ANIMAL TRACKS

ACTIVITY CHOICES:

You will not have time for all of these activities. Decide which you wish to use for your center, keeping in mind the time length of the centers.

♦♦♦♦ NOTE THE PLASTER CAST DIRECTIONS ON THE LAST PAGE. THIS IS ANOTHER ACTIVITY YOU MAY WISH TO DO LATER—NOT AS A CENTER ACTIVITY. ♦♦

Activities:
• Make a set of track prints on paper.
• Make a "story" on a large sheet of paper by printing animal tracks.
• Make track "stories" in the sand.
• Play "Animal Track Bingo."

Discussions:
• Talk about the three types of animal feet (see background information below).
• Talk about how different types of feet help animals to move, find food, and defend themselves.
• Read excerpts from We Walk in Sandy Places.

LOCATION:

CESC staff will inform you of the location of this activity.

EQUIPMENT AVAILABLE:

Set of rubber mammal foot replicas  Pictures of mammals
Brushes to spread paint on foot replicas  Containers for paints
Brushes for cleaning tracks  Animal Track Bingo game
Book: We Walk in Sandy Places

EQUIPMENT BROUGHT FROM SCHOOL:

- Paper for making track prints—notebook-size sheets for individual printing, or large sheets of butcher paper so students can make track stories.
- Tempera paints for making track prints (1 pint containers of Tempera may be obtained through TUSD warehouse catalogue) Do not use acrylic paints!
- Plaster of Paris, stirring stick, Pam spray, and a container for mixing plaster if you wish to make plaster molds of tracks.

ASSIGNMENT FOR GROUP LEADERS A FEW WEEKS PRI OR TO TRIP:

The leader reads all the material about the center. The Peterson Field Guide Series Book, A Field Guide to Animal Tracks is one source of information if the leader wishes to do more research about tracks. There will not be enough time to do all the activities in the usual 40 minute time allotment. Select the activities to be used for the center and work out a plan.
**DIRECTIONS FOR GROUP LEADERS ON TRIP DAY:**

Pick up materials from a Cooper staff member at Biznaga cabin.  
Take the materials to the assigned activity area.

**BACKGROUND INFORMATION**

Mammals have three types of feet:

1) **Plantigrade** (walking on the sole of the foot)  
The flat surfaces which bear the animal's weight extend from toe to heel and are in contact with the ground at some point during the step. These are slower moving animals.  
...To illustrate this foot type, ask the children to "walk" their hands on the ground using the entire flat of the hand.  
...Examples:  
   bear, raccoon, coati, skunk, human being

2) **Digitigrade** (walking on toes)  
These animals walk on their toes, with the heel permanently raised. These are faster movers than the plantigrade animals.  
...To illustrate this foot type, ask the children to "walk" their hands on the ground with only fingers touching the ground, and the "heel" of the hand raised up.  
...Examples:  
   bobcat, mountain lion, wolf, coyote, fox, rabbit, squirrel, mouse

3) **Unguligrade** (walking on hooves)  
These animals move on the tips of their toenails. The toenails have evolved into enlarged nails we call hooves. This group includes the fastest moving animals.  
...To illustrate this foot type, ask the children to "walk" on their hands with the fingers bent under so that they are "walking" on their fingernails.  
...Examples:  
   deer, pronghorn, javelina

**THE LESSON:** (Choose one or more of the following ideas.)

No matter which activities you use, begin with an introduction about animal feet. The depth of the discussion will depend upon the age level of the group.

**Introduction:**

1) Talk about the three types of feet as outlined above.  
2) Talk about how the type of foot helps the animal in walking, running, climbing, getting food, defense.  
3) How do we use our hands and feet? Our hands are quite different from our feet. Do the front (fore) feet of animals differ from the back (hind) feet?
**Activities:**

1) Make mammal track prints on small pieces of paper using paint and the foot replicas.
2) Make mammal track prints on a large piece of butcher paper to make a story.

**Instruct the students to apply a small amount of paint to the feet to make their imprints. Dipping the feet in the paint causes sloppy prints and the molds are hard to clean.**

3) Make a story in the sand using the tracks. Here are some ideas. The children will come up with many more.
   - A rabbit hopped along. A coyote follows the rabbit. The coyote catches the rabbit. How could you make track prints to show this story?
   - There are many javelina tracks around a prickly pear cactus. What is happening?
   - A deer was walking along browsing on plants. A mountain lion appears. The deer bounded away.
   - A skunk walked along. A coyote came near. The coyote ran away.

4) Play the "Animal Track Bingo" game.

5) Read excerpts from *We Walk in Sandy Places* by Byrd Baylor.

**CLEANUP:**

Gently scrub the paint from the feet using the cleanup brushes. Clean the paint trays. Wipe up any spilled paint.

**KEEP TRACK OF THE TRACKS.** An inventory list is in the box. Be sure all tracks are returned to the box. If any of the foot replicas are in need of regluing let the camp staff know so that repairs can be done.

Return the box to Biznaga Cabin.
PLASTER OF PARIS ANIMAL TRACKS

Cooper ESC has a set of rubber animal track molds for your use if you wish to make plaster casts to take back to school.

Making the molds does not work as well as a center activity because it takes the plaster time to dry. If you are at the site for the day, you may wish to do this near lunch time so that the plaster is dry by the time you leave. If you are spending the night, this may be done around the dinner hour when you could use a quiet activity.

EQUIPMENT AVAILABLE:

A set of rubber mammal foot molds
Plastic “sheet” on which to make the molds

EQUIPMENT BROUGHT FROM SCHOOL:

Plaster of Paris (available through the Warehouse catalog)
A stirrer to mix plaster
Cooking oil spray to grease molds
Container for mixing the plaster
Box to carry plaster casts back to school

DIRECTIONS:

1) Collect the equipment from Biznaga cabin.

2) Take the equipment to the assigned area.

3) In a large container, mix two parts plaster of paris to one part water so that it has a pudding consistency. It is better to start with a smaller amount and mix more later. Once the plaster starts to set in the mixing container adding more water does not make it usable, it just becomes a mixture of water and hard lumps.

4) **DO NOT POUR PLASTER IN THE SINK!**

5) Spray cooking oil in the molds for easier release of the cast.

6) Pour plaster in the molds and set them aside to dry. They should be ready for removal in a few hours.

7) Ask students to write the names of the animals on the backs of the casts, and their names if you wish.

8) After the casts have been removed, clean the molds and return them to the box. Please check the inventory list to be sure all molds have been returned.

9) Return all equipment to the table in Biznaga cabin.