

Save Animal Tracks as Plaster Casts



What kind of wild animals live near your house?

There are more than rabbits and squirrels, for sure. You might be surprised to find out how many kinds of critters live nearby. With a little detective work, this project will help you discover where some of them live. Also, you will learn how to make plaster casts of their footprints so you can start a collection of their tracks. It's simple and fun.



Here's what you will need

A one- or two-pound bag or box of plaster of Paris. This is a powder that looks like flour. You can buy plaster of Paris at the hardware store. It is not expensive.

A mixing bowl - a small plastic container such as Tupperware or a plastic cereal bowl. Actually you can use anything that will hold one or two cups of water without leaking, but plastic is reusable and easier to clean. You will be mixing the plaster with water, so it is also better to have something shallow and wide rather than something tall and narrow.

A bottle of water. A 16-ounce plastic soda bottle works great.

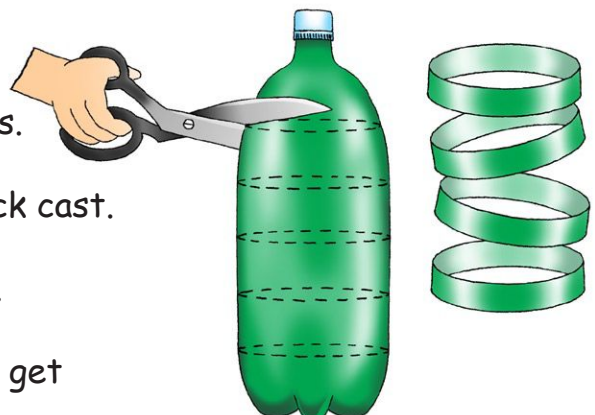
An old spoon.

A 2-liter soda bottle cut into 2 inch sections.

A few sheets of newspaper to wrap the track cast.

A bag or knapsack to put all of this stuff in.

Oh yeah, old shoes and clothes that you can get muddy in.



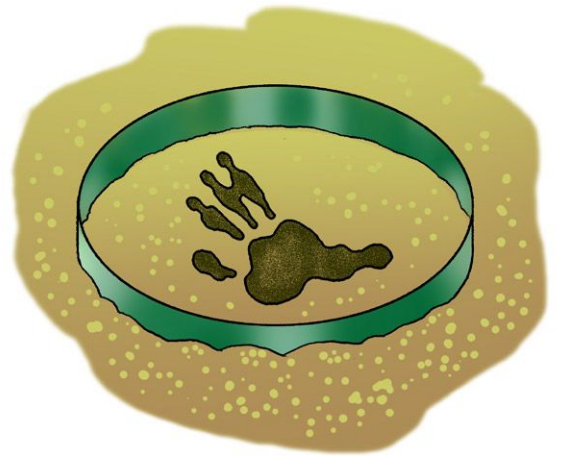
Let the detective work begin

Look for tracks on wet ground and soft mud. The best place to look is where animals go to drink water. The bank of a creek, stream, river, pond, or lake is a great place to start. Sandbars are good places, too. The edges of mud puddles shouldn't be overlooked.

How to make a plaster cast

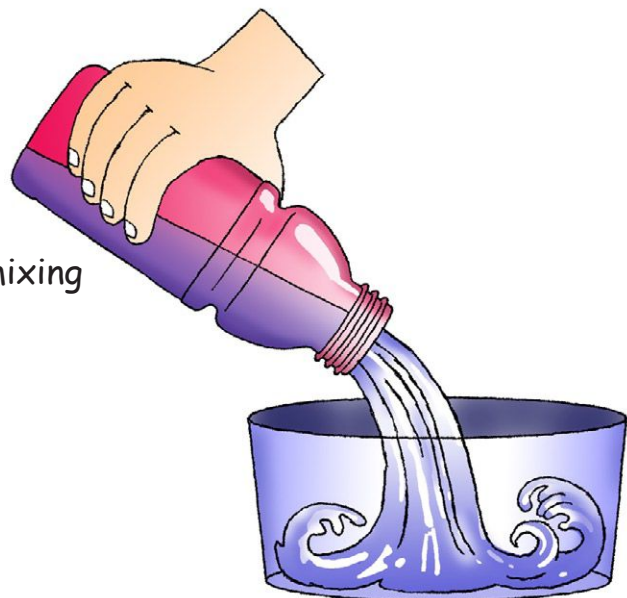
Once you have found a good clean track that you want to keep, gently clear away any debris around the track. Remove any leaves, small stones or twigs without disturbing the track.

