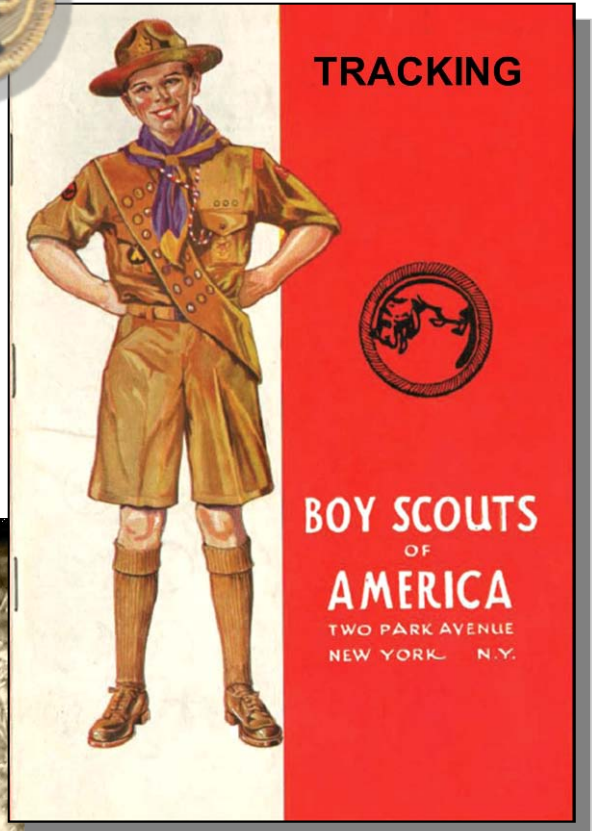
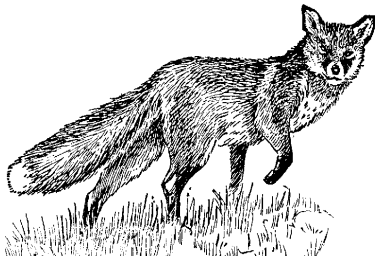


# Animal Tracking and Sign





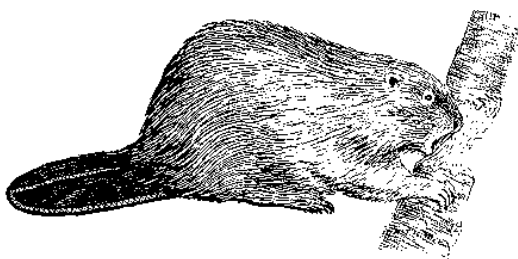
# Animal Tracking

## SIGN TRACKING



The first thing to learn about tracking is to know where to look for animals. Much of this is done by what is called "sign tracking".

- **Landscape - read the landscape to locate animals.**
  - **Indicator Animals - the presence of these animals is an indicator of the "value" of the habitat.**
    - Rabbits
    - Deer
  - **Types of Habitats**
    - Deep Forest
    - Fields
    - **TRANSITION AREAS** A transition area is zone of intersection between two habitats. Ex. Forest and field, field and stream, forest and stream. These offer wide varieties of vegetation and cover.
- **Travel Routes - Animals will tend to take the "path of least resistance" across a landscape.**
  - Trails - These are the superhighways of the woods. Animals know them intimately.
  - Runs - runs may connect watering areas, bedding areas, feeding areas back to a trail
  - Slides – Entryways to water
  - Chutes and Tunnels - in vegetation and thickets. Rabbits, small animals
  -
- **Animal Sleeping Areas**
  - Bed - any consistent sleeping place.
  - Lay - usually used only once or twice.
  - Den or nest- only used to bear and raise young.
  - Hides and holes
- **Feeding Areas / Hunting Areas (Predators hunt feeders)**
  - Fields- grasses, seed, briars, berries
  - Forest- browse, leaves, mast, nuts, acorns
  - Waterways- creeks, streams, swamps
- **Intentional Sign ( Sometimes unintentional)**
  - Rubs - polished areas on plants and trees, mud on trees. Territory markings.
  - Wallows
  - Scrapes- ground scratchings, territory markings
  - Hair and Feathers - Sign of a meal
  - Gnaws and Chews' –plants, logs, trees
  - Scratchings –logs, trees
  - Ground Debris- Stone rolls



# GHOST SIGN

Animal made signs on the ground which disappear (or seem to).

