "Y-shaped" track pattern because the back feet are two to four times as long as the front and always land ahead of the front feet.

Rodent Family—Includes squirrels, chipmunks, muskrats, mice, rats, voles and beavers. Like the weasel family, the tracks of this family vary greatly. Usually there are four toes found on the front feet and five on the back. Claws are sometimes evident.

Deer Family—Includes white-tailed deer and moose. Probably the most commonly-seen large animal tracks in the state, deer tracks are heart-shaped with a line down the middle. When frightened and running, they leave a dew claw mark in the back and the tracks split and fan down the middle line. Moose tracks are considerably larger versions of the same track.

Raccoon, Opossum and Bear Families—These three families all have five toes on both the front and hind feet. Raccoon—track is often likened to the hand of a human baby. Opossum—fairly obvious looking wide spread "thumb" print. Bear—hind track resembles a wider and shorter version of a human footprint.

This brochure contains a sampler of those species' tracks most commonly encountered in winter in New York. Unless otherwise indicated, illustrated tracks are life-sized. However, keep in mind that track size will vary.

Another way of identifying what animal visited an area is to look at any scat it may have left. Like tracks, scat can be used for identification because each animal's scat has a different look. For additional information on identifying tracks and scat, check your local library or bookstore for any of several excellent field guides on the subject.

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