

Outdoor Learning Opportunities:

Three P's of Animal Tracks

Standards: M.MG.PS.1 PHD.GM.PS.2 S.LS.PS.1 & 6 SED.SD.BRC.PS.1



Materials:

- 8-1/2" x 11" white paper
- Large peeled crayons to make rubbings
- Pictures of animal tracks and animals local to Maine
- Large sheets of white paper taken from a roll of paper (2-1/2' wide x 5-6' long)
- Book Whose Tracks Are These? By Jim Nail
- Track stamps, ink pads and large paper
- Rubber track molds and Plaster of Paris

Vocabulary:

- Print
- Pattern
- Placement
- Bounding
- Waddling

Introduce the topic of animal tracks with the 3 P's (print, pattern, placement) of tracks activities.

Print

To introduce the concept of a single print, provide children with paper and crayons so they can do a rubbing of their shoe or boot. Demonstrate how they can place their foot on the white paper (pretend snow) and trace their shoe or boot around with a crayon. They can do this in pairs and each child trace their friend's shoe. Then they take off their other shoe (or boot) and place it under the outline on the paper. Then use a crayon on its side to do a rubbing of the bottom of the shoe.

Once rubbings are completed, have everyone look at their rubbing and find something special about it. It might be the pattern they see or shapes or even words revealed. Everyone's rubbing will be unique to them. Discuss the prints of different animals (with pictures) that live in Maine and how they are unique (number of toes – often different for front vs. hind feet; claws that retract or don't – dog family don't retract claws, cat family do retract claws; size, etc.).

Pattern

Place the large sheet of white paper on the floor. It can represent a snow storm. Discuss (with pictures of animals and animal tracks) the different ways that animals move. Have the children

move like a deer, dog, or cat. Have them walk and look at where their feet land. A volunteer can walk on the large sheet of paper and then outline their feet with a crayon to show how the tracks will be left. Which animals walk (deer, dog, cat, fox, etc.)? A fox and cat will have a more linear walking pattern. Children can take turns walking in the footprints left on the sheet.

Take out another large sheet of paper (or turn the first sheet over) and have children move like they think a rabbit or squirrel moves. This is called bounding (or hopping). Have another volunteer hop on the paper and outline their feet. The back feet will be larger than the front. The pattern created has the back feet in front of the front feet in a group. Which animals bound or hop and leave grouped tracks like these (rabbits, squirrels, chipmunks, mice, etc.)? Rabbits front feet will be slightly offset as compared to a squirrel and their hind feed will be larger. Mice will have very small tracks. Children can take turns hopping in the footprints left on the sheet.

Use another large sheet of paper and have the children move like a bear or raccoon. Then have them pair off one behind the other child. The child in the back puts their hands on their partner's shoulders. Then they walk, but both use the same foot (one side, then the other). This can be an opportunity to talk about right and left sides. Have one pair of volunteers walk like this on the paper and outline their feet. It will show that the front and hind footprints will be next to each other and then reverse with the next step. This represents a waddle. Which animals move like this (bear, raccoon, skunk, opossum, etc.) The skunk and opossum slightly vary and are not quite so clear to identify.

Placement

After figuring out the print and pattern, the next important clue to figure out animal tracks is where they are found. A hopping track that looks like a squirrel or rabbit and leads to a tree is more likely a squirrel, as it will climb the tree. Read *Whose Tracks Are These?* By Jim Nail. This book provides clues for animal tracks and provides the idea of placement very well.

Go outside and look for animal tracks in the snow. What stories do the tracks tell? Have children make their own walking, hopping, and waddling tracks.

Extension: Using animal track stamps (homemade by using adhesive craft foam cut out into an animal track and sticking it to a wood block or by purchasing animal track stamps from www.acornnaturalists.com), the children can make their own track stories on large sheets of paper. They can do this individually or in groups, then have the other children guess the story by looking at the tracks.

Extension 2: Make plaster casts of animal tracks by using rubber molds (can be purchased from Acorn Naturalists along with other animal track materials). This is how you can bring an animal track back if you find one outside. The children can paint the casts once they are dry.

Guiding Questions:

- What details in an animal track print are important to help figure out which animal made it?
- How do animals move? What would their track look like depending on how they move?
- Where do you find animal tracks? Can you tell which animal left the track by where you find it (leading to a tree, near the pond, in the woods, in a field, etc.).