



OSU EXTENSION  
4-H YOUTH DEVELOPMENT

# Animal Tracks

Oklahoma Cooperative Extension Service • Division of Agricultural Sciences and Natural Resources

## Identifying and Making Animal Track Casts

Animal tracks are found in numerous places. Some tracks may be as close as our own backyards. Others may require some search to find. Perhaps you have pioneered the woods to find hidden tracks. If not, then you can also find animal tracks in barnyards, along creek and marsh bottoms, pastures, in mud, and in snow. Frequently used wildlife paths are a sure place to find tracks. Consider unusual places—sandy beaches and sand dunes show track signatures. Casts of tracks found in mud or slightly wet sand produce the best results. But remember, any place the ground will “give” to leave

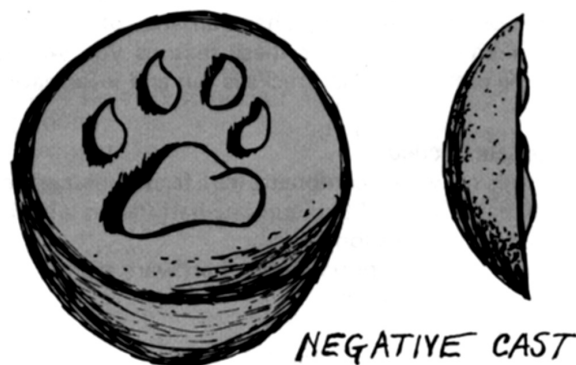
an imprint is an ideal spot for tracks.

Once started in tracking you will become aware that animal tracks are found in various locations. Your backyard features different kinds of tracks. If you live on a farm, then numerous domestic and wild animal tracks may be found in soft barnyard and pasture soils. The woods and “edge” areas probably provide the greatest potential for studying animal tracks. Woodlands are good spots since secretive animals are afforded valuable cover. The edge, an area where two different habitats meet, fulfills needs of wildlife and thus, serves capably for studying tracks.

In this activity you will learn much about animals around you. You will have the

opportunity to make impressions of animal tracks. The impressions you make are called “casts.” A cast lets you collect the track and carry it with you to be identified.

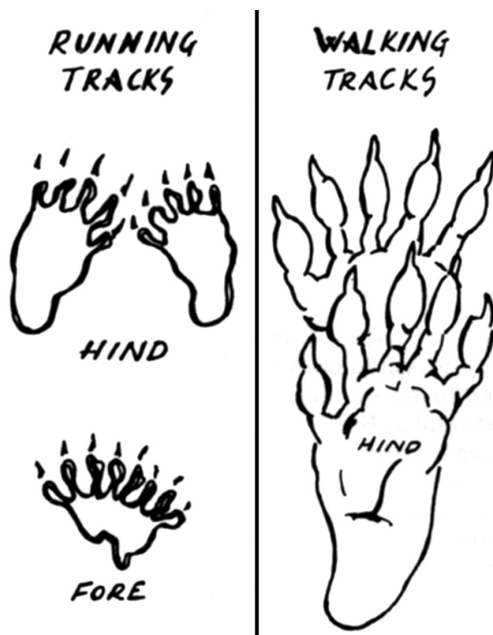
Keep in mind when selecting a track that it is hard to find a perfect track. Details of the animal’s feet are left out or they never “register” for many reasons. Possibly the ground may have been too firm or a light rain disturbed the track. Hopefully in the end, you will find making casts a fun and interesting way to learn about animals.



Track casts prove helpful in numerous situations. They show contrast between the same species and other tracks. For most junior conservationists, casts provide a method of collecting track samples for reference. When making casts you will also become more and more familiar with characteristics of habitats in which animals live. For these reasons, you will find making casts of animal tracks is fun and informative.