- Dullings - in the morning with dew on the ground everything is shiny from the dew. An animal trail will be dull.
- Shinings - during the day everything begins to dull down. Anything walking on the grass presses it down and the shiny side of the grass catches the sunlight giving it a shining. The shininess disappears in about 2 hours. The bent grass recovers completely in about 24 hours.
- Leaf Depression - leaves are compressed as an animal walks leaving a compression outline beneath the leaves in the soil (a true track). The leaves spring back up but not all the way leaving a depression. By sideheading you can see the depression.

## Scat

Tubular - Dog Family, raccoon, skunks, opossum, wolverines, bears  
(Coyotes drop theirs in the middle of the trail or road)

Tear drop or Tapered - Cat Family (Usually very little traces of fur in their scat)

Fattened Threads - Weasel Family

M&M's - Rabbits & Hares (Rabbits like to leave theirs on top of stumps)

Oblong- may have nipple at end - Deer

Pencil Lead - Rodents

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



Aging Scat: Scat dries from the inside out.

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

COYOTE



RED AND GRAY FOX



NORTHERN RACCOON



GRIZZLY BEAR



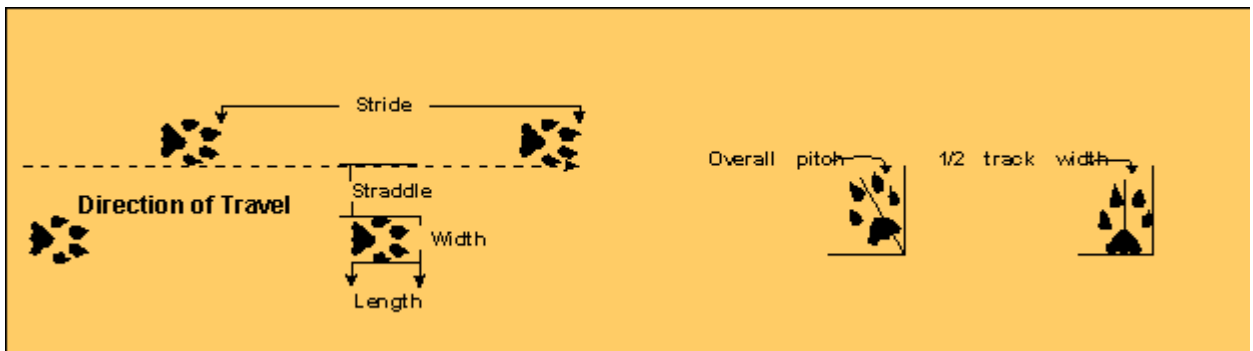
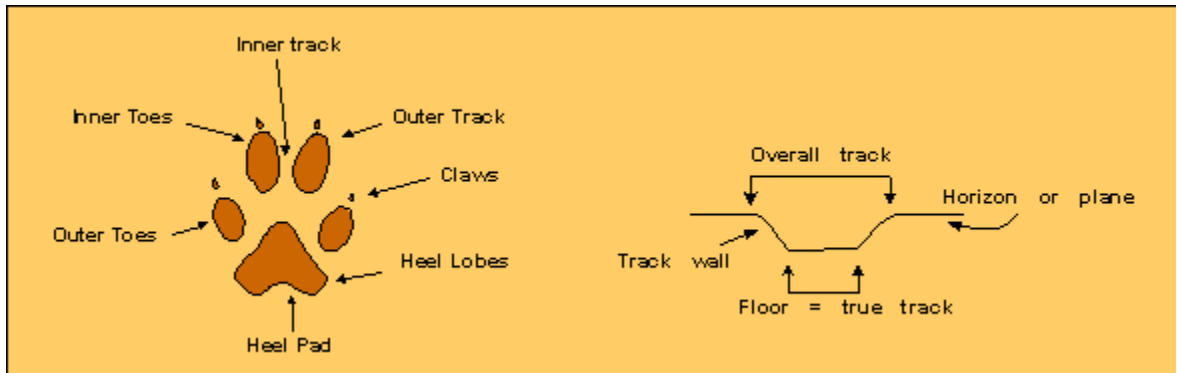
BLACK BEAR





