

Terrarium Substrate Buyer's Guide

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A natural terrarium environment will reduce stress in your pet amphibian or reptile and help keep her in good health. In particular, the substrate or flooring you choose for your reptile's cage, and the items you place in it, require careful consideration. We recommend that you thoroughly research your specific herp's natural habitat and build a home to match it as closely as possible.

No single substrate is right for all herps. In fact, what is right for one may be harmful to another. If you have two herps that come from different habitats, resist the temptation to put them together. One or both will likely have health problems if you do.

The right choice of substrate will enhance the appearance of your cage, but more importantly, it will keep spilled water, food, feces, and urates away from your pet. If you choose soil or sand, it must be sterile at the time you place it in your herp's habitat. If it is not, you might introduce microorganisms into the environment that could compromise your herp's health.



To ensure a clean environment, we recommend commercially available products. These will enable you to achieve the look you desire, while providing the healthy conditions your pet requires:

- **Substrate Options** - A number of easy-to-change [bedding](#) options simplify substrate cleaning and changes. [Cage carpet](#) is a good choice used alone, or as a protective layer below [moss](#), bark, or sand. Many large herp keepers prefer

linoleum that allows for daily or "on-demand" cleanups.

- **Artificial plants** - Durable [artificial plants](#) are easy-to-clean and provide places for your pet to bask, climb, and hide.
- **Bowls** - Realistic, nonporous, replica [bowls](#) prevent spills and will not absorb bacteria.

In addition to initial purity, you will also want to look for substrates that are:

- **Easy to clean** - If you choose a substrate that is difficult to clean, you will likely not keep up with the needs of your pet.
- **Readily available** - The amount of substrate you regularly need is determined by the size of your pet. While small pets may require only weekly replacement of the substrate, a large pet may require daily cleaning or more frequent changes.
- **Good heat conductors** - Every material conducts heat differently. For example, regular bagged sand, a weak conductor some people use in desert terrariums, usually requires use of a [mat heater](#).
- **Nonabrasive** - A good substrate will never contain anything that will be abrasive to your pet or scratch her sensitive skin.



If you prefer to introduce "found" materials to your habitat, make sure they are sterile:

- **Sand and rock** - Avoid gathering beach sand and stratified rock such as limestone. Both are magnets for organic material. Start with clean, dry sand or smooth aggregate stones, such as granite or marble. Rocks should be cleaned, and then boiled in water for 30 minutes. Sand can be rinsed with large amounts of water to remove any particulate debris. The final rinse should be in water treated with a [conditioner](#) to neutralize the chlorine, chloramines, and heavy metals. Then heat the sand in an oven at 200-250°F for 30 minutes. Let sand and rocks cool before placing in the terrarium.
- **Wood** - Submerge branches in clean water and allow to dry thoroughly. Then heat in the oven at 200-250°F for 30 minutes. Allow to cool prior to use.
- **Live plants** - Because few wild plants are naturally free of pests or disease, and sterilizing them is extremely difficult, we do not recommend their use in your herp's cage.
- **Dangerous choices** - Be aware that a number of commonly used substrates have



proven to be harmful, if not lethal. For example, it is recommended that you never use cedar chips or pine bedding because they cause irritation of the skin and respiratory tract, or corncob bedding because it can be lethal if ingested.

Desert Dwellers

Fine-grain sand is the popular choice for desert dwelling snakes, lizards, tortoises, and turtles. [Zoo Med Repti Sand](#) consists of finely ground, pure quartz desert sand to create a more natural desert environment. A [sand sifter](#) can be used at intervals to clean your terrarium floor and extend the life of your sand. When feeding snakes, move them to a newspaper-lined cage. This will help keep the sand substrate clean, and also help prevent sand ingestion. This is also a good procedure to follow with some lizards.



Woodland Species

Forest dwelling reptiles such as glass lizards will prefer substrates that will allow for shallow burrowing. Comfortable, safe bedding products include Forest Bed and [Eco Earth](#). All are nontoxic and highly absorbent. Arboreal lizards such as climbing geckos and chameleons will do better with a substrate which is easier to clean such as [Cage Carpet](#). Be sure to provide plenty of [artificial plants and tree limbs](#).

Rain Forest

For amphibians such as toads, frogs, salamanders, and other moss-dwelling creatures accustomed to the damp environment of the rain forest, a good choice can be peat moss or commercial products such as [Zilla Fir and Sphagnum Moss Mix](#). These help retain the much-needed moisture and humidity, and are resistant to development of mold that may develop with choices such as newspaper or carpet.