Place one soda bottle ring around the track so that the track is centered, and press it about 1/2 inch into the ground. This makes a sturdy circular wall that will keep the plaster from running out.



Mix up some plaster

Pour about a cup of water into your mixing bowl.



Follow the directions that came with the plaster.

If you don't have instructions, here is how we do it in the field: carefully begin sprinkling some of the plaster into the water. When the plaster looks like the top of a volcano and is about 1/2 inch taller than the water, stop. (See drawing. It's worth a thousand words.) Let it sit for a minute or two so that the plaster absorbs some of the water.



Next, begin slowly (slowly is the magic word) stirring the plaster and water with your spoon until it is creamy like pancake batter. Here is another hint: you don't want to get air bubbles into the plaster mix. They take away some of the detail of the track. Don't whip the mix. Just stir it gently until it is evenly mixed and has no lumps.



Gently tap the bottom of your mixing bowl on a rock or a fallen tree trunk to remove any air bubbles. As you tap you will see bubbles come to the top. Aren't you glad you didn't whip the plaster? Keep tapping until the bubbles stop coming up.

Now you are ready to pour the plaster into the circle you made earlier. Do not pour the plaster directly on the track. It might ruin it. Instead, pour to the side of the track and let it run into the track. Fill the circle to the top.

This plaster thing you have just made is called a cast. It needs to harden for at least 30 minutes. An hour is better. Even after an hour, the cast will still be soft and will easily break if handled roughly. This is a good time to look for more tracks. Can you find any bird tracks? How about snail tracks?

When the time is up, it is time to remove the cast. Start removing the mud 4 or 5 inches outside of the cast. Next dig away the mud below the cast. Carefully lift up the cast. If there is any resistance, stop. Dig out some more mud. Do not try to pry the cast out with a spoon or a stick. It will crack. Lift it out gently with your hands.

Wrap the cast in newspaper to protect it on the trip home. It is still very fragile. It will be for about two more days. When plaster is drying it feels warm to the touch. The cast will be ready to clean after it feels cool to the touch.

Then you can paint it if you like.

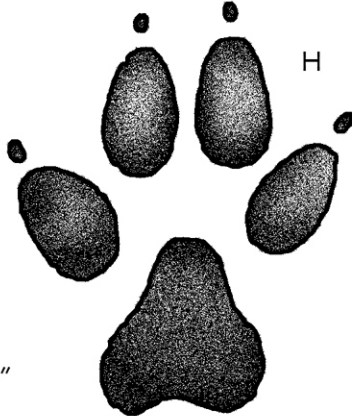


Animal Tracks Reference Guide

See if you can match your animal track casts to one of these common animals:

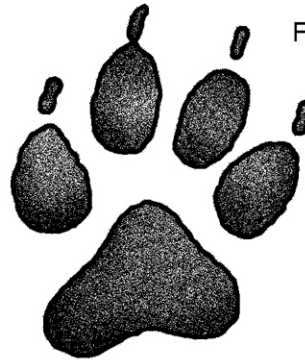


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Dog $\geq 1/2$ " to 4"

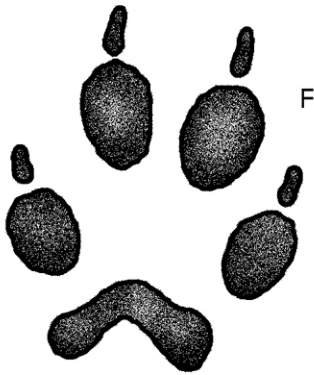


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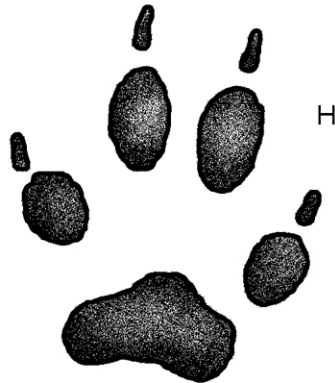


