ANIMAL TRACK CASTING

When you go out on a hike—or even just on a walk around your neighborhood—seeing wildlife is one of the most exciting parts! But many animals are shy. Even when they're around, we don't always see them.

Scientists can keep track of what animals are found in an area by looking for sign. Sign is all the evidence animals leave when they pass through a place. It might be a tuft of hair, scratches on a tree trunk, scat (that's a polite science word for poop!) or many other things. One of the clearest bits of sign are animal footprints,

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YOU'LL NEED:

- Plaster of Paris powder: A type of plaster used for arts and crafts (instead of, say, repairing holes in a wall), this can be found in nearly all arts or crafts supply stores or sometimes in hardware stores.
- Water: For mixing your plaster.
- A cup and spoon for mixing and pouring: Something either flexible, like a paper cup, or with a pouring spout is helpful. Be aware that dry plaster of Paris is hard to get off your tools, so you might want to use either old or compostable items.
- Trowel or larger spoon for digging out the cast (optional): If you don't have time to leave the cast in the track for a long time (such as when it's outdoors along a hiking trail), this will help you get the cast out without breaking it.
- Animal tracks: If you're going out to find wild animal tracks, bring the above items with you, so you're ready to cast. If you want to try it out with a pet's track first, you'll also need the items below:
 - —A waterproof tray or box at least a little bigger than your pet's foot: plastic food containers are great for this.
 - —Sand: You can get small amounts of clean sand at gardening stores in the houseplants section.
 - —More water: damp sand holds a track better.





ANIMAL TRACK CASTING

(continued) or tracks. A snowy winter day is usually the best time to find tracks, but a muddy springtime is almost as good—and offers a chance to save the tracks you find by making plaster casts of them! And if you don't happen across any wildlife tracks, you can always immortalize your pet's footprints instead.

HOW TO:

- Find an animal track. Muddy areas or sandy beaches are good places to find wildlife tracks. In particular, if you go out to a muddy hiking trail early in the morning, before other human hikers get there, it's not unusual to find tracks left overnight. Trails are easy for everyone to walk on, and lots of wild animals use ours after dark!
- Or, enlist your pet to make one! To do this, fill your waterproof box with sand and squish enough water into it that it will hold a shape. Try for how damp you'd want the sand if you were making a sandcastle. Call your pet over and give it a treat or skritches for helping you. Gently take your pet's foot and press it into the sand to make a print. Send it on its way with more "thank you" treats or skritches!
- Mix your plaster. Scoop enough plaster powder into your mixing cup to fill the track. Add about half as much water as you have plaster into the cup. Mix until it's smooth. You may need to add a little more water, but don't make it too runny. It should be about pancake batter consistency or just a little thinner.
- Pour plaster into the track. Working quickly before it sets, pour the plaster in until it reaches the top edge of the track or a little further. If it's a very small track, like one from a squirrel or songbird, using the spoon might be more successful than pouring.
- Let the plaster harden and let it cure in the track if possible. Plaster of Paris usually hardens within 15 minutes, but it's very brittle until it cures. Curing can take two days to a week, depending on how humid the air is. (If the air is very humid, the initial hardening will also take longer, possibly up to an hour.)
- If you can't let it cure in place, dig it out carefully when hard. Very gently use your large spoon or trowel to dig into the soil under the track with the hardened plaster in it, and lift some soil out with the plaster cast in it. Carry it to a safe place to cure.
- Brush off the sand or soil, and enjoy! Gently brush off the cured cast. You won't be able to get all the sand or soil off, and that's okay (more will also come off over time). Admire your cast!

NATURAL CHAOS PAINTING

The beauty of nature can be in its structure—patterns of growth and change and predictable relationships—but beauty can also be seen in nature's chaos. While everything that happens in nature has some kind of physical cause and predictability, we can't always see it. So from our perspective, waves crash wildly on rocky shores, random

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YOU'LL NEED:

- Paper: There's likely to be a lot of paint involved in this, so thicker paper will hold up better. Consider watercolor paper, poster board or foam core board. Each type of paper will give a different end result, so maybe get a little of each to try!
- Paint: There are a lot of options here, and just like with the paper types, each type of paint will create different effects. Watercolor and tempera paints are easy-to-use, inexpensive and biodegradable choices, but you can also try alcohol inks, acrylics or other artstore options.
- Water: You'll probably want to dilute most types of paint.
- Cups, spoons and maybe an eyedropper or two: For diluting paint, mixing colors and getting it on the paper.
- A variety of natural objects: Go out collecting and bring back whatever strikes your fancy. Leaves, cones, moss, small branches, rocks, wood chips...the list goes on and on. The items can be dry and crumbly, dripping wet, soft and delicate, whatever. A handful of soil? Sure! It's chaos!





NATURAL CHAOS PAINTING

(continued) clouds of falling cherry blossom petals swirl around us, and unruly hordes of crows careen unpredictably around one another as they commute home to their roosts for the night.