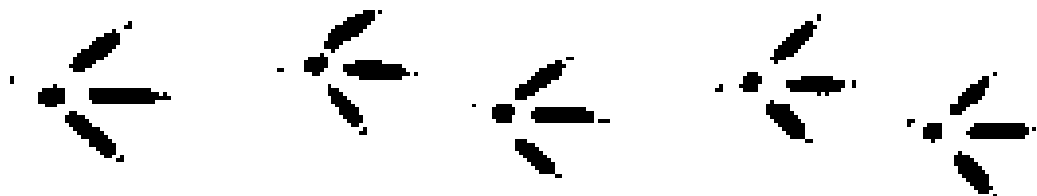
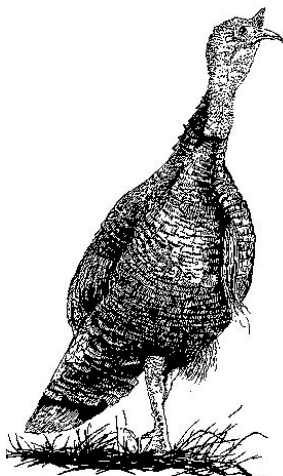
# TRACKS

## MEASURING A TRACK



## BIRDS

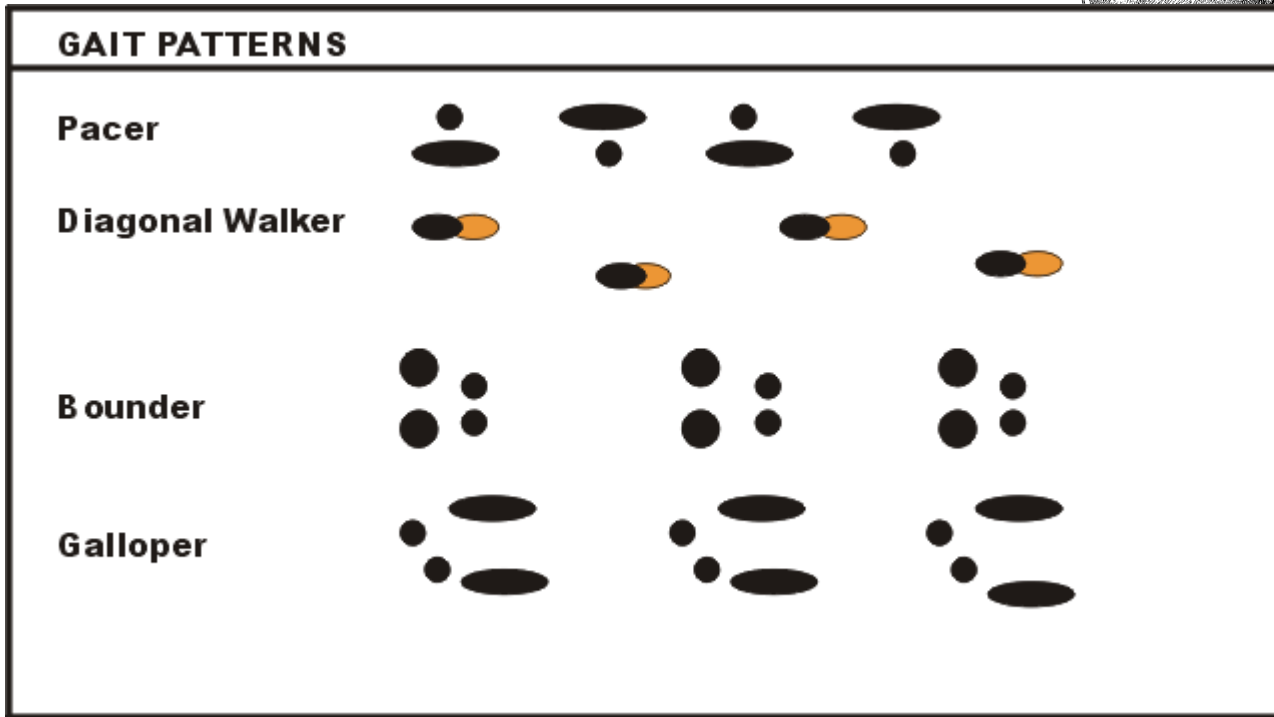
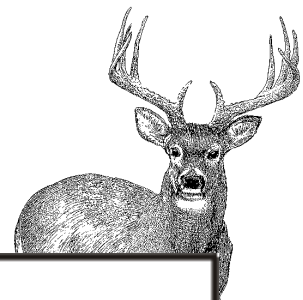
- Ground Bird - spend most of their time on the ground and show a "walking" gait
- Perching Bird - spends most time in the trees - shows a "hopping" gait
- Mixed - if the track shows both walking and hopping it is probably a bird that splits its time between trees and the ground e.g. Crow



