



Signs in the Snow

WHAT'S THE Big Idea?

Interdependence Community

Materials

- See "Animal Homes" (p.91) for instructions in setting up various wild animal homes in your classroom
- ***In the Snow: Who's Been Here?*** by Lindsay Barrett George
- pretend snow (old white sheets, cotton batting, or cotton)
- discarded artificial or real evergreen trees (*see tip*)
- sets of animal track cards (Appendix, p.222)
- "Animal Homes" sheet (Appendix, p.219) cut into cards
- fake animal scat (fecal waste)
 - **deer:** coffee beans
 - **rabbit:** cocoa puffs
 - you can also purchase *Repliscat* from:
 - www.trackandscat.com
 - www.acornnaturalist.com
- pine cones, acorns, butternuts, downed hollow logs, tree browse (examples of branches or limbs that have been eaten, browsed, by animals)

Enduring Understandings

- Every living thing has a unique role, or niche, in its community.
- Animals live in a place because they can find food, water and shelter.
 - Predator animals hunt other animals for food. This animal food is called prey.
 - We can use clues left by animals to discover who lives here and what they have been doing and eating.

Objectives

- Children demonstrate an understanding of the signs animals leave behind.
- Children show interest and curiosity in reading animal signs.
- Children practice solving mysteries by reading animal signs.
- Children create their own animal stories using props.
- Children demonstrate an understanding that animals adapt to winter by building shelter and eating what is available.

Directions

PART 1: In the Classroom

1. Set up your classroom with a few "track stories"—mysteries for children to solve that include an animal home, its food browse, footprints, and scat. For example, scattered nuts and pine cones below a hole in a pine tree with small hopper tracks on the ground would represent the home of a red squirrel. You can replicate the general wintry outdoors with real or artificial evergreen trees, and cotton batting or white sheets to represent snow.
2. Allow the children to walk around observing the "stories." Encourage them to figure out who lives here by reading the clues in the story.
3. Have the children share their findings. What "stories" did the animals leave behind? What clues made it possible for them to know this?
4. Read the book, *In the Snow: Who's Been Here?* Ask the children if they would like to revise their animal story after hearing the story.
5. Show the animal and footprint card sets to the class. Divide the children into small groups and have them create their own track stories using prints, homes, food, and scat.
6. Once the children's track stories are set, groups ask others to "read" their story. At this time, it's not necessary for the stories to be accurate. Instead, allow the students to think about what signs the animals leave for us to "read." As children's tracking skills increase, they can edit their stories to make them more accurate. Stories can be photographed or written down to share at a later time.

TIP!

Plan to do "Signs in the Snow" after your winter break. Ask families to donate their Christmas trees in January and recycle these old trees to create your winter landscape.

PART 2: Track Stories Outside

7. After practicing “reading” track stories indoors, take the class outside to explore tracks that may be in the schoolyard. Look for signs of both domestic and wild animals. Even if there is no snow, children can find tracks in the mud or frozen in ice. Scat and browse are always there if our “owl eyes” are working.
8. Once you have located tracks, draw a circle around the print in the snow to help preserve the print for others to see.
9. Look for signs of food that the animal may have been eating: buds eaten off the tips of branches (nibbled buds high on the plant may have been deer, lower munches might be rabbits), empty nut shells, holes dug in the snow.
10. Look for signs of scat. The fecal waste of wild animals tells much about their life. Fox will often leave their scat upon a rock, very deliberately letting all know this is their territory. Rabbit scat looks much like the cereal, cocoa puffs, but if it is lighter brown in color, the rabbit may have eaten the original scat to get the very last of the nutrients from it. Deer scat resembles coffee beans.
11. Notice any other clues left behind. Sometimes, an animal will leave behind some fur. It takes real “owl eyes” to find strands of fur! Animal homes are sometimes more visible in the winter. Look for holes in snow. Notice their size. Try to determine what animal may inhabit this hole. Every time you go out with your students you are guaranteed to find something new, it’s all in the eyes of the beholder.

Discussion Questions

- What kinds of clues do animals leave behind?
- How do the clues help us know who lives here?
- What did you need to do to read the animal stories?



When you find a track outdoors, draw a circle around it to help preserve the track for all to see.



Set up “track stories” indoors with an animal’s tracks, scat, food, and home.

Extensions

- After a group shares its story, have everyone else turn away as the group removes one part of the story. The class looks back and uses their “owl eyes” to determine what has changed.
- Set up small pop-up tents and plastic tunnels covered with white sheets to represent snow-covered animal homes for children to role play being animals in winter. Use a small plastic slide as an otter slide so students can slide into an ice-covered pretend pond.
- “A Winter’s Meal,” (p.108)
- “Active in Winter,” (p.102)
- **Who Lives in the Snow?** by Jennifer Berry Jones
- **Animals In Winter** by Henrietta Bancroft
- For teachers: **Tracking and the Art of Seeing** by Paul Rezendes

Track Patterns



Okay, Track Detectives, you are on your own! Use the secret code, and in dirt, mud, or snow, identify tracks wherever you go!

