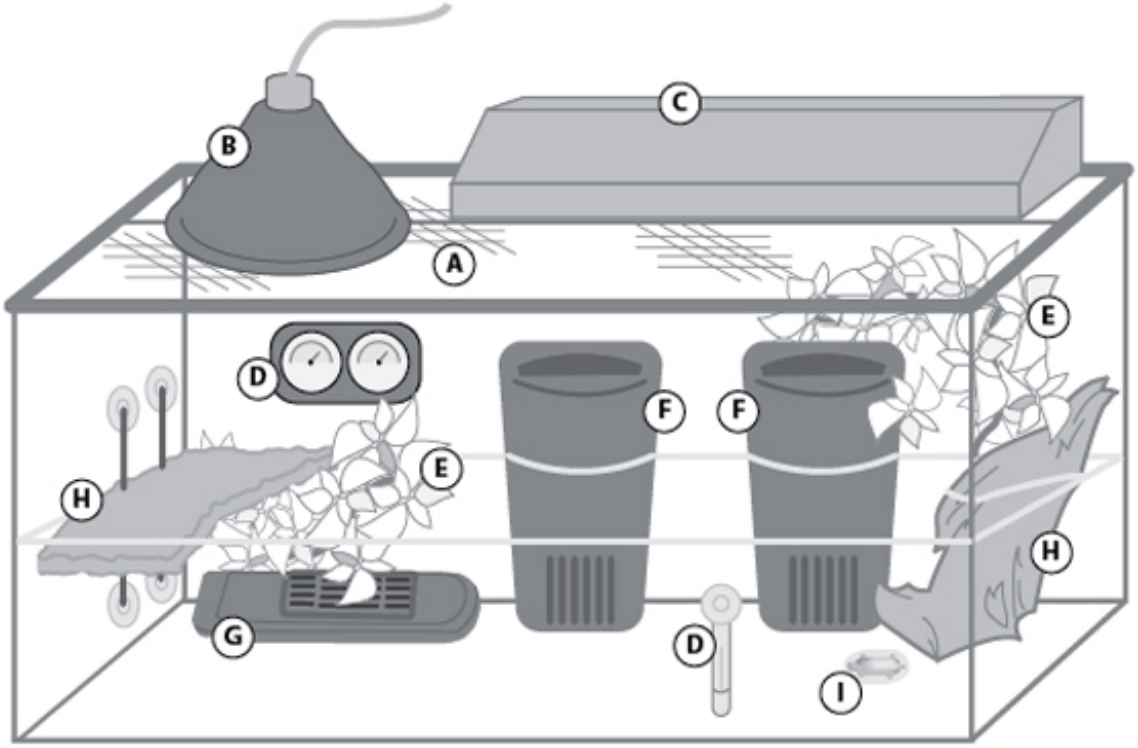
Aquatic & Semi-Aquatic Turtle Habitats, How to Create

Drs. Foster & Smith Educational Staff

There are many different types of aquatic and semi-aquatic turtles that you can keep, such as red-eared sliders, painted turtles, mud turtles, musk turtles, and Florida cooters. Each species will have its own specific housing requirements that are necessary to promote proper health. However, there are basic guidelines that all aquatic and semi-aquatic turtle habitats adhere to, and the following tips will help you provide your aquatic turtle with a safe and comfortable habitat.



Enclosure/Cage

*Unauthorized use of any images, thumbnails, illustrations, descriptions, article content, or registered trademarks of **Foster & Smith, Inc.** is strictly prohibited under copyright law. Site content, including photography, descriptions, pricing, promotions, and availability are subject to change without notice. These restrictions are necessary in order to protect not only our copyrighted intellectual property, but also the health of pets, since articles or images that are altered or edited after download could result in misinformation that may harm companion animals, aquatic life, or native species.*

Aquatic and semi-aquatic turtles should be housed in long, low aquariums that allow them plenty of room to swim, bask, and move around. The size of the aquarium will be dependent on the size of the turtle, and you should always purchase with consideration to how big the turtle will be when it is full grown. Turtles must have a carapace length of 4" to be sold in pet stores, but some can grow as big as 12" in diameter. One to two small turtles can fit in a 20 gallon aquarium, but a turtle that has a carapace length of 8" will need at least a 20 gallon aquarium to itself, and most adults will need an aquarium that is larger than 20 gallons. If you own multiple turtles, each additional turtle will require, at the least, an additional 10 gallons worth of space. Use a wide-spaced mesh lid to provide proper ventilation and allow UVB light through.