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Coyote
front $\geq 1/2$ "
hind $\geq 1/4$ "

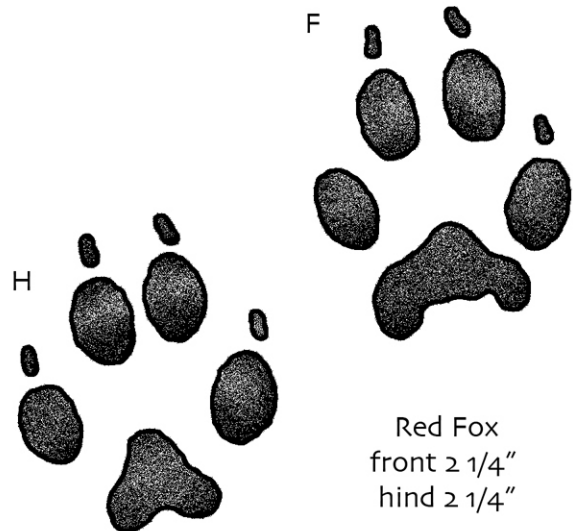


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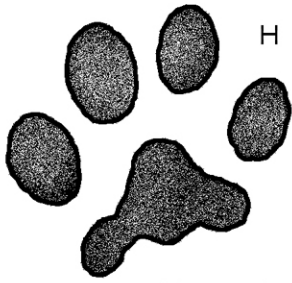
Grey Fox
front 2"
hind $1 \frac{3}{4}$ "



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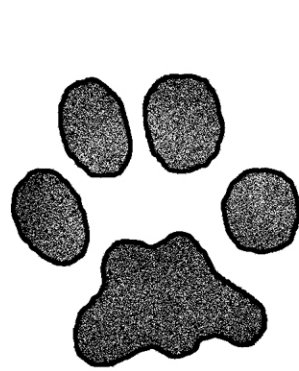
Red Fox
front $\geq 1/4$ "
hind $\geq 1/4$ "



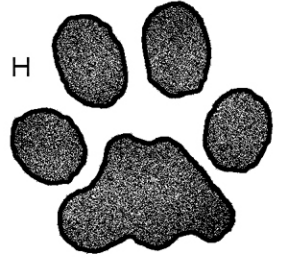
House Cat 1" to 2"



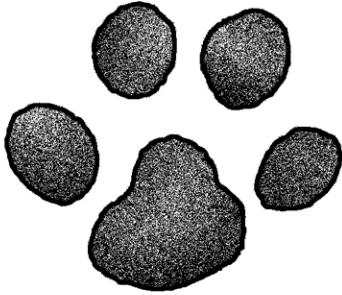
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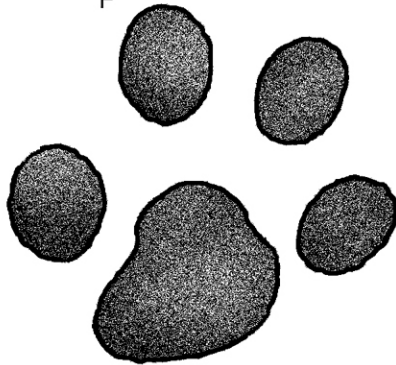
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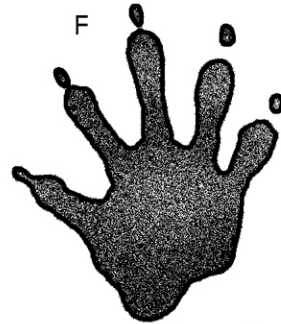
Bobcat 1 7/8 "



