
a stay-at-home project

HOW TO BUILD A

NATIVE VIVARIUM

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OUR PROJECT

WHAT IS A VIVARIUM?

A vivarium is a terrarium that also has animals or insects. It is a fun way to bring a little bit of nature indoors.

It is usually planted in a clear glass or plastic container so light can get inside more easily. A clear container also makes it easier to observe the creatures inside.

A native vivarium is created with materials gathered from a specific area. In fact, you can build one without leaving your own yard!

Building a vivarium means you are building a small world for the creatures inside. Let your imagination go wild with its design!

ISOPODS

For this project, we will build a native vivarium that will be a home for isopods. Isopods are known by many names, like pill bugs, roly-polys, and doodle bugs. They are often mistaken for insects, but they are actually crustaceans. This means they are more closely related to shrimp than ants.

Isopods make good vivarium pets because they are active and fun to watch. Plus, they cannot climb out of a glass container if it is filled properly. Isopods feed on decaying wood and leaves, so there is no need to buy special food. Because they are crustaceans, adding a piece of clean eggshell to the vivarium will give them calcium, which is good for their shell. They will also eat tiny amounts of fish food.



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GATHER TOOLS

No fancy tools are needed to build a vivarium. Everything you need can be found around your house.

CONTAINERS



A vivarium needs airflow, so choose a container with a wide opening. An old fish bowl or tank will do nicely. A clear glass serving bowl or vase are also good choices. Even an empty peanut butter jar will work. If you plan to house creatures that can escape, you will need a lid for your container that allows air to flow in and out easily..

DIGGING TOOL



A trowel is the best tool for digging soil. It is lightweight and can be handled easily. If you don't have a trowel, there are other tools you can use for digging. Though large, a shovel will work nicely. You can even use a spoon!.

STORAGE



When collecting materials for your vivarium, you need to have a few containers to place them in to keep them separate. Have at least three containers for soil, plants, decorations, and creatures..

GLOVES



These are optional, but can be handy for protecting your hands while gathering materials and keeping your hands clean. They can also protect you in case you run across spiders or ants that bite.



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SEARCH YOUR YARD

Take a few minutes to walk around your yard and see what's there. You'll be surprised by the different things you find. Watch for things you'll need for your vivarium. After you have explored your yard, go back with your tools and collect what you've found.

SOIL



Soil can be found all around the yard. The best soil is in spots where leaves or grass clippings have been piled up and decayed, usually under trees. Take only the amount of soil you need and put the soil you don't use back where you got it.

You can use bagged soil or potting mix if they only contain organic materials. Fertilizers and other chemicals can be deadly to some insects, animals, and plants.

PLANTS



Every vivarium needs a few plants. The kind and number you choose will depend on the container you are using. Mosses and short plants work best so they don't grow out of your vivarium's opening. An easy way to find short plants is to look for them right before mowing, when your lawn grass is tall. Small plants will be easier to identify.

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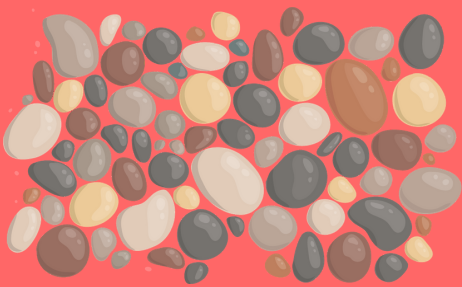
SEARCH YOUR YARD

DECORATIONS



A native vivarium looks great when it is decorated with natural items. Wood is essential, as it provides food and places for the isopods to hide. Sticks, bark, stones, pebbles, acorn caps, and dried leaves are all good options for decorations.

DRAINAGE STONES



Drainage in a vivarium with an open top is not a necessity, as it is unlikely it will be overwatered. However, it is nice to have just in case someone accidentally overwaters the plants. Plus, stones in the bottom are very attractive. Aquarium stones make an excellent drainage layer, but not everyone will have a bag stashed in their garage. Small stones found in the yard will work fine, but give them a good rinse before using so they look their best.

ISOPODS And Other Creatures

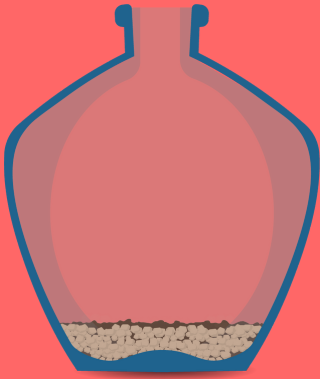


Isopods can be found under just about anything that has been laying on the ground for a while, but are most easily found under pieces of wood, sticks, and leaves. To gather the isopods, gently rake them off the piece of wood into a container. If the wood is small enough for the vivarium, just take the whole thing. Other creatures that make great native vivarium inhabitants are worms, millipedes, and land snails. Only collect snails if your container has a vented lid that fits well and doesn't have large holes. Snails are fun to watch, but they are escape artists!

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ASSEMBLE THE VIVARIUM

1 - DRAINAGE



Carefully add a shallow layer of rocks on the bottom of the container. The amount will depend on how large your container is, but an inch is usually enough. If you have a large container, you may want a little more so your vivarium looks nice. If you have a small container, you may need less so it doesn't take up space your soil needs.

2 - SOIL



Add your soil to the container. Leave several inches open at the top (at least 4") for plants and decorations. If one side of the container will be the 'front' side, pile the dirt in the 'back' slightly higher so it forms a little hill. This will make the back more visible from the front.

3 - PLANTS AND DECORATIONS



Plant the leafy plants first. Start with one or two plants, then add moss. Add one or two of the wooden decorations. Take a step back and see how it looks. Add more decorations or plants if you need them. Scatter a few leaves and acorn caps around.

Plant and decorate the vivarium until you are happy with how it looks, but don't overfill it. You want to be able to see the isopods inside.

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ASSEMBLE THE VIVARIUM

4 - WATER



For this first watering, water the vivarium well with a watering can or cup to moisten the mosses, plants, and soil. The goal is to make the soil damp, but not muddy. This is the only time you will add this much water to your vivarium.

After the first day, water your vivarium lightly a few times a week. The best way is to water daily with a spray mister. This will allow you to dampen the soil and wood without any danger of overwatering. You can also water it lightly with a watering can or cup, but always take care not to overwater.

5 - ISOPODS And Other Creatures



Gently add your isopods to the vivarium. Isopods can be injured if handled roughly, so add them carefully. If this is difficult, it may help to empty them gently onto a piece of paper, then use it to scoop them into the vivarium.

Try to place them in the center of the vivarium and let them find their way around.

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ENJOY YOUR VIVARIUM!