You can capture some of that chaos by using natural objects to create an abstract painting. And it's easy enough for the youngest kids to get great results!

HOW TO:

- Find a place to work. There's likely to be spillage off the edge of your paper, so your workspace should be easy to clean. And you'll need to leave it undisturbed until it dries at least partially, so it should be somewhere out of the way.
- Arrange your natural objects on a sheet of paper. There are no rules here—arrange it carefully or toss it all on at random.
- Mix up some paint. If the paint is too thick, it'll just sit on top of the objects and nothing much will happen. So dilute it with water until it's pourable. It can be thick-pourable or thin-pourable—every dilution level will give different results. Use as many colors as you want.
- Pour, drip and sprinkle the paint over the natural objects. Use a little paint or a lot of paint, or different amounts in different areas. Feel like you should have diluted more? Drip on some water. Think you should have poured on less than you did in that one spot? Press down a rag and soak some of it back up. Anything goes!
- Let it dry. To preserve the contours of the natural objects, let the painting dry completely or almost completely. Otherwise, the wet paint will spread out and leave no hint the objects were ever there.
- Peel off the objects to reveal your painting. You probably won't be able to get every bit of everything off. You also might find you accidentally peel up a bit of the paper when getting some objects off. All of that is okay and just part of the beautiful chaos!
- Enjoy! Next time, try doing things differently and see what happens. Could you place another piece of paper on top and weigh it all down as it dries? Use more than one type of paint? Layer another chaos painting with different objects on top of a completed one? Of course you can! There's no wrong technique, just new effects.

ENRICHED COMPANIONS

Woodland Park Zoo's animal keepers are busy all the time. Sometimes they're doing what everyone knows they do, like cleaning, feeding and keeping careful records. But just as important are the things not everyone realizes are part of a keeper's job. Perhaps the most important one of these is something we call enrichment.

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FOR DOGS & CATS:

- Working for a living: Instead of feeding their entire diet in a boring bowl, give them the chance to slow down and figure a few things out in order to eat. Dry food can be easily enclosed in a paper towel or toilet tissue roll with the ends folded down, as shown in the photo. Or you can put it in a paper lunch bag, or even just scatter it across the patio or kitchen floor! Swallowing an occasional bit of nontoxic paperboard or kraft paper isn't harmful, but if your pet is inclined to just swallow non-food objects whole, the scatter technique is a better choice than paperboard containers.
- The chase is on: Not all enrichment must be food. Dogs often enjoy a game of fetch, but not all of them love to bring the object back. And cats sometimes enjoy fetch, but mainly prefer stalking and chasing. A flirt pole is great fun for the chasers in your household! You've probably seen flirt poles for cats in pet supply stores—a stick with a string on one end and a bunch of feathers on the end of the string. You can make a variety of small flirt poles yourself. Tie household twine securely onto the end of any stick-like object (a duster handle, a yardstick, a big kitchen spoon), then tie anything non-toxic to the string. A facial tissue is fun to chase or a piece of felt! You can even make a flirt pole for larger dogs—find or buy a length of PVC pipe and some rope that can be threaded through the pipe. Tie a large secure knot in one end of the rope, so it won't go through the pipe. Leave several feet of rope trailing out the other end, and tie a dog toy to it. Now you can easily make that toy "run" away from your dog and change direction unpredictably!

ENRICHED COMPANIONS

(continued) Enrichment is a complex series of activities and opportunities every animal at the zoo is given to encourage them to use their minds and bodies in all the ways healthy and possible for their species. As you might expect, this looks different for every animal. Sometimes enrichment is a series of food puzzles, so foraging animals like gorillas can spend hours collecting food bit by bit, as they would in their natural habitat. For animals with strong senses of smell, different scents applied in hard-to-reach spots motivate them to stretch, climb, and move their bodies to get to those places and revel in those new smells. For animals like reptiles who are close to the ground, a rotating selection of textures they can choose to walk or slither over gives them choices to consider.

But it's not just zoo animals who need enrichment. Our pets at home need to use their minds and bodies for optimal mental and physical health, too! Fortunately, building enrichment for pets doesn't need to be difficult or expensive. Below are a few suggestions to get you started, but just like the advice for people starting a new exercise program, check with your vet for safe options for your specific pet.

FOR SMALL PETS:

• The scent of fascination: After you clean your pet's enclosure, dot a bit of scent here and there, using something different every time. Some great choices might be vinegar of different kinds, extracts like vanilla or small amounts of spices like cinnamon. Be sure to check with

your veterinarian on what scents are safe for your species of pet.

in human cooking to make it more delicious, and frankly, more enriching! If greens are a healthy part of your pet's diet, use as wide a variety as your vet recommends—maybe parsley, tarragon, dill, or different veggies like broccoli, cucumbers or fancy lettuces.