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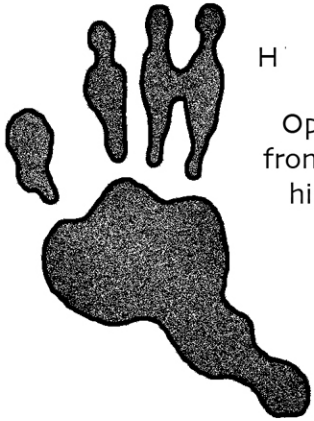
Lynx
front 4 1/4"
hind 3"



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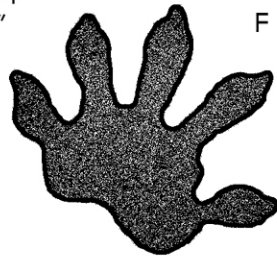


Raccoon
front 2 1/2"
hind 4"

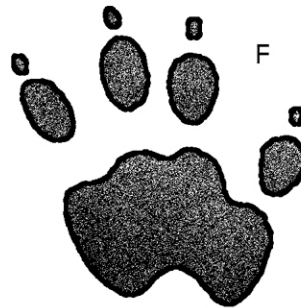


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Opossm
front 1 1/4"
hind 2"



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Woodchuck
front 2"
hind 2 1/4"



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Grey Squirrel
front 1 1/2"
hind 2 1/4



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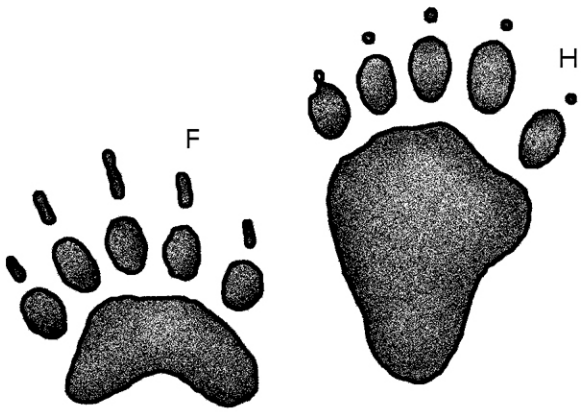


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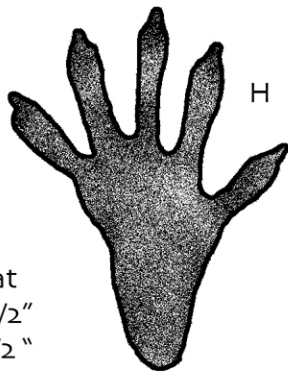
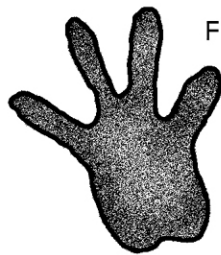
White-footed Mouse 1/4"



Striped Skunk
front 2"
hind 2"



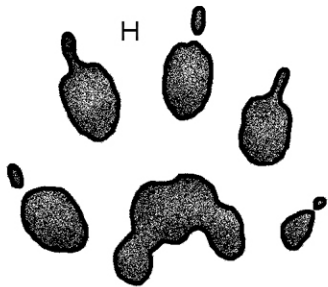
Porcupine
front 2 3/4"
hind 3 1/4"



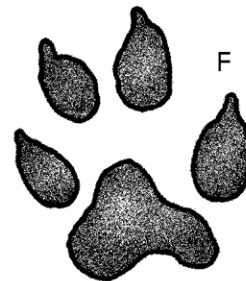
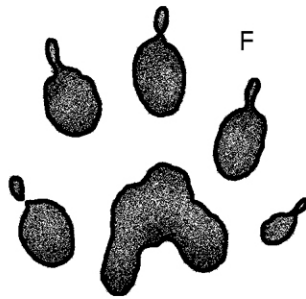
Muskrat
front 1 1/2"
hind 2 1/2"