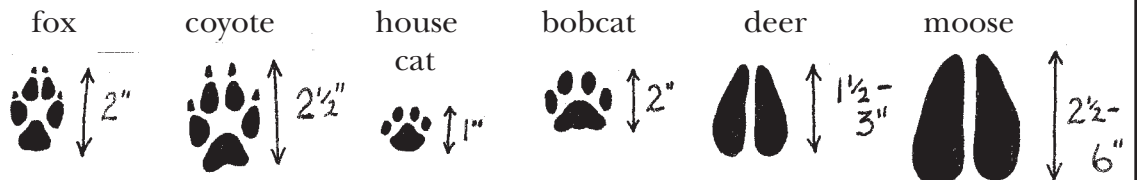
First, what **PATTERN** are the tracks in?

	STRAIGHT WALKER
	HOPPER
	WADDLER
	BOUNDER

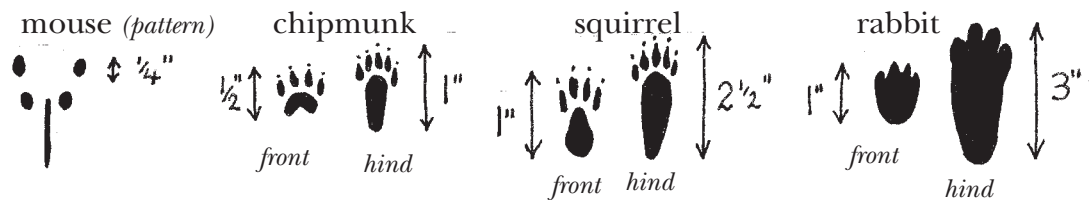
What **PLACE** are they found? Remember to look for homes, leftover food scraps, and other clues such as feathers, fur, blood, scat, etc. left at the scene.

Now check the **PRINT** of the animal's foot. Notice the overall shape, measure its size, note the presence or absence of claws, and count the number of toes.

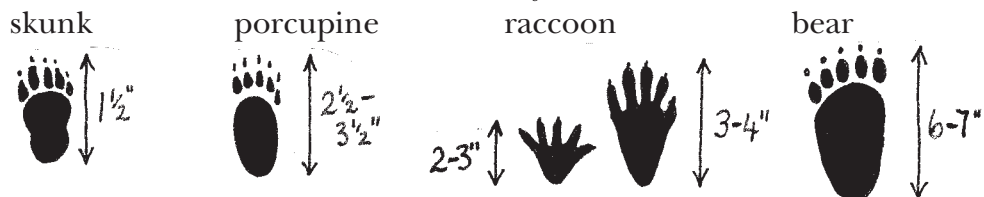
STRAIGHT WALKER



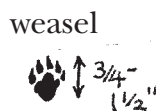
HOPPER



WADDLER

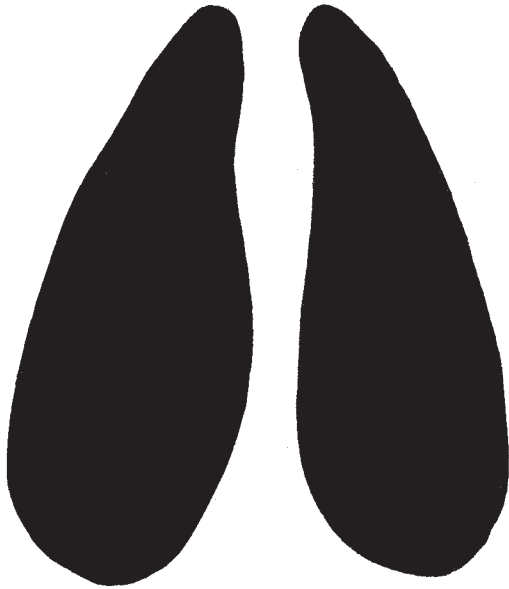


BOUNDER



Forest Animal Track Templates

DEER



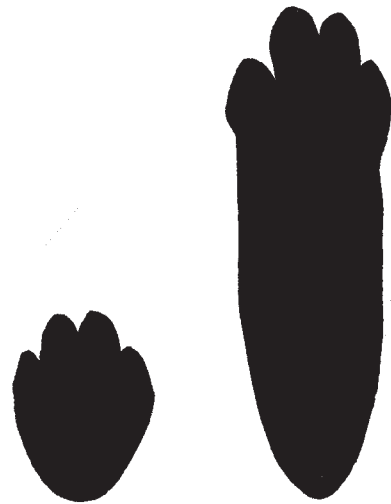
SKUNK



FOX



RABBIT



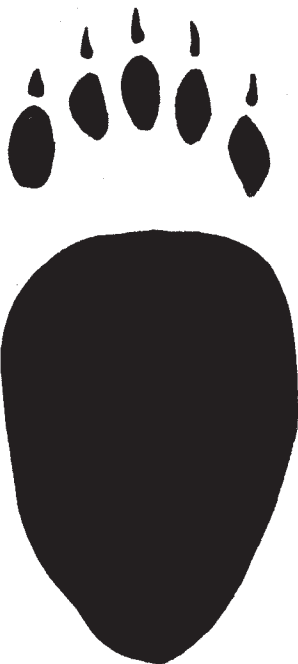
forefoot

hindfoot

WEASEL



PORCUPINE



MOUSE
(pattern)



