

Tracking Wetland Critters

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School or Agency: St. Anne Wetland Education Outreach Project

Grade Level(s): K-4

Science Topic: Life Science

Summary: Students will walk through the wetland and surrounding forest in search of wetland critters. Various 'clues' will tell the students which animals are present in the wetland, although they may not see them.

Core Content: Life Science

Objectives: Students will be able to identify animal habits and remnants and determine their presence in the wetlands.

Materials: Clipboards, paper and pencil, magnifying glass, Wildlife tracking field guides or cards (recommended)

Procedures: Take students into the wetlands to search for wildlife. Use the 'what to look for' scavenger hunt handout to guide the class.

*Be sure students to not handle or inhale around scat-it can contain parasites!

Assessment Techniques: see handout

Resources:

<http://www.bear-tracker.com/animalscat.html> (scat handouts)

http://www.ussartf.org/animal_tracking.htm

<http://dnr.wi.gov/org/caer/ce/eeek/nature/track.htm>

<http://www.bear-tracker.com> (animal track drawings)

Handouts: A great resource is:

http://www.loudounwildlife.org/PDF_Files/Animal_Tracks_Traces.pdf

Animal Tracking in St. Anne Wetlands

What to look for:

- 1) Scat (see handout)
- 2) Tracks (paw/talon prints, snakes, snails, deer trails, amphibians)-handout attached
- 3) Feathers
- 4) Fur
- 5) Food remnants (carcasses, seed shells, vomit, raptor pellets)
- 6) Burrows/shelters (bent grass from sleeping deer and fox, crayfish burrows, rabbit burrows, birds' nests, cocoons, beehives, woodpecker holes, etc)
- 7) Gnaw marks on tree bark (from beavers or hungry deer) or rub marks from male deer antlers.
- 8) Chew holes in leaves (from caterpillars, mice, mites, etc.)

Animal Scat

A common animal sign that is often ignored or passed over because of our human tendency to look upon it as dirty, is scat, or droppings. However, this is another way to identify the species that are present in an area, and even determine what they are eating in that location. Scientists studying scat can determine the health of the individual animal by analyzing the chemical content of this material, as well as looking for seeds, plant parts, berries, and other indicators of the animal's diet. Predator scat often contains large amounts of hair and bones from the prey. Rabbit and other herbivore scat usually contains only plant material. Although this is an important part of animal tracking, I must preface this page with a warning to those who may be squeamish or are bothered by animal fecal droppings. I have included photos of the real thing, so if you are bothered by such things, please do not go any farther. I don't want to offend anyone and would not deliberately try to do so. This is of scientific interest to some and is information that I have found lacking on the 'net. If you are interested in learning another dimension of tracking, read on.



 <p>Cougar (mountain lion) scat.</p>	 <p>Deer scat. Typical form.</p>
 <p>Deer scat. Clustered form.</p>	 <p>Jackrabbit scat. (Pellet)</p>
 <p>Horse scat. (Several months old.)</p>	 <p>Black bear scat. (Three months old, composed of apple peels.)</p> <p>New black bear scat page</p>

 <p>Coyote scat, with hair of prey.</p>	 <p>Coyote scat.</p>
 <p>River Otter scat.</p>	 <p>Mouse scat.</p>
 <p>Robin scat.</p>	 <p>Human scat.</p>
 <p>Wild turkey scat.</p>	 <p>Bobcat scat.</p>
 <p>Bobcat scrape.</p>	 <p>Raven Scat</p>

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Common shapes of scat:

Tubular - Dog Family, raccoon, skunks, opossum, wolverines, bears

Tear drop or Tapered - Cat Family

Fattened Threads - Weasel Family

M&M's - Rabbits & Hares

Oblong, may have nipple at end - Deer

Pencil Lead - Rodents

Fox - Tubular & Tapered at both ends - between dog and cat

Aging Scat: can be aged but to be at all accurate you need to see it come out of the animal. Leave a popsicle stick marker and check it every so often. Scat dries from the inside out. Find some fresh, pick it apart and examine the contents. Come back later, pick another apart and see how it has changed over time.

Pellets: Raptors (hawks, eagles, and owls) regurgitate pellets of what isn't digested. These pellets consist of bones, hair and/or feathers.

Follow the tracks!



Four toes on each of the front and hind feet means you're looking at a track from the dog family (fox, wolf, coyote, neighborhood dog) or the cat family (bobcat, lynx, neighborhood cat). Does the paw print have small triangular marks in front of it? If yes, those are claw marks. Raccoons, skunks, coyotes, foxes, and dogs will often leave claw marks. Cats, on the other hand, retract their claws when they walk or run. So, you won't usually find claw marks with bobcats, lynx, or house cats.