### Materials Needed

- Strips of waxed cardboard (cut from a milk carton) to make a “collar” two and one-half inches wide by 12 to 15 inches long
- Plaster of paris purchased at hardware stores, drug stores, hobby shops
- A mixing stick
- A jar for storing the plaster
- Two tin cans (one for water and one for mixing)
- Water
- Paper clips



## Activity Plan

To begin, find a suitable track. The track should be deep enough to produce a solid cast and clear enough to reproduce. Remove all sticks and straw around the track. Make a circle around the print with the two and one-half inch wide strip of cardboard and attach the ends with paper clips. Press the cardboard about one-half inch into the ground. The cardboard serves as an outer mold for the plaster. Pack some soil behind the cardboard for reinforcement. Next, make the batter in a tin can. Mix the plaster of paris with enough water so that the mixture is the consistency of cream or pancake batter. Thump the can from time to time to make air bubbles rise out of the batter. If the batter does not flow readily, it may dry too quickly and fail to get some details. Now pour the mixture into the track so that the plaster runs into the deeper parts. Fill the track and cover the inside mold to a depth of one inch below the top. Allow the plaster to dry.

Once it is dry, lift the cast and carefully remove the cardboard. Rinse or brush off any clinging dirt from the cast. This cast is called a negative cast. For a positive cast (which can be made at home), cover the negative cast with a film of grease, vegetable shortening or Vaseline. Place the flat side of the negative cast down on level ground with the greased side upright. Form a waxed cardboard mold around the base so that at least two inches of the collar is above the negative cast. Pour plaster (mixed as before) over the cast and cover the inside of the mold to a depth of one inch. When this cast is completely dry, carefully lift it off and tear away the collar. Now you have a positive cast that is a duplicate of the original track.

Lastly, you will want to identify the animal tracks. Also, record your name and where you found it. Your school library should have books to help you identify tracks. Your parents, wildlife protector, 4-H Volunteer Leaders, County Extension Educators, and Wildlife Extension Specialists can all aid you in track identification.

## Making a Track Album

In this exercise, you have the opportunity to lure animals to a spot where their tracks can be seen. This activity actually allows you to "set the stage for animal tracks." Basically, you will prepare an area where tracks will imprint the ground. Means for attracting animals will involve using a bait. The product you receive will be a unique record of tracks left by animals that sought the bait. A "track album" describes this method, since a recording is produced and the study area is round like a record album or CD-ROM.

By undertaking a track album much can be accomplished. To begin, you gain access to an observable area. A track album permits city conservationists to study an area they would not have noticed. The rural member can better improve his setting especially if no adequate ground is present. Additionally, the album increases the possibility of detecting any previously unseen animals (applies wherever album is set). On the other hand, the track album could allow you to capture a specific track if you prepare the album in the correct location. Finally, the track album may allow you to use some deep imprints for potential track casts.

## Materials Needed

Materials will vary for each setup, but generally you will need:

- bait—depends on animals you wish to lure—seed, grain, peanut butter, nuts, fruit, and meat
- low flat stone or small square board
- rake





- wood, ash, fine soil, or sand (for an unprintable ground surface)
- reference guide

### Activity Plan

The first step involves selecting a suitable site. If you know a place where animals habit or where a den site lies, then the area close by should be considered. The site could be near your house or 4-H camp, but it must be flat and fairly open ground. Little noise and minimal human interference should also be included as requirements. By using wise judgment and these suggestions, you can select a good potential site.

From within your site choose a reference point, which serves as the middle of the album. Mark the point by positioning either a low flat rock or a small square board on it. Next you will want to proceed raking all debris within eight feet of the reference point. Rake so you clear all twigs away, and turn up the soil so it has a loose texture. If the ground is hard to loosen, then sprinkle wood ashes, fine soil, or sand as a covering, which will hopefully "give" to show an imprint. Having completed this, you should have a sixteen-foot prepared circle with a center point.

On the low flat stone or a small square board you should place appropriate bait. You can adjust your bait for the type animal or animals you wish to attract. For instance, seeds (sunflower) and grain (oats) attract squirrels, chipmunks, and

various birds. Nuts and peanut butter draw unseen mice and shrews, opossums, raccoons, and squirrels. Fruit may lure anything from an opossum to a robin. Fresh meat can be used in woods by water to draw weasels, minks, and possibly bobcats. These are just a few baits to use and only moderate amounts should be used.

After you have positioned the bait, carefully rake behind your tracks until you are outside the album. This is done so creatures walking over the ground will leave clear, identifiable tracks. Now the stage is set and you may leave, in hopes that tracks will be secured.

Give ample time for the album to record. If you set the album in the morning, then return in the late afternoon. Conversely, if the album is set during the afternoon, then return the next morning to inspect. The latter case works best when working in woods, since woodland creatures are most active at night.