A. Fresh Air Screen Cover
B. Dome light and black or red reptile bulb
C. Fluorescent Strip Light with UV Bulb, on a Timer
D. Thermometers for both air and water temperatures, and Hygrometer
E. Real or Artificial Plants
F. Filter(s) (Internal or Canister, the larger the better!)
G. Submersible Aquarium Heater
H. Basking/Land areas, such as a Turtle Ramp or Dock, rocks or Driftwood
I. Tortoise Block

The aquarium should be divided into a land area and a water area. The ratio of water to land will depend on the species. The majority of semi-aquatic turtles will need no more than 50% of the aquarium dedicated to a water area. Most aquatic turtles will need the majority of the aquarium devoted to a water area, with no more than 25% of the aquarium dedicated to a land area. The water should be deeper than the turtle's shell is wide, so that the turtle can be completely submerged and swim freely. You will need to use a filter to keep the water clean.

The land area will be used for basking, and it can be made from aquarium gravel, soil, or sand. Again, which substrate is best will depend on the specific needs of the species that you are keeping. Land areas can also be created using a large dock or ramp or some smooth rocks, slate, or driftwood that stick out of the water. The basking area should slope gently down into the water to ensure that the turtles are easily able to climb out of the water and onto land.

The size of the basking area will depend on the size of the turtle, the species, and how many turtles are in the terrarium. Larger turtles will need a larger basking

*Unauthorized use of any images, thumbnails, illustrations, descriptions, article content, or registered trademarks of **Foster & Smith, Inc.** is strictly prohibited under copyright law. Site content, including photography, descriptions, pricing, promotions, and availability are subject to change without notice. These restrictions are necessary in order to protect not only our copyrighted intellectual property, but also the health of pets, since articles or images that are altered or edited after download could result in misinformation that may harm companion animals, aquatic life, or native species.*

area, and aquariums housing multiple turtles must have a basking area large enough to accommodate all the turtles at once. Additionally, some semi-aquatic turtles, like red-eared sliders, are more terrestrial than others, and they will need a larger land area to move around on.

Substrate such as gravel or sand can be used in the water area, but it is not recommended as it will make it more difficult to clean the enclosure and maintain cleanliness. If you wish to use a substrate, select a substrate that won't be easily ingested by your turtle, to help prevent possible impaction.

Landscaping/Aquascaping

Semi-aquatic and aquatic turtles generally do not need many landscaping items in their aquarium, but such items can be used to make them feel safe when they are on land and to make the environment more natural. You can use logs and terrestrial plants to provide them with a sense of security. Aquatic plants can also be used in the water areas to provide hiding places and improve or sustain the quality of the water. Worn driftwood or smooth flat rocks can be placed in the basking area. You can also place a wooden enclosure in the basking area if it is large enough to provide your turtle with a hide spot.

It is important to note that many turtles will eat plants, so we recommend that you use a combination of real and artificial plants to cut down on excess waste. Using only real plants works best if you have a very large habitat for your turtles. Using only artificial plants or a combination of real and artificial is better for smaller habitats. If you see that your turtles are frequently nibbling on the artificial plants, remove them from the habitat and replace them with real plants. When using real plants, choose carefully - by researching the plant or consulting a veterinarian - as some plants can be toxic to turtles.

Temperature

There are two temperatures that are important in a semi-aquatic or aquatic turtle's habitat: the temperature of the water and the temperature of the basking area. The water temperature should be approximately 78°F, though it can vary slightly by species. You can maintain this temperature by using submersible aquarium heaters.

The temperature of the basking area should be approximately 80° to 85°F. This can be achieved with the use of overhead basking lamps with heat bulbs.

Use a thermometer to monitor temperatures to avoid over- or under-heating your turtle's habitat. Improper temperatures can result in a lack of appetite, illness, and even premature death.