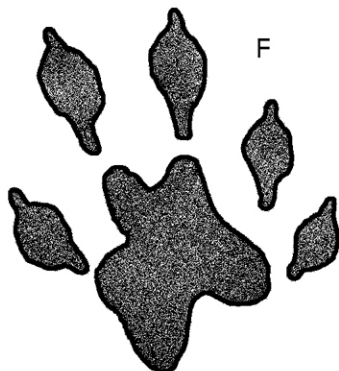
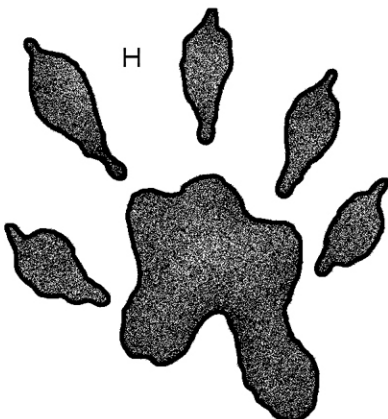
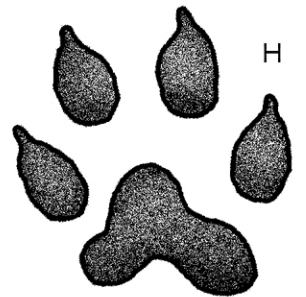
Cottontail Rabbit
front 1"
hind 3 1/2"



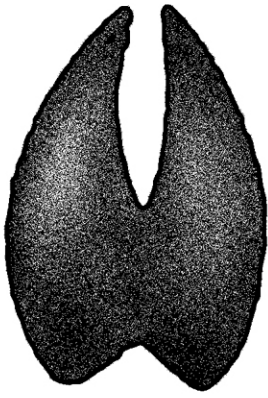
Mink 1"



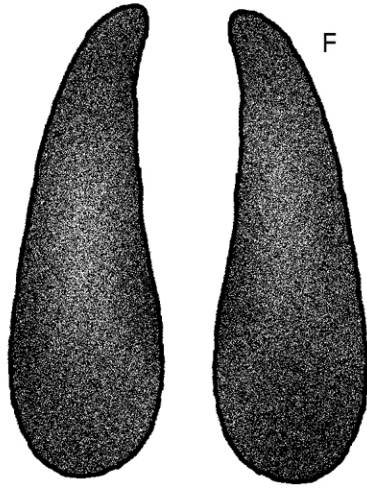
Weasle 1/2" to 1"



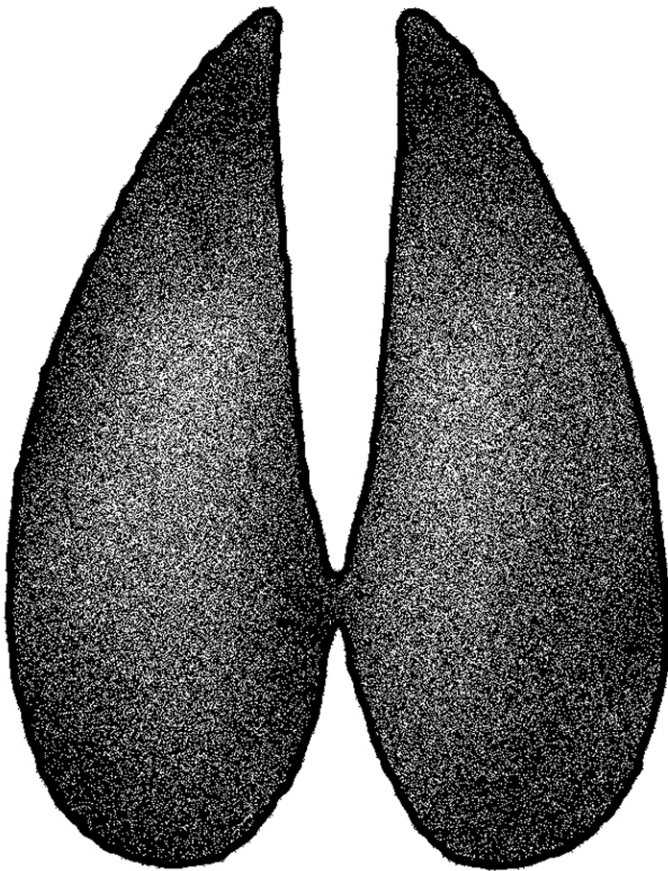
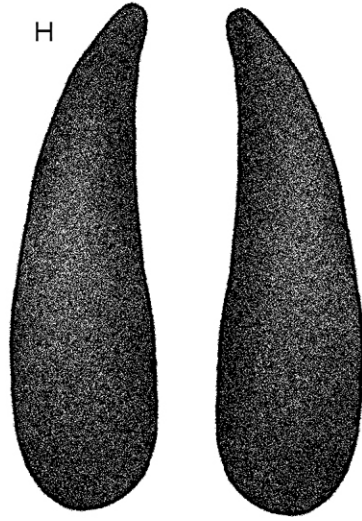
Otter 1 1/2"



