

Casting Animal Tracks

Preserving a cast of an animal's track is relatively easy, provided you do it the right way.

You'll need a small flexible **strip of cardboard** or plastic, a couple of **paperclips**, a small **paintbrush**, some **Plaster of Paris**, a small **measuring cup**, some **water**, a plant **misting bottle**, (if the track is in snow), a stick of **plasticene**, and some **petroleum jelly**.

And of course, you'll have to find some animal tracks!



Plaster of Paris is safe to use, as long as it doesn't get in your eyes. You should also avoid inhaling the dust, or getting it on your skin. Wash thoroughly after using it.



Find a good clear track you wish to preserve. Before looking for tracks of wildlife, we suggest trying out the technique near your front door, using a good clear print of a pet. The technique is slightly different in snow than in dirt, clay, or mud, so it's good to practice first. *It's much more difficult to get a cast from snow, since the casting mixture will be warmer than the track, and will tend to melt it a little. You might want to experiment with other mixtures to get tracks from snow; we suggest trying quick-setting contact cement, silicone, or craft glue.*

Casts of prints made in soft snow are very difficult to obtain if the print is a small one. We used a print made by Emily's cat Cuddles, in loose snow, and the resulting cast did not turn out well ... the size of the grains of snow made the relatively small imprints of the foot difficult to distinguish in the final cast. We suggest you find a large, well-defined print, made in hard-packed snow, and coat it thoroughly with the spray bottle (see below) to make the inner surface icy.

When you're ready to look for prints of wildlife, you can carry the materials with you (unmixed, in premeasured quantities) and make the cast where you find the print. Or you can take a shoebox and knife, and remove a section of ground around any print you find, carefully returning it to where you can make the cast more easily.

Look for tracks in summer near creeks, in mud, clay, or wet ground. In winter you can cast tracks in snow. When you find a good impression, the first step is to use the brush to carefully remove any excess dirt, and small stones, leaves, twigs, or other foreign material. A tissue might also be used to soak up any water laying in the print.



to just dust the surface, and allow this to dry. If the snow is dry and powdery, spray it with a mist of water droplets using the misting bottle; this will quickly freeze, making the impression's surface hard enough to take a

 *cast. The inner surface should be smooth and icy.*



Now wrap the cardboard strip around the track. Secure it with the paperclips, and press it firmly into the ground. Make a small amount of Plaster of Paris. The best ratio is about two times as much powder as water. Add the powder to the water... begin with 200 ml of water, and slowly mix



in 400 ml of powder.

The mixture should be the consistency of thick whipping cream when mixed. *For a track in snow, in order to avoid having the mixture melt the track, you will have to let the mixture sit outside to get very cold and begin to thicken even more. Test it first on a patch of snow ... it should sit on top without melting the snow too much.*



Pour the mixture carefully into the track, trying not to disturb the impression. Fill the cardboard cylinder to a depth of 2 to 3 centimetres above the track; slightly deeper for larger tracks. Now let the Plaster of Paris harden. This should take about half an hour.



If it is very cold out, the plaster may freeze before it sets. If this happens, remove the entire cylinder of cardboard with the cast in it, and take it inside to warm up. As it warms, it will soften and begin to set; don't touch it until it is warm and completely hard.

But in normal circumstances, the cast should harden in place. You can remove the cardboard and bring the cast indoors.

Let the cast sit for a few days to thoroughly harden. Then you can use an old toothbrush to carefully remove any dirt or other unwanted material.

Irregularities can be sanded off with a bit of sandpaper. Use a pencil to label the back of the cast with the type of animal, and the date and location where it was found. You can also paint the track itself if you want.



The cast you have made is an actual model of the bottom of the foot of the animal that made it. If you would like to make a cast of the track the way it appeared on the ground, you will have to make another 'positive' cast. Wrap the cardboard strip tightly around the cast, leaving three or four centimetres of cardboard above the track. You will need to seal any gaps between the cardboard and the base of the track; plasticene works well. Then grease the track itself, and the inside of the cardboard cylinder, with a thin layer of petroleum jelly.





several centimetres above the top of the track, and allow it to set. Wait a few days before attempting to peel off the cardboard and separate the two casts. If they can be separated without crumbling, you should have a very nice impression of the animal

track, which can be painted.

For prints in mud, clay, or dirt, you might also want to experiment with using candle wax dripped into the actual animal print to make the first cast. When it hardens, plaster can be added as above, to make a positive impression, and then the wax can be melted away using a hair dryer.

Use our handy footprint guide to help you identify your casts.

Note: When cleaning up the left-over Plaster of Paris, don't wash it down the sink, or you could plug up your pipes. Wash up outside, and dump the leftover material (it's non-toxic). Better yet, use disposable containers and throw everything away when you're done.

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