

Black Bear

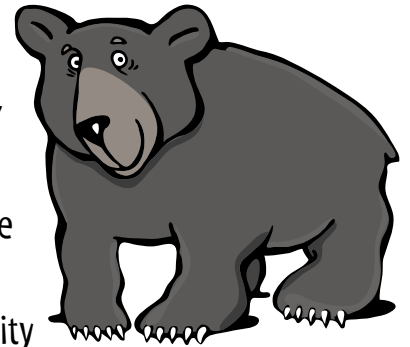
Get on the Trail of Things with Tails...

What you need!

- Baby or foot powder
- 10 cm wide strips from a milk carton
- Paper clips
- Paper cups
- Plaster of Paris
- A bottle of water
- A couple of spoons
- Plastic bags (to carry the casts in)
- Newspaper
- Animal Track book (if you don't have one, you can look at your local library or just get your cast done and check later!)

On first glance, bear paws and human feet don't look that much alike, but did you know we're both "plantigrades"?

Don't worry, this has nothing to do with veggies or grades (whew!). The word *plantigrade*, or sole walker, refers to animal feet that have 5 toes, and a sole that shows up in their tracks. This is different from the *digitigrades* - the toe walkers, who tend to have only four toes and much smaller soles. *Unguligrades*, the nail walkers, have only one or two toes that show up in a track. The nails of these toes are modified into hooves.



So here's a sole-searching activity for you. You can try to sort the plantigrades from the digitigrades and unguligrades, (can you say that 5 times really fast?) and maybe bring home some animal tracks.

What you do:

The best time to look for animal tracks is a few days after a heavy rain. Look around places without any grass cover such as muddy shorelines and trails. As you are walking around, keep your eyes open for animal tracks.

1. Once you have found a track that you'd like to cast, carefully clear sticks, pebbles, pine needles, and leaves from it without damaging the print.
2. If you have a guidebook, you can use it to figure out what kind of tracks you've found and if the animal is a sole walker, a toe walker, or a nail walker.
3. Make a "collar" from the milk carton strips to put around the track. Close it with paper clips.
4. Lightly dust the print with powder so the plaster doesn't stick.
5. In the paper cup stir up some Plaster of Paris and water with a spoon. You'll know it's perfect when it is almost as thick as a milkshake.
6. Pour the plaster evenly in and over the track to a depth of about 3 cm.



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What you do: (cont)

7. You may want to stick a paper clip half way into the cast as it is drying. This can serve as a hook so that you can hang it up.
8. The plaster will take some time to dry, so continue on your hike looking for other tracks to add to your collection. Try to find different animals, and different examples of digitigrades, plantigrades, and unguligrades.
9. As you hike back, gently collect the casts that you have made. Remove the milk carton strips, wrap the cast up in newspaper and tuck it into a plastic bag until you get home.

Once home, paint them and, hang 'em up on your wall as a "wild walk of fame" track gallery!



Ask yourself

- Can you tell which animal made the tracks?
- Was it a digitigrade, plantigrade or unguligrade?
- Did you see any of these species on your hike, or just the tracks?

What did you find out?

Many types of mammals are active only at night so most people don't get a chance to see them. Fortunately most of these animals leave tracks behind so that their wandering does not go totally unnoticed. Doing this project should allow you to identify the track maker and to classify it by its foot type. The foot styles of digitigrades, plantigrades, and unguligrades can easily be determined by studying the casts of animal's tracks.

Specific Learner Expectations (SLE)

Grade 6 Topic D: Evidence and Investigation. Investigating evidence of human and animal activity.

SLE 1: Recognize evidence of recent human activity and recognize evidence of animal activity in an outdoor setting.

SLE 4: Investigate evidence and link it to a possible source by classifying footprints, tire prints and soil samples from a variety of locations.