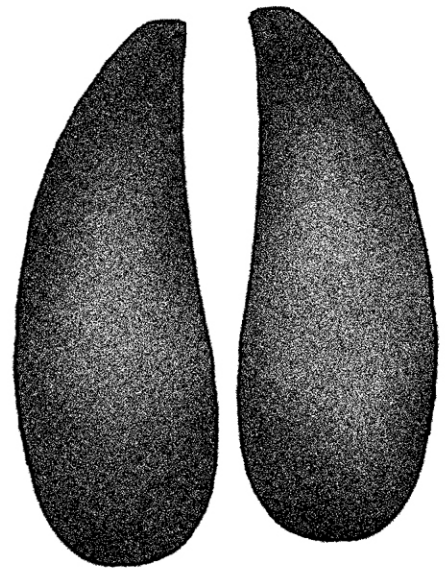
White Tailer Deer
2 1/2" to 3"



Antelope
front 1 1/2" x 2 3/4"
hind 1 7/8" x 3 1/4"



Moose 4 1/2" to 5 1/2"



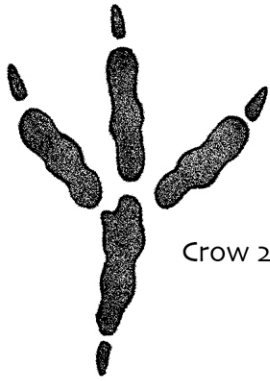
Elk



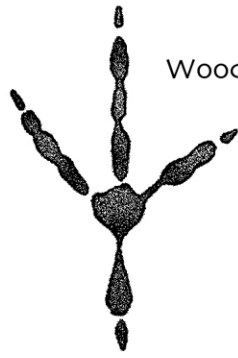
Brown Bear – Grizzly Bear

Black Bear





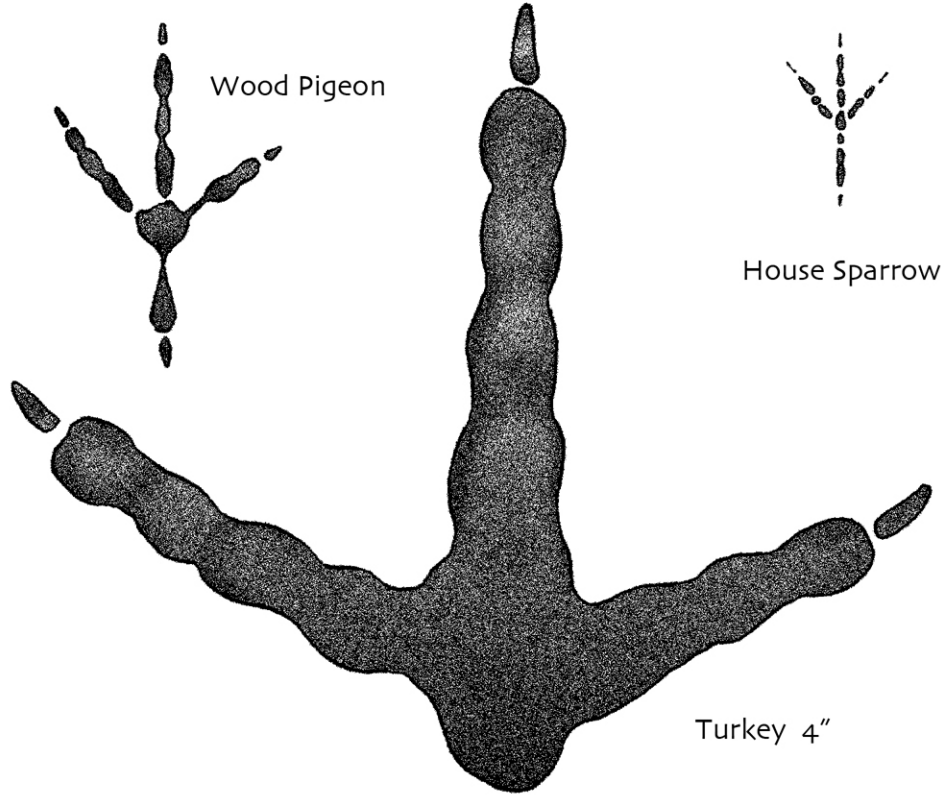
Crow 2 1/2"



