



**Western Upper Peninsula Center
for Science, Mathematics and Environmental Education**

A partnership of

Copper Country & Gogebic-Ontonagon Intermediate School Districts and Michigan
Technological University

Serving schools and communities in Houghton, Baraga, Gogebic, Ontonagon and
Keweenaw Counties

Track & Tale

Grade : 5
hrs.

Duration: Approx. 1.5

Summary:

Finding tracks in the snow not only allows us to guess what critters came by, but also what might have been happening at the time. Was there a chase? Was a rabbit nibbling quietly?

Objective:

Students will be able to classify the shape and pattern of tracks, learn to use terms like straddle and stride when referring to tracks.

Materials:

- Snowshoes for each student
- One for each group of 2 students:
 - Meter stick
 - Track Books
 - Silicone tracks
 - Projectable: Who Goes There?

Background:

Track recognition and identification is a difficult and imperfect art. Especially in winter, when footprints are more difficult to discern, it is often the track pattern that alerts you to a possible identification, rather than a specific print. Of course, habitat and season are further clues to identifying the type of animal that made the track.

Another issue relating to tracks is to make guess, or confident ID and then be done, “oh, it’s just another rabbit track.” The mystery is to see how many tracks you can see, and try to find clues that might suggest what types of activities the critter was engaged in. Is there more than one type of track in the area? Do they overlap? Does one or both change direction suddenly? The next question to ask is why? Why did this critter do this or that? And so on.

When tracks are observed, it is often a good idea to measure them: the width of straddle and length of stride, in order to more accurately ID the maker. For this activity,

however, a sketch on an extra sheet of paper will be enough to remember what was seen. Then, a short story can be written describing what the student thinks may have happened.

There are really no wrong answers as long as the evidence is used to help in the writing of a story. Let students' imaginations run wild.

Pre-Activity: Discuss briefly how much easier it is to know if a critter has been by when you can see its tracks in the snow. Use projectable.

Discussion: Think about what kind of animals live in the area. This will help you narrow the field of identification. It's a pretty good bet that if you're looking in your backyard you'll find squirrel, bird, and maybe rabbit tracks.

"The Tracking formula consists of three words that all begin with the letter *P*.

- The first thing you want to look for is the animals' foot ____" (pause to let students fill in the word *print*.) A clear footprint can tell you a lot about the animal trail you are looking at, but is also one of the hardest clues to find.
- The next thing you want to determine is the design that the footprints are making in the snow. This design keeps repeating itself and is called a track _____ pause - *pattern*."
- "The last thing that you want to look for is where the animal is going or if it has a secret hiding _____ pause - *place*. During this stage of your investigation you also want to think about where you are geographically and what animals live in the place you are. Note the habitat, if you are along a river, in a forest, in the desert. These are all important clues.

Activity:

Rubber track and scat id (indoors)

Set out 10-12 of the rubber tracks and scat samples and have them numbered. The students would have a blank numbered sheet and while working in pairs they would visit each number and try to identify the track (using the spiral bound mammal track and scat book, by Levine)

Then, after about 10 minutes, collect all of the samples and go over them, giving bits of information about each one. Because they were eager to find out if they got the answer right they were very engaged while going over this.

Demonstrate (and invite students to participate) and tell what animal types are associated with each.

- *Walking:*
 - Pacing/Waddler (beaver, opossum, porcupine, muskrat, raccoon).
 - Diagonal (deer, cats, dogs).
- *Hopping:*
 - Bounding (most of the weasel family, otters, mink, martens, fisher).
 - Galloping-difficult to get your feet in front of your hands (rabbits, squirrels, mice, voles, chipmunks, shrews).

Point out differences in stride and straddle. Mention the difficulty in positively identifying tracks.

Outside

On snowshoes, take the students on a hike of the area and look for tracks in the snow. Identify the type of track and mention the possible critters considering the habitat of the area.

Track Patterns

Next we would head outside. The first thing I would do is either draw or have a photo of rabbit tracks and ask them what way the rabbit is traveling. Most will point in the wrong direction because the hind feet are longer. Show them how the hind feet actually end up in front with each hop.

Before they put on their snowshoes, go over the 4 different gaits- bounding, Pacing/waddler, diagonal walking, and galloping/hopping. I would have them try each one. There's usually at least one student who can do the rabbit hop correctly.

Look for tracks

Have the students put on their snowshoes and take a hike looking for animal tracks. Instructor would usually carry a few guidebooks. With the snowshoeing field trips, the less they carry with the better.

Set the expectation that the students would have to be within sight of an adult at all times, but would let them go off in different directions and explore the area looking for tracks. Have groups call out when they find something.

Post Activity/Assessment:

1. Ask students to share their correct identification with the class.
2. Hand out Cootie Catcher

Additional Information: <http://www.woodlanddunes.org/pdf/Winter-World-Pre-and-Post.pdf>