

Tracks

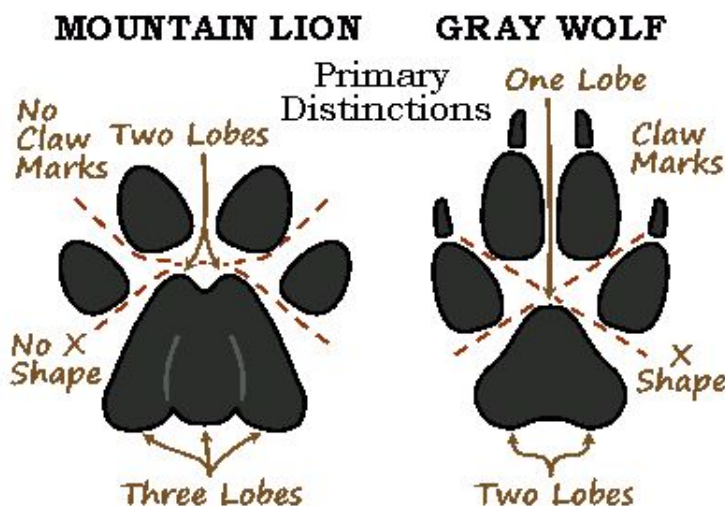
Objectives: Students will learn about animal tracks, what you can learn about the animal that made the track, and how to tell the difference between cougar and wolf tracks. They will also identify some iconic western wildlife using pictures and descriptions of tracks. Vocabulary includes: tracks, retractable claws, lobes.

Audience: Tracks! is a self led activity for second- fifth grade students.

Science Standards: 2 LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats; 3-LS3-2 Use evidence to support the explanation that traits can be influenced by the environment; 4 LS1-1 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction

Background: Tracks are prints made in dirt, mud, sand, or snow by an animal's foot, paw, or hoof, and can not only help you to identify the species of animal, but can also give you other information about them. You can learn the size of the animal who made the track and which direction they were traveling in. By looking at the placement and distance between tracks, you can determine whether it was walking or running. You can learn if the animal was traveling alone or with a group, as well as whether it was being chased or chasing another animal. The presence or absence of tracks in a particular area can also tell you what type of habitat a species prefers.

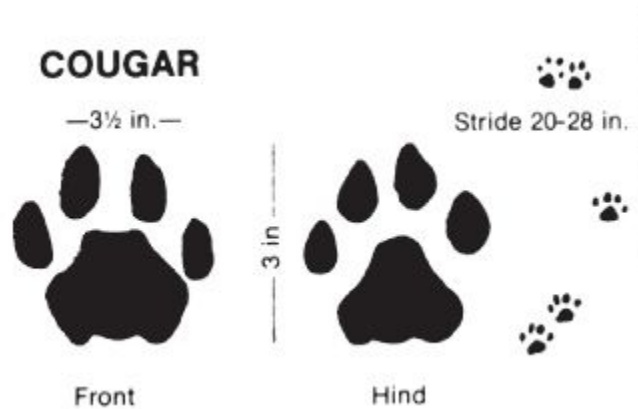
Some tracks are very similar to one another, like those of equal sized animals in the cat and dog families. For example, mountain lion tracks are often confused with those of the grey wolf or other large dogs, but if you look closely, you can see many differences between the two.



Picture from <https://cloudpeak.webs.com/mountain-lion>

Because cougars have **retractable claws** and are able to pull them into their paws when they want to protect them, they usually do not show claw marks in their tracks, whereas wolves claws are visible.

Another difference between the two is the pad shape. Cougars have 3 distinct lobes on the bottom of their pads and 2 on the top. **Lobes** are distinct parts divided by a fissure or crease. Dogs and wolves have 2 lobes on the bottom of their foot pads and only 1 on the top. The general shape of the tracks are different also. If you were to draw a line around the cougar's track, it would be relatively circular. If you did the same around a wolf's track, it would make an oval.



Picture from <https://www.cougarnet.org/sites/original/Assets/pumaidguide.pdf>

The front and hind tracks of the mountain lion are also slightly different, with the front tracks being larger than the hind. The pads also have distinct shapes, with the sides of the hind pads being a little steeper. On both the front and hind feet, the toes are oval shaped, with quite a bit of space between them. All of these characteristics distinguish the cougar track from other wildlife tracks.

Now let's see if you can identify some other animal tracks!

Supplies: Printed tracks worksheet, something to write with, answer key

Instructions:

1. Look at the track, read the clues, and try to figure out which species of western US animal it came from.
2. Write the animal's name in the space.
3. After going through all 9 tracks, check your answers on the answer key.

Extensions:

1. Go outside and look for tracks! Try to identify tracks in the wild, either with books and guides or by taking photos of the tracks and identifying them when you get home.
2. Do Plaster Tracks, Opposable Thumbs, and/or Walking Patterns lessons.