 Four toes on the front foot and five toes on the hind foot means it's a rodent (mice, voles, chipmunks, squirrels, woodchucks, muskrat, porcupine).

 If the track has five toes each on the front and back feet it's from a raccoon or a member of the weasel family (weasel, badger, mink, skunk, otter) or it's a bear, beaver, opossum.

 If you find a two-toe track, it's probably a deer. Moose and elk also leave two-toe tracks, but those animals are uncommon in Wisconsin.

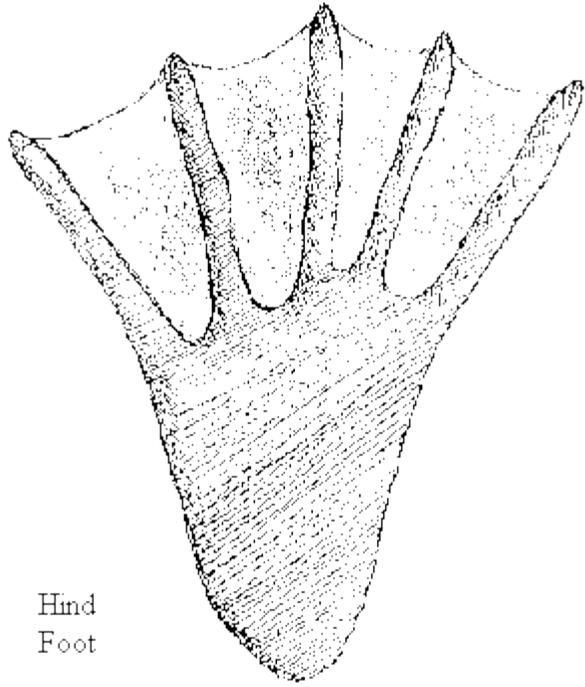
 Is the track made by a "hopper?" Squirrels leave interesting tracks. As they bound along, their larger hind feet land ahead of their smaller front feet. It looks like the front feet are side by side. Rabbit tracks look a little different. The hind feet still land ahead of the front feet, but the front feet are not found right next to each other.

Mammals



What is a Mammal?

Mammals are animals that are born with fur or hair. Mammals produce live young which they nourish with milk. They are warm-blooded and have the most highly developed nervous system of all the animals. A mammal usually has four limbs and a four-chambered heart. The largest mammal is the blue whale at 100 feet in length. The smallest mammals are shrews, mice, and bats. Many are less than two inches long, excluding the tail length.