Turkey track

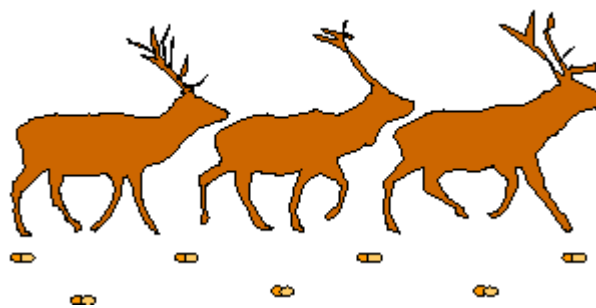
# ANIMALS

## Gait Patterns











1. **Diagonal Walkers** the animal moves the opposite sides of the body at the same time  
Deer, Wild Hog, Fox, Coyote, Bobcat - Bobcat and Red Fox direct register by being completely off the ground at one point

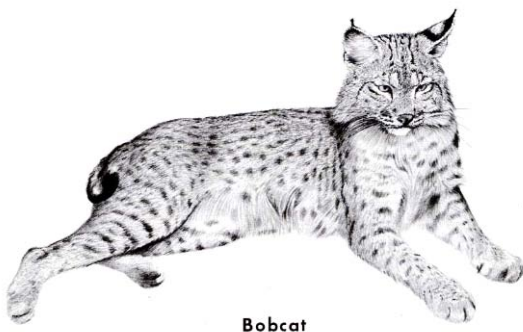
Diagonal Walk Pattern



- **Direct Register** - as the front foot is lifted up the rear foot on that side drops directly into the front track (cats and foxes). Also called perfect walking.
- **Indirect Register** - as the front foot is picked up the rear foot on that side drops slightly behind and to the right or left of the front track (depending on the sex of the animal)





DEER FAMILY	Shows - 2 toes front, 2 toes rear	
General Shape	Normal Pace Gait: Diagonal Walker	
		
Heart Shaped	<p>Indirect register            Front feet 1/2 larger than rear feet            With speed or soft ground the toes may spread and dew claws appear            Larger toe is on the outside</p>	
  Dew Claw	<p>Can tell sex using toe size/location (in adults). Locate the front vs rear tracks on a pair of prints. Decide which toe is larger to determine whether it is a left a right pair. If the rear foot is in a wider stance then it is a female (wilder pelvis). If the front foot is in a wider stance then it is a male (wider shoulder girdle).</p>	
	Deer (toes open)	