Lighting

Semi-aquatic and aquatic turtles need full spectrum light, so you must use both UVA and UVB bulbs in the tank. UVA light encourages proper activity levels,

*Unauthorized use of any images, thumbnails, illustrations, descriptions, article content, or registered trademarks of **Foster & Smith, Inc.** is strictly prohibited under copyright law. Site content, including photography, descriptions, pricing, promotions, and availability are subject to change without notice. These restrictions are necessary in order to protect not only our copyrighted intellectual property, but also the health of pets, since articles or images that are altered or edited after download could result in misinformation that may harm companion animals, aquatic life, or native species.*

appetite, and breeding. UVB light contributes to Vitamin D3 production and simulates their natural environment, decreasing stress. UVB heat lamps should provide the main lighting, and basking heat lamps should be used in the basking area.

We recommend the use of a timer to achieve natural light cycles. Most semi-aquatic and aquatic turtles need a natural light cycle of 12 to 14 hours of light followed by 10 to 12 hours of darkness. The length of the light period should be longer in the summer and shorter in the winter.

Humidity

Humidity needs vary widely by species. The more terrestrial turtles will need a lower humidity, while those who spend more time in the water will need a higher humidity. Speak with your veterinarian about what the proper humidity levels are for your turtle, and monitor levels with a hygrometer.

The substrate you use in the basking area will contribute to the humidity levels, so turtles that require less humidity should have drier substrate such as sand and dry mulch in their habitats, while turtles that need more humidity can use moister substrates such as damp mulch, soil, sphagnum moss, or peat moss.

Cleaning & Filtration

Turtles produce a good deal of waste, so a filter is an absolute necessity to keep the water clean. Without a filter, you'd have to do water changes almost daily, and proper filtration ensures that your turtle's habitat will stay as clean, safe, and sanitary as possible between water changes.

There are a number of filters that you can choose from. We recommend that you use a larger filter, such as a canister filter, that will not be easily clogged by your turtle's solid waste. While canister filters are more expensive, they are a worthwhile investment that will decrease the amount of work you have to do, keep your turtle's habitat cleaner, and keep your turtle healthier. Whether or not you opt to use a canister filter, remember that the bigger the filter, the more effective it will be, and the less you will have to clean. If you decide to use an internal filter instead, consider using two, rather than just one, for cleaner, healthier water. No matter what filter you choose, always remember to change the filter media regularly to optimize your filter's performance.

How often you will have to clean the water in your aquatic turtle's tank will depend on a number of considerations. These include how big the tank is, how effective your filtration system is, and the number and size of the turtles in the tank. Another factor that you may not have considered is how you feed your turtle. Be careful not to overfeed your turtle, as this will create excess waste, and always remove uneaten food to prevent it from fouling the water.

We recommend performing large water changes at least every two weeks,

*Unauthorized use of any images, thumbnails, illustrations, descriptions, article content, or registered trademarks of **Foster & Smith, Inc.** is strictly prohibited under copyright law. Site content, including photography, descriptions, pricing, promotions, and availability are subject to change without notice. These restrictions are necessary in order to protect not only our copyrighted intellectual property, but also the health of pets, since articles or images that are altered or edited after download could result in misinformation that may harm companion animals, aquatic life, or native species.*

replacing with water of the same temperature. The exact water change schedule should be based on the above factors. If you are unsure of when you should clean the aquarium, consult your veterinarian.

Always wash your hands thoroughly after washing the tank or handling any of the accessories to prevent possible transmission of *salmonella*.

Housing Multiple Turtles

You can house more than one turtle if you choose to. However, always remember that the 4" turtles you are bringing home can grow to have a carapace length of 8", 10", or even 12", and the size of the enclosure will need to be large enough to accommodate their adult size. One large semi-aquatic or aquatic turtle can require a 30 or 40 gallon aquarium, and multiple turtles will need an aquarium larger than that. Increased size will also entail higher setup and maintenance costs. Carefully consider whether or not you have the room or the finances for a multiple turtle aquarium before purchasing additional turtles.

*Unauthorized use of any images, thumbnails, illustrations, descriptions, article content, or registered trademarks of **Foster & Smith, Inc.** is strictly prohibited under copyright law. Site content, including photography, descriptions, pricing, promotions, and availability are subject to change without notice. These restrictions are necessary in order to protect not only our copyrighted intellectual property, but also the health of pets, since articles or images that are altered or edited after download could result in misinformation that may harm companion animals, aquatic life, or native species.*