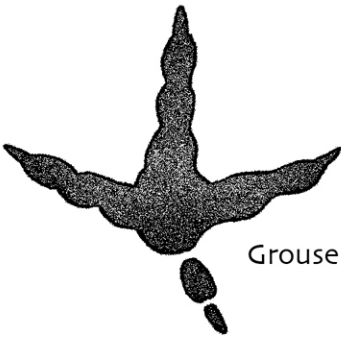
Wood Pigeon



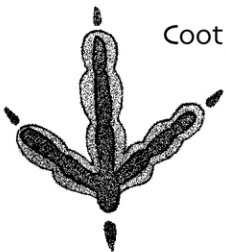
House Sparrow



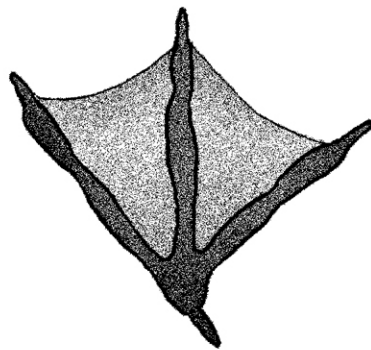
Turkey 4"



Grouse



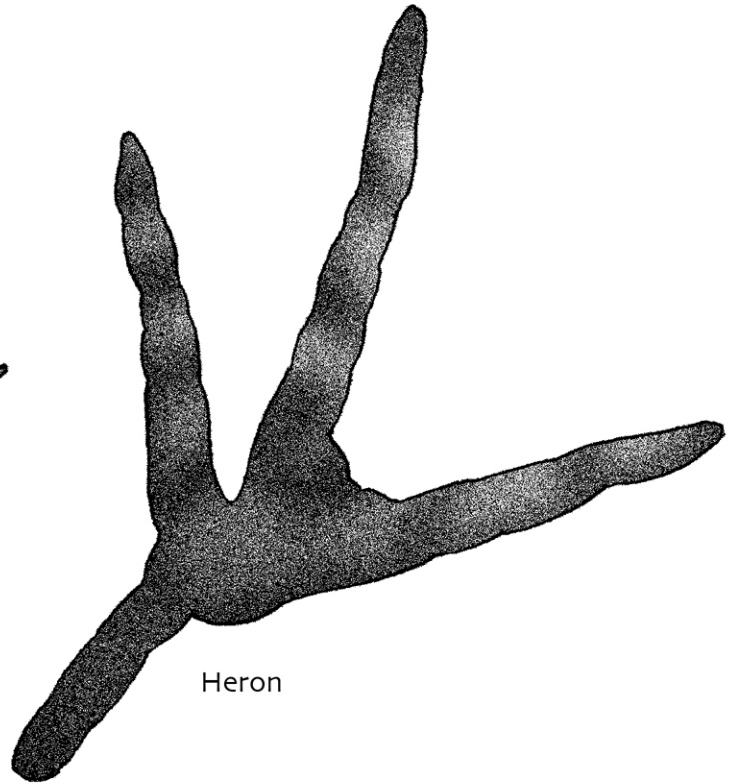
Coot



Mallard

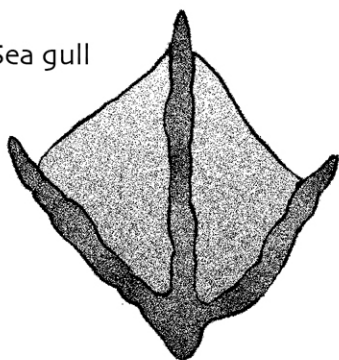


