

Musk Turtle (*Sternotherus odoratus*)

Difficulty: Intermediate



Musk turtles (also known as stinkpots) are small, semi-aquatic turtles native to the eastern United States. They can be identified by their black-brown coloring with a pattern of two narrow yellow stripes on the head and neck, accompanied by a large head, pointed snout, smooth domed shell, and reduced plastron.

Musk turtles prefer aquatic habitats such as soft-bottomed ponds, lakes, swamps, and slow-flowing rivers with abundant vegetation. Like other turtles, musk turtles are diurnal, which means that they are most active during the day. As omnivores, they use much of this time to hunt small animal prey and forage for edible plants.

Musk turtles average 4-5" in shell length as adults, making them a convenient size for keeping as a pet. However, they're still a big commitment! With good care, musk turtles can live up to 50 years.

What You Need for an Indoor Bioactive Musk Turtle Pond

- Small Waterland tub (55"L x 24"W x 12"H)
- [22" T5 HO Arcadia 6% UVB bulb](#)
- [24" The Bio Dude Solar Grow T5 HO Single Bulb Light Strip](#)
- [Bio Dude Glow & Grow 22" LED](#), x2
- [Arcadia Halogen Heat Lamp 50 watt](#), x2
- [Exo Terra Reptile Deep Dome Fixture, Large](#), x2
- Two-outlet rheostat
- Aquarium heater, rated for 20+ gallons
- Plastic heater cover

- [Bio Dude Digital Thermometer / Hygrometer](#)
- Aquarium thermometer
- Light fixture chains (for hanging from ceiling)
- Extension cords, as needed
- Canister water filter, rated for at least 40 gallons
- Filter media (if not included with filter)
- Siphon
- Surge protector power strip
- Ground-fault circuit interrupter (GFCI)
- [Terra Fauna Bioactive Kit 20 gallon](#)
- Live, edible aquatic plants (both aquatic and terrestrial)
- Misc. décor (aquatic substrate, rocks, [wood](#), toys, etc.)
- Turtle pellets
- [Cuttlebone](#)
- Soft-tipped feeding tongs
- Soft toothbrush

Enclosure Size

The minimum enclosure size recommended for housing a single musk turtle depends on the size of the turtle itself. When using an aquarium, the general rule is at least 10 gallons of water per inch of shell length in total capacity. However, if you're using a Waterland tub, water depth and general dimensions relative to the turtle's size become more important. Considering that musk turtles only grow up to about 5" long as adults, a small (55"L x 24"W x 12"H) Waterland tub with 75% water area, 25% land area, and 6" water depth should be sufficient for the turtle's needs. However, larger is always better!

Musk turtles are known to be potentially territorial toward each other, so it's best to only keep one turtle per enclosure.

Lighting & UVB

Musk turtles are diurnal, so they require UVB lighting to stay healthy. They are also likely to benefit from a bright ~6500K daylight lamp, which adds extra illumination to the enclosure and encourages better activity, appetite, and mental health. The extra light is also required to help keep your plants healthy and growing!

For UVB, we recommend installing a **Zoo Med T5 HO ReptiSun 5.0** or **Arcadia Forest 6%** in a reflective T5 HO fluorescent fixture, long enough to span the land area plus some of the water area. So for a large Waterland tub, you will want a bulb about 22" long. Do not use other brands — when it comes to UVB, *brand matters!*

The UVB lamp should be hung from the ceiling to land 13-14" above the basking spot to achieve a UVI of approximately 3.0-4.0 in the basking area. UVI can be measured with a **Solarmeter 6.5**.

For daylight lighting, we recommend installing **Bio Dude Glow & Grow LED lamps** or similar, spanning the length of the enclosure. This helps make sure that your plants get enough light to stay healthy!

Both lighting and heating should be on for 12 hours/day.

Heating

Because musk turtles are reptiles, they are cold-blooded, and that means that they need a range of temperatures within their enclosure so they can regulate their own body temperature as needed. Areas of heat (ex: the basking area) speed up their metabolism and promote activities like digