

ANIMAL TRACKING ACTIVITY

When you walk, only some parts of your foot contact the ground—the tips of the toes, the ball of the foot, the heel. A footprint doesn't look exactly like the foot that makes it. Snow makes it easy to see all the tracks of animals that are around, but if it keeps snowing, the tracks can be covered. If the snow melts the track can lose its shape. Soft mud or fresh moist sand is the best surface to identify tracks.

Questions to consider during your observations:

1. What animal was here? What were they doing? What direction were they going?
2. What parts of an animal's foot will leave a mark on the ground?
3. How might the ground's surface—be it sandy or snowy or muddy—affect or change the shape of a footprint?
4. How does the movement and speed of the animal affect its track?
5. Did you spot anything else? Feathers? Scat? Bones? Chew?
6. What kind of habitat do these animals need to live?

Track Types (*Below is background info on tracks by Len McDougall*)

Track types are separated into "digitigrade" (animals that carry their body weight forward, onto the toes) and "plantigrade" (animals that walk flat-footed). Being literally on their toes all the time, digitigrade walkers, like the wolf, cougar, and all deer, can spring instantly into flight or pursuit, and are built to run fast over rugged terrain. Slower running plantigrade animals, like bears, raccoons, skunks, and porcupines, are generally omnivorous, shuffling throughout their waking hours in search of food, protected by natural defenses that cause most predators to pass them by.

Track patterns

The way all four footprints are arrayed is called a "track pattern." Because track patterns change predictably with different gaits, they reveal how fast an animal was traveling. Differences in the track patterns of walking, trotting, and running animals tell if an animal was relaxed, if it had a specific destination in mind, or if it was in flight. Fortunately, track patterns for different gaits are almost universal among four-legged mammals.

How speed affects the track: Walking vs. easy trot vs. running

At a casual walk, the hind foot of most animals prints on top of the front track. This is a learned walking behavior generic among animals inhabiting uneven terrain. The ability to see where the forefoot is placed to avoid stepping into holes or tripping, but being unable to see the hind feet, makes most species learn to habitually place hind feet into the same location. At an easy trot, both hind feet and one forefoot tend to print together in a roughly triangular shape, with the remaining forefoot printing separately ahead of them. Having three feet hit the ground almost simultaneously provides the stability of a tripod, while the remaining forefoot acts as a pivot when those three are brought forward. The forefoot that prints alone is the strongest, and indicates which side is dominant—like left- and right-handed people. At a hard run, most animals adopt a "rocking horse" track pattern in which forefeet are planted together and far forward to act as a pivot when the rear feet are raised off the ground and brought forward to land on either side and ahead of the foreprints. When widely-stance hind feet make contact, the animal lunges forward, forefeet together and stretched ahead to catch it after a leap that may exceed four times its body length.

Number of toes

Number of toes is important to both track identification and species classification. All weasels, bears, and raccoons have five toes on all four feet; all canids have four toes tipped with stout nonretractable claws on all paws. Cats show four toes in all prints, but paws are rounder and less elongated than canids, and sharp retractable claws rarely register except on slippery surfaces. Exceptions to both these rules include the nonretractable claws of the African cheetah and the semi-retractable claws of North America's tree-climbing gray fox. Deer, cows, and pigs are "ungulates," with cloven hooves that can be splayed to provide a braking action when descending slippery hillsides. Horses alone possess a single hoof that's better suited to travel on open plains. Members of the squirrel family, from red squirrels to woodchucks, are marked by four toes on the forefeet, five toes on the hind, all sharply clawed. Lagomorphs (rabbits and hares) have four toes on all paws. All weasels, from otters to ermine, have five clawed toes on all four feet.

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Now try it! Animal tracks are great and one of the most common to find. Look for tracks in mud, wet sand or snow especially. Look at the size of the track, the distance between tracks and how they are grouped. Raccoon tracks are two tracks beside each other, one small and one large. Squirrels are in a group of four as they bound from place to place. Look at which way are the tracks headed and where they came from.

Guide To Animal Tracks

TRACKS NOT TO SCALE

Depending on the substrate (snow, mud, dust, sand, etc.) and the speed the animal was moving, tracks may show great variability in their appearance.

F – Front track
H – Hind track
T – Tail marks may be present

WILDLIFE CONSERVATION:
begins with conserving habitat!

Happy tracking!