CAT FAMILY	Shows - 4 toes front, 4 toes rear, claws (rarely)	
General Shape	Normal Pace Gait: Diagonal Walker	
		
Round	<p>Direct Register            Front feet 1/2 larger than rear            No claws (95% of time) - sometimes out during a hunt.            Zero straddle            Zero pitch</p>	
	 <p>Cat</p> 	
	<p>Feral Cat - 4 toes equal size            Mountain Lion - 4 toes equal size            Bobcat - inner toes larger, cleft in heel pad            Lynx - outer toes larger</p>	

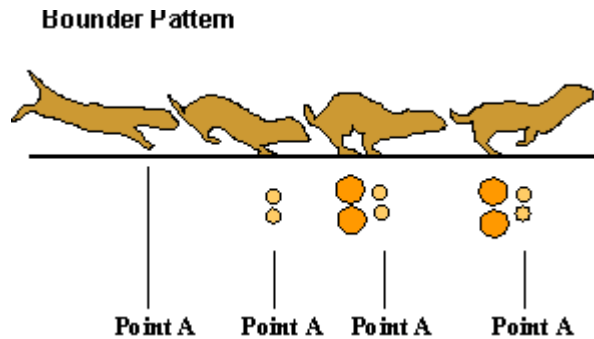








Bobcat



DOG FAMILY	Shows - 4 toes front, 4 toes rear, claws
General Shape	Normal Pace Gait: Diagonal Walker
	  Indirect Register Front feet 1/3 larger than rear.  Dog inner toes larger Fox - 4 toes equal size, direct register, zero straddle, zero pitch, shows ridge on heel pad Wolf - 4 toes equal size Coyote - outer toes larger   Dog
Egg Shaped	

**2. Bound Walkers - the front feet land together, then the rear feet behind.**  
**Weasel Family, Minks, Otters - All Members Except Skunks & Badgers**



WEASEL FAMILY	Shows - 5 toes front, 5 toes rear, claws
General Shape	Normal Pace Gait: Bounder
	  Indirect Register All are ball walkers (except skunk - see Others)  Weasals, Mink, Fisher, Otter, Marten, Wolverine, Badger  
Box Shape	
	   Badger

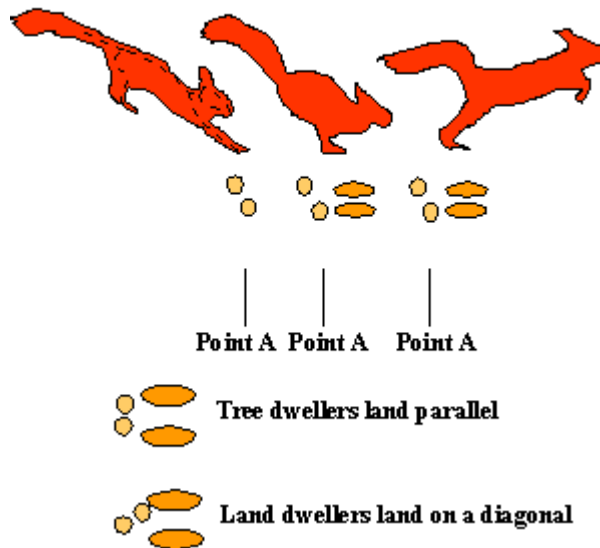
**3. Gallop Walkers** - the front feet land first, then the rear feet comes on the outside of the front feet and land ahead.