Forest Animal Track Templates

COYOTE



RACCOON



forefoot

CHIPMUNK



forefoot

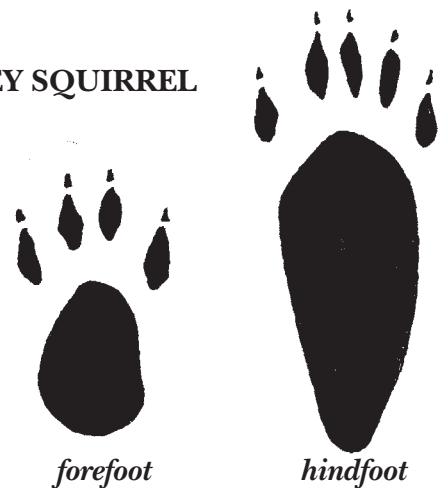
hindfoot

hindfoot

BOBCAT



GREY SQUIRREL

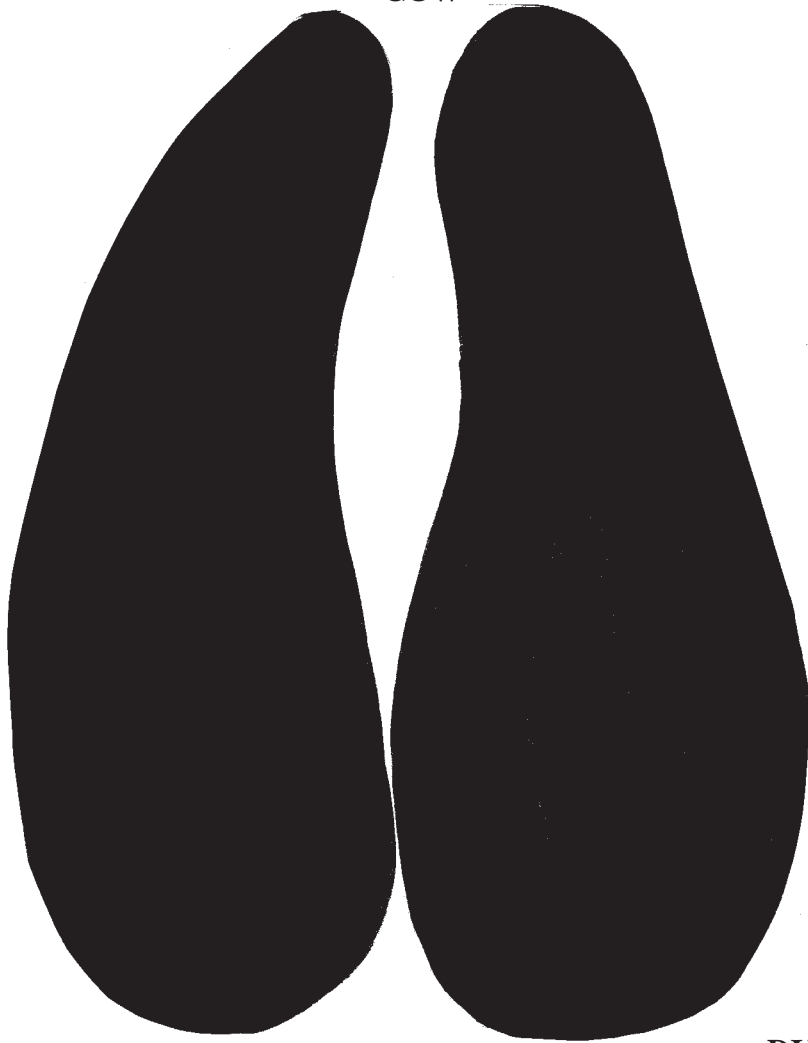


forefoot

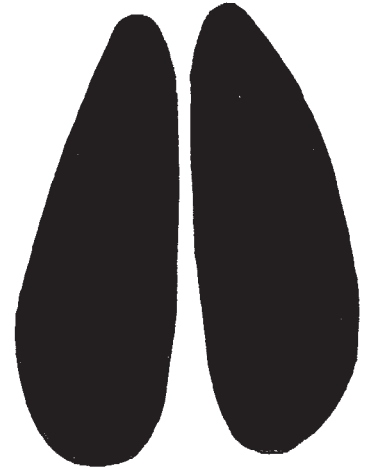
hindfoot

Farm Animal Track Templates

COW



SHEEP/GOAT



CHICKEN



DONKEY



DUCK