Discussion:

1. What can you learn about an animal by looking at its track?
2. Where should you look for animal tracks?
3. How can you tell a cougar's tracks from a wolf's?
4. What are some of the unique characteristics of a cougar track?
5. How can you tell the front and hind tracks of a cougar apart?



Track #1

1. My tracks are very large because I'm a very large animal! But don't let my size mislead you - I'm an omnivore (I eat animals and plants).
2. My claws are very long. They help me dig in the ground for roots, rodents, and other food sources.
3. I was on the endangered species list.

I am a: _____



Track #2

1. My five toes tell you that I am neither a dog nor a cat.
2. They say I'm black, but I can be many different colors.
3. I have a bigger cousin (Track #1) whose tracks you may have already seen!

I am a: _____



Track #3

1. My track looks a lot like a dog's track, doesn't it?
2. If you're lucky, you might hear me howl.
3. I live in a group called a pack.

I am a: _____



Track #4

1. I have antlers that some people call “paddles.”
2. I spend a lot of time in or near water.
3. You might think that I’m friendly and tolerant of people, but I can actually be quite defensive and dangerous if you get too close.

I am a: _____



Track #5

1. I am a wolf's primary food source.
2. In the fall, you might hear me bugle.
3. I have a National Wildlife Refuge in Jackson Hole, Wyoming named after me.

I am a: _____



Track #6

1. I have claws, but most of the time they don't show in my tracks.
2. My long tail helps me move swiftly with grace and balance.
3. People often assume I only live in the mountains because of one of my more popular names, but I also live in forests, grasslands, swamps, and deserts.

I am a: _____



Track #7

1. Just like Track #6, I have claws but you can't always see them (We belong to the same family of animals!).
2. My feet are quite large, but my body isn't. This makes my feet work like snowshoes and helps me move easily over snow!
3. My favorite food is the snowshoe hare (a large rabbit).

I am a: _____



Track #8

1. You might find me in fields searching for small rodents.
2. People say that I howl, but I really just “yip.”
3. Doesn't my track look like a small wolf track?

I am a: _____



Track #9

1. I am a secretive, highly carnivorous member of the weasel family.
2. Some people say I look like a small fox; others say I look like a long, skinny house cat.
3. My name starts with an “M”.

I am a: _____

Answer Key



Grizzly Bear



Track #1



Black Bear



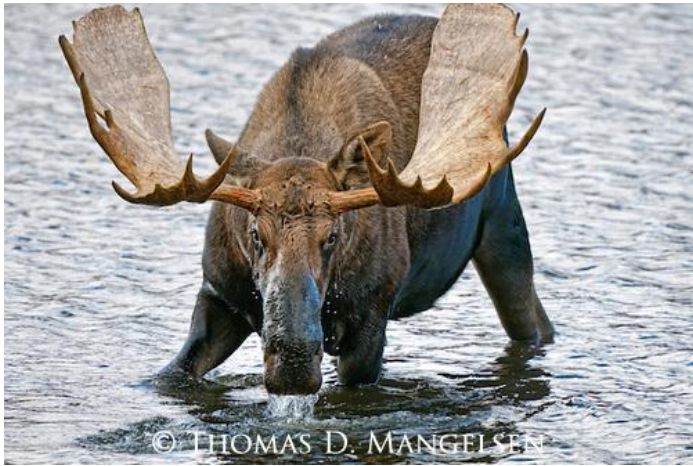
Track #2



Grey Wolf



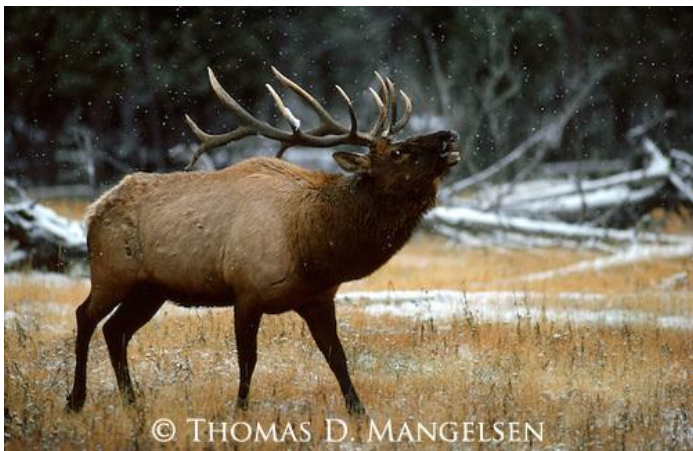
Track #3



Moose



Track #4



Elk



Track #5



Mountain Lion (cougar)



Track #6



Lynx



Track #7



Coyote



Track #8



Pine Marten



Track #9