Rabbits, Hares, Squirrel









If the front feet hit at a diagonal = ground dwelling rodent e.g. Rabbit

If the front feet hit side by side, it is a tree dweller e.g. Squirrel





**Gallop Walk Pattern**



<b>RODENTS</b>	<b>Shows - 4 toes front, 5 toes rear, claws</b>		
<b>General Shape</b>	<b>Normal Pace Gait: Galloper</b>		
			
<b>Cross Pattern</b>	<p data-bbox="560 1396 771 1428">Indirect Register</p> <p data-bbox="560 1459 1177 1585">Gallopers : Squirrels, Ground Squirrels, Mice Rats, Chipmunks, Ground Hog, Marmot. Tree dwellers show both pairs of feet parallel. Ground dwellers show dominant foot landing first.</p> <p data-bbox="560 1606 1226 1638">Pacers: Porcupine, Muskrat, Beaver, Mountain Beaver</p> <p data-bbox="560 1669 1226 1764">Porcupine, Muskrat, Beaver - in deep mud show 5 toes in front (a hidden thumb). Mountain Beaver - always shoes 5 toes in front.</p>		<p data-bbox="1266 1554 1396 1585"><b>Squirrel</b></p>
			

<b>RABBITS &amp; HARES</b>		<i>Shows - 4 toes front, 4 toes rear</i>	
<i>General Shape</i>		<i>Normal Pace Gait: Galloper</i>	
			
		<i>Indirect Register</i> <i>Elbow on the rear foot may or may not show.</i>	
		<i>Rabbit - rear feet 2 times larger than front feet</i> <i>Hare - rear feet 4-5 times larger than front.</i> <i>The small heel pad helps to distinguish between a showshoe hare with no elbow showing and a dog galloping</i>	
			
			

**4. Pacers-** move the same side of the body at the same time.  
Badgers, Skunk, Porcupine, Opossum, Raccoon, Bear

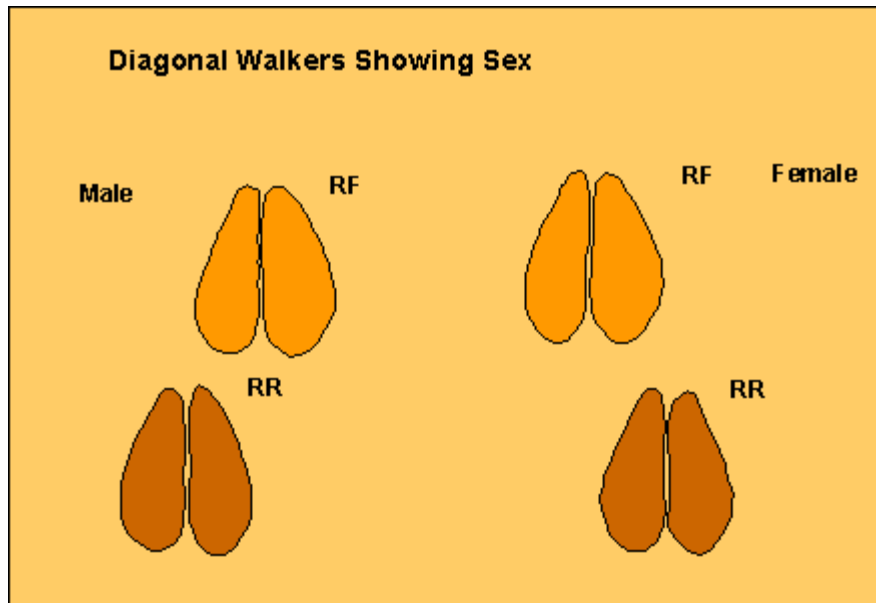
<b>OTHERS</b>		<b>Shows - 5 toes front, 5 toes rear, claws</b>	
<i>General Shape</i>		<i>Normal Pace Gait: Pacer</i>	
			
		<i>Indirect Register</i>	
		<i>Raccoon, Opossum, Bear, Skunk (from Weasel family)</i>	
<i>Fuzzy front edge with elipitcal back - human looking</i>			
		<b>Bear</b>	



## READING TRACKS

1) Sidedness - if one front foot is behind the other over 4 - 5 tracks that foot is on the dominant side. The animal will have a tendency to circle in that direction.

2) Sex - (this works for diagonal walkers only).



## AGING TRACKS

1) The single most important factor is weather and weather fluctuations.

2) Gravity is the second major factor in track degradation.