Killdare

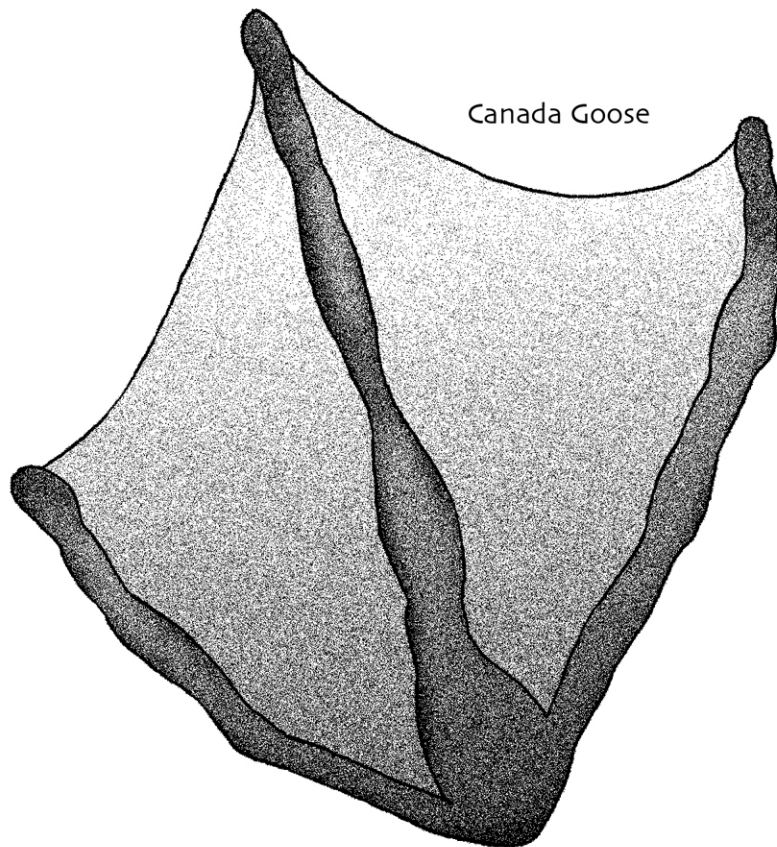


Heron

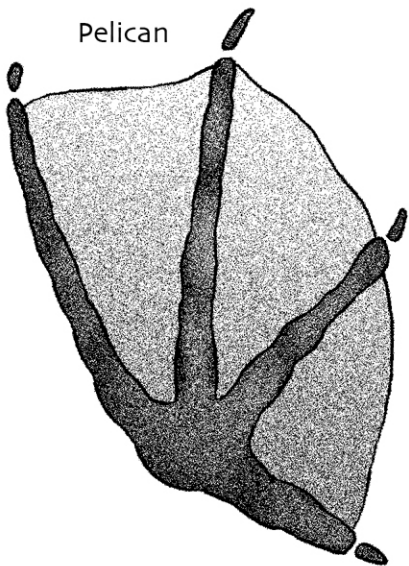
Sea gull



Canada Goose



Pelican



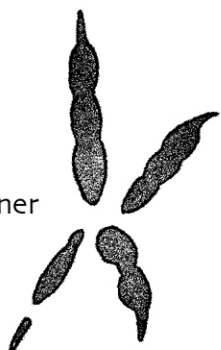
Red-winged blackbird



Cardinal



Roadrunner



Junco



White throated sparrow

