

The Dude's guide to Paludariums



Q: What is a paludarium?

A: A self controlled, efficient aquatic + land terrarium with full mechanical, biological and mechanical filtration reinforced by efficient fungi, bacteria and other mechanical process' in the aquatic and terrestrial substrate.

Tips and tricks before getting started:

1. Determine if you are using a 100% aquatic base vs 50%-50% land/water (whatever ratio you prefer and whatever works for your planned inhabitant).
2. Always make sure your terrarium is waterproof and reinforced with silicone around any bulkheads and/or seals. This is the. [aquarium safe silicone](#) that we recommend.
3. Ensure you have the ability to filter your water + perform water changes on a weekly to bi weekly basis. Full aspect of chemical, mechanical and biological filtration is recommended. It is not recommended to have a paludarium without filtration of any kind.
4. Aquatic substrate is necessary when utilizing live plants and reinforcing your aquatic bacterial process'.

5. When keeping fish and aquatic amphibians it is recommended to let the water cycle for at least 2 weeks prior to introducing any live animals.
6. Provide lots of climbing areas for your arboreal or terrestrial critters to get out of the water.

The below video is great for a 70% land and 30% water paludarium:

<https://www.youtube.com/watch?v=j9-7VVXvIOk>

When using a drainage layer, it is recommended to stay away from loose material and stick with a solid drainage layer, such as the Dude's [Supergrow](#) or MATA LA mat. These can be cut to size while giving you the strength to layer all of the necessary decor on top without compressing and disrupting air and water flow within the enclosure. In the event that is not possible, river rocks can be used entirely with a slope to create your "water edge." From there simply place your screen divider on top and place your substrate and biodegradables mixed throughout your land area.

<https://www.thebiodude.com/blogs/how-do-i-create-a-bioactive-vivarium/how-do-i-drain-my-drainage-layer>

When doing a 100% aquatic base your filter should be strong enough to handle the volume of gallons as required for clean water. Utilizing an aquatic base substrate, such as the FLUVAL Stratum layer is a great aquatic base when using live plants. A minimum of $\frac{3}{4}$ " depth is necessary for proper bacterial and root development. Canister filters can be utilized with a strong aquarium pump by using the pumps energy to put water into the canister filter with the water naturally flowing out of the filter back into your terrarium. This is where you can get unique with your builds and water features. Other types of filtration such as sponge filters, whisper in tank filters can also be utilized for water quality. When creating your water features ensure to maintain the following:

1. The tubing is not kinked or bent in any way that could disrupt water flow.
2. Water flow is being aided by gravity, not going against it.
3. Utilizing wood or rocks is a great way to create a waterfall. Ensuring all pieces are immovable and not able to be manipulated by the inhabitants.
4. Your pump(inside the terrarium) is easily accessible for routine maintenance.
5. [The Dudes choices for rock decor](#), [cork round](#) and other types of wood are good options for waterfalls.



[The Dudes Terra Flora substrate](#) is our go to for amphibians, making it great for a paludarium set up. Retaining the moisture needed for the plants, and giving the animals ample places to burrow comfortably. Can be mixed in a bucket with [biodegradables](#) such as seed pods and wood pieces for the clean up crew, before adding it inside of the enclosure to make the process easier. Clean up crews should be burrowing isopods, such as Dwarf White or Dwarf Purple. Springtails will naturally float and will breed very quickly in your paludarium. There will be some isopod casualties from drowning.

Maintaining your aquatic, terrestrial and epiphyte plants can be a challenge. Many paludariums are tall, so a strong LED plant light or T5 Plant light is recommended. The following lights are great options when building a brilliant display paludarium:

1. [Glow and Grow LED](#)
2. [Solar Grow T5 Plant Light](#)
3. [Fluval Grow Light](#)
4. [Exo Terra Terra Sky](#)

When deciding your hardscape and plants it is very important to evaluate how well those plants and accents will handle the wet biome that is being created. Stay away from Grapevine and other soft woods that will mold very quickly. Woods such as Cork Bark, Ghostwood or Spider Wood are great options. They can be submerged or exposed and function just fine in your paludarium. Rocks are also great for your water features. Rock such as Pumice, Dragon Stone, Bone Stone, Wood Stone and Petrified Wood are a few of the options the Dude has used in his paludarium builds.



When selecting your plants, evaluating your lighting requirements, humidity requirements and how much abuse the plants can take should be all considered when building this paludarium for your inhabitant. Aquatic plants should be planted bare root and in the substrate unless otherwise noted. Ensure that your aquatic plants are grasping necessary light as they require as much light as your terrestrial and epiphyte plants.

The Dude Abides