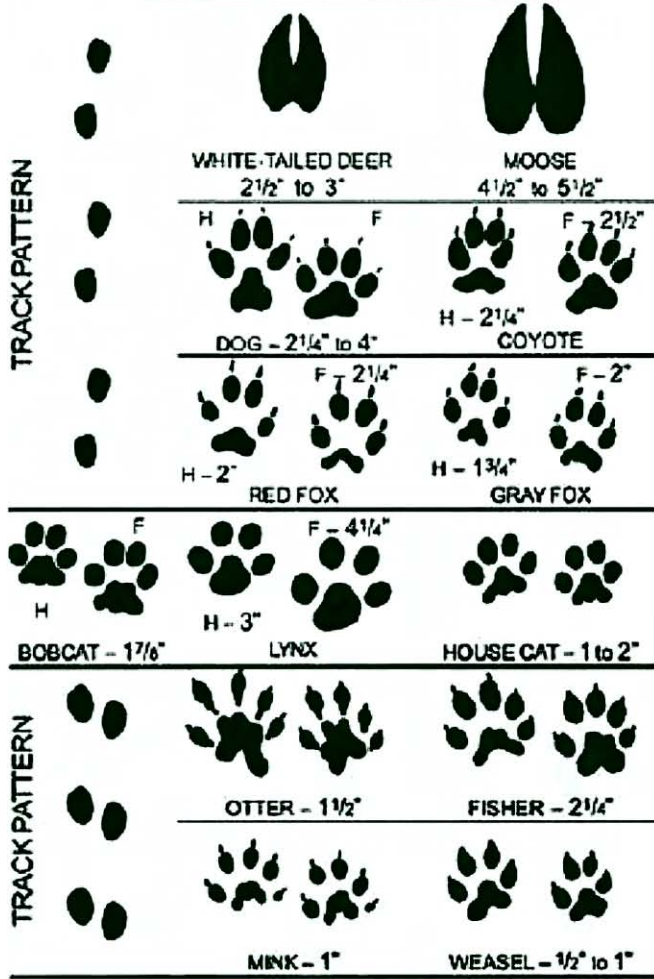
3) The third factor is the type of soil.