Hopefully, your album will register many animal tracks. From clear, crisp tracks you may construct drawings with accurate measurements or you may photograph the prints. Tracks, which made deep impressions, are good subjects from which to make plaster casts. Whatever action you take, the track album allows study and investigation into tracks.

In your track study you may find some tracks hard to identify. Your parents, wildlife protector, Extension Educator, or 4-H Volunteer Leader can aid you in identifying tracks. Make a cast of the track and present it to them.

### Other Things To Do

1. Do not stop with one-track cast or album. There is no limit to the number of tracks you can make. Try making bird track casts. Seek out different areas to find tracks.
2. Mount a collection of your positive casts on plywood or on heavy cardboard. Five tracks is a good start for your collection. Label each of the tracks, where it was found, the character of the ground, and date found. You may want to paint in your positive cast to let it stand out against the white plaster background. You can exhibit them at your 4-H Achievement Day.



3. Give a demonstration of making a track cast or album on a 4-H group field trip.
4. Make a single cast of a segment of a track trail. Small patterns of squirrels or weasels will work, but limit yourself to a foot long cast. Place a cardboard collar around the segment chosen. Mix batter and pour it into one set of tracks; then trail the plaster into the other sets. Complete by filling the collar up to a half-inch below the top. Reinforce the entire cast by placing a few sticks or wire into the plaster. Let dry thoroughly and retrieve the cast afterwards. Handle it carefully.
5. Make casts in snow if possible. A perfume atomizer should be utilized to spray water over the track. This will create a thin reinforcement layer over the track. Use a cold plaster mixture. Mix snow in the batter to achieve this. If not done, you may risk collapsing the snow print.

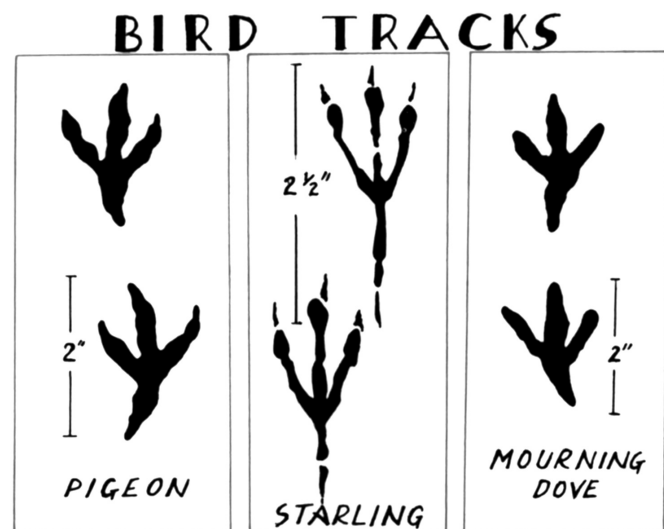
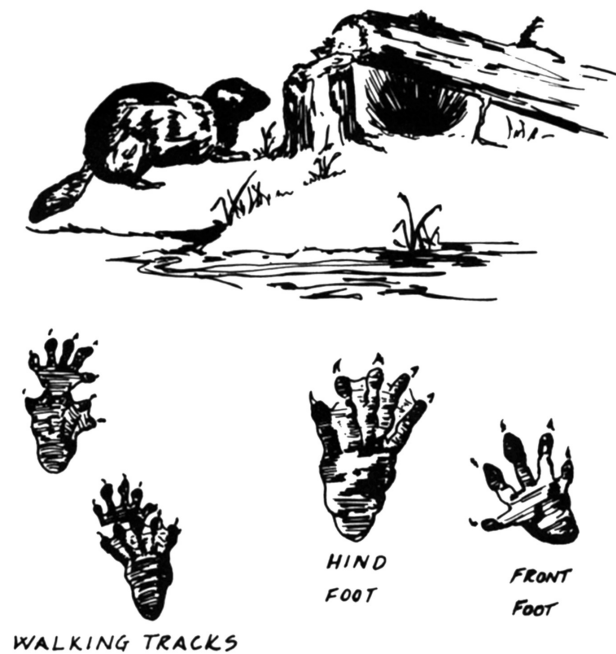
6. Experiment with different baits in your track album. This should give different results. Be creative as well and change the track album's shape. Different shapes may produce more tracks or may capture a long track path.

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