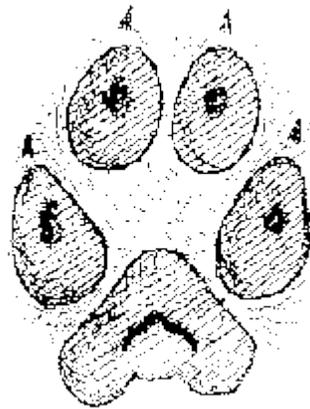


Hind
Foot

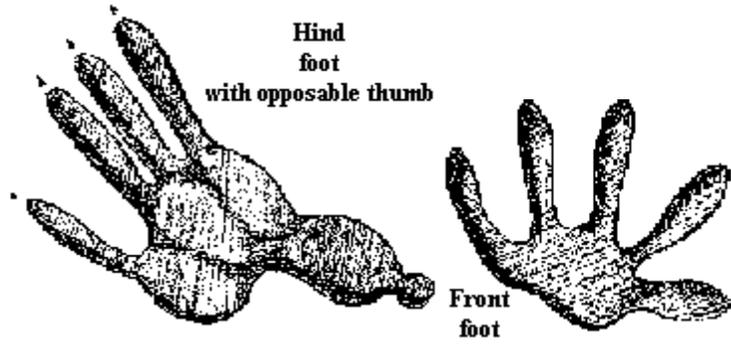


Front
Foot

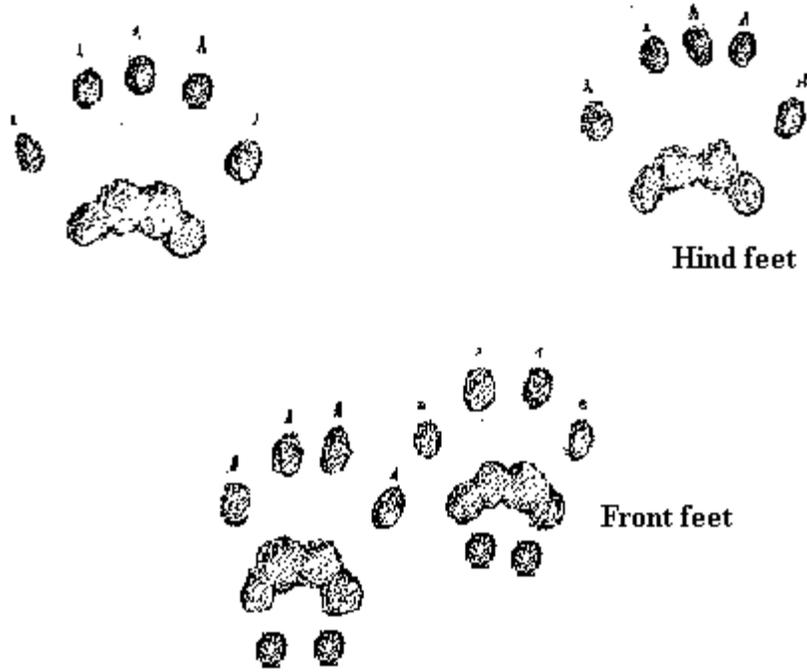
Beaver Tracks



Red Fox Front Track

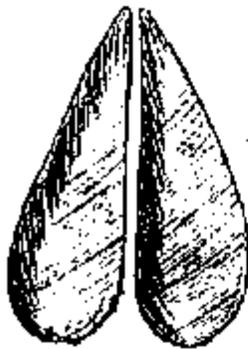


Opossum Tracks



Gray Squirrel Tracks

Black-tailed Deer



3½" L x 2¼" W

Trail width: 6"
Stride length: 21"-24"

Toes spread when
in soft mud or when
the animal is
running. Dewclaws
show.



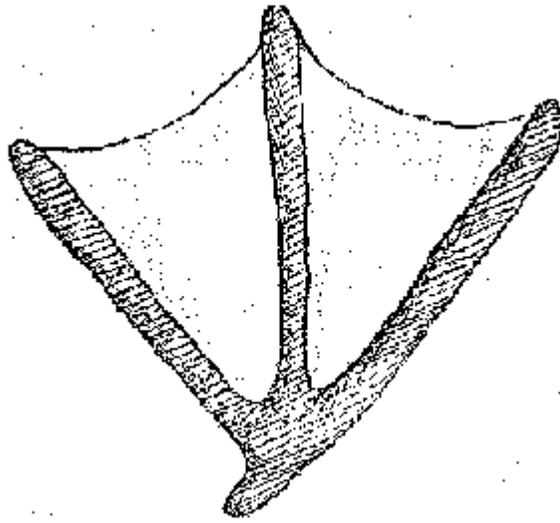
Trail Pattern

Birds



What is a Bird?

Birds are feathered animals. Birds have a four-chambered heart and are warm-blooded. They develop in eggs outside the mother's body. Egg shells are hard, unlike those of reptiles. Most birds can fly.



Duck Track



Robin Tracks

Reptiles



What is a Reptile?

Reptiles include snakes, lizards, crocodilians, and turtles. Reptiles are cold-blooded. (They depend upon their environment to provide warmth.) Most reptiles are egg-layers, although some produce live young. In cold regions, reptiles hibernate. In extremely hot or dry climates, some reptiles will estivate, or go into a torpor. Because they lack internal heating mechanisms, reptiles depend on external heat sources. Thus, you will often find them lying in the sun on rocks and logs. Most reptiles have a three-chambered heart.



Snake Track



Lizard Tracks

Amphibians



What is an Amphibian?

Salamanders, frogs and toads are amphibians. Some amphibians have long tails and slender bodies. They live near water. Unlike reptiles, they do not have scaly skin. The skin is smooth and moist. Mucous glands help to keep the skin moist. Blood vessels just beneath the surface allow the amphibian to use its skin to help it breathe. Some secrete poisons from their skins. Special color cells allow the amphibian to change its skin color by expanding or contracting. If a limb is lost to a predator, some amphibians can re-grow a new limb. Amphibians are cold-blooded and those living in cold regions hibernate during winter. Eggs are laid in jelly-like masses in the water, or in other moist places. Some amphibian larvae have gills and live underwater until they metamorphose into land-dwelling forms. Many adult amphibians are carnivorous, but larvae are herbivorous (vegetarian).



Western Toad Tracks



Salamanders/Newts