## Continuum of Speed

Stalk ----->Slow Walk ----->Walk ----->Trot ----->Bound ----->Lope ----->Gallop



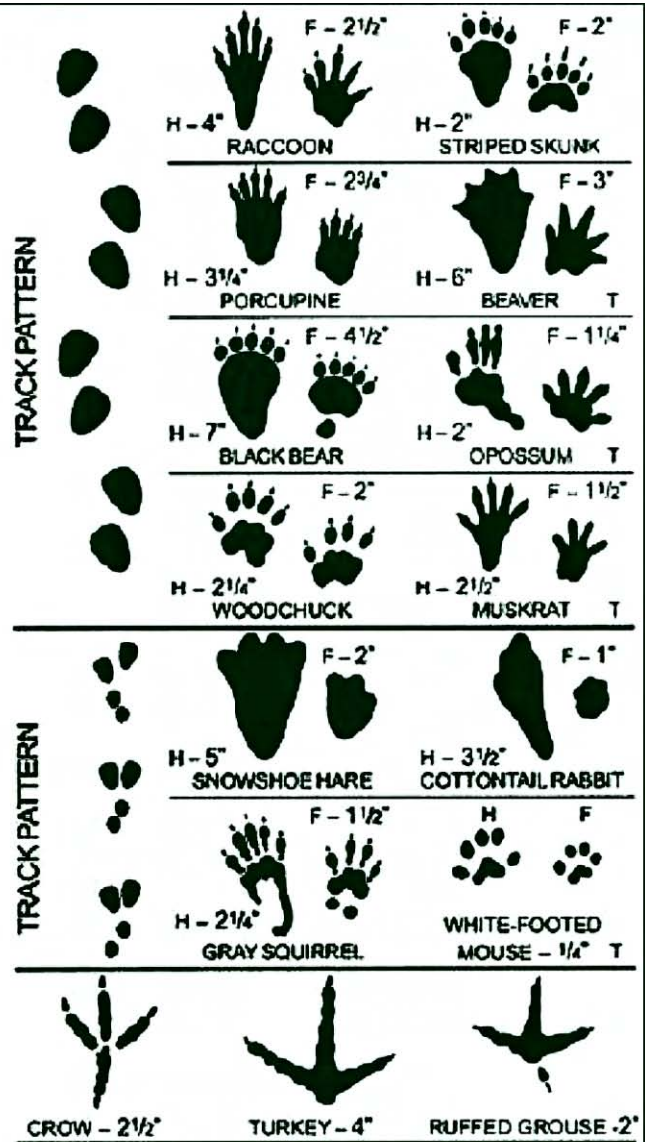
# Guide To Animal Tracks



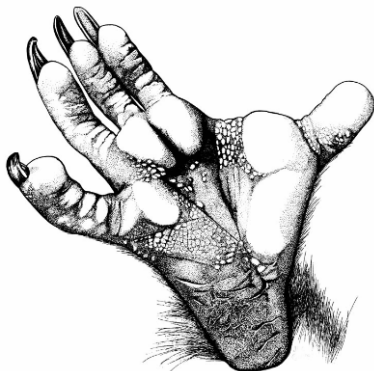
## TRACKS NOT TO SCALE

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!*



# Tracking - Historic Merit Badge

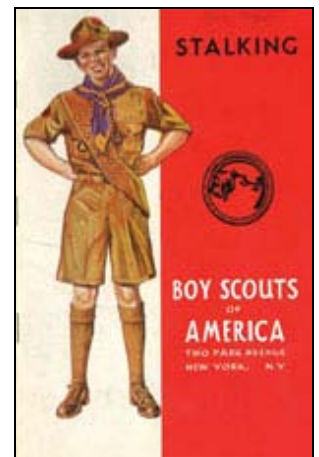


First offered in 1911—discontinued in 1952

A hundred years ago, being able to track animals was very important in order to put food on the table. How many animals will you be able to follow? Think of how many animals you will see.

These are the original requirements as written in 1911. Think about how times have changed as you complete the requirements a Scout your age would have done a hundred years ago.

In 1910 many boys probably had farm animals or lived close to farm animals so they frequently saw tracks. Also, many people hunted for food and trapped for extra income. Can you imagine running a trap-line before going to school?



## Requirements 13

To obtain a Merit Badge for [Tracking], a Scout must:

1. Demonstrate by means of a [tracking] game or otherwise, ability to [track] skillfully in shelter and wind, etc., showing how to proceed noiselessly and “freeze” when occasion demands.
2. Know and recognize the tracks of ten different kinds of animals or birds in his vicinity, three of which may be domestic.
3. Submit satisfactory evidence that he has trailed two different kinds of wild animals or birds on ordinary ground far enough to determine the direction in which they were going, and their gait or speed. Give the names of animals or birds trailed, their direction of travel, and describe gait and speed; or submit satisfactory evidence that he has trailed six different kinds of wild animal or birds in snow, sand, dust, or mud, far enough to determine the direction they were going and their gait or speed. Give names of animals or birds, their direction of travel, and describe gait and speed.
4. Submit evidence that he has scored at least 30 points from the following groups:  
Group (f) and 4 of the 5 groups (a), (b), (c), (d), (e) must be represented in the score of 30 and at least 7 points must be scored from (a), (b), or (c). Make clear recognizable photographs of
5. (a) Live bird away from nest - 4 points each
6. (b) Live woodchuck or smaller wild animal - 3 points each
7. (c) Live wild animal larger than woodchuck - 4 points each
8. (d) Live bird on nest - 3 points each
9. (e) Tracks of live wild animal or bird - 2 points each
- AND
10. (f) Make satisfactory plaster cast of wild animal or bird tracks with identification imprint on back of cast - 2 points each

5a												
6b												
7c												
8d												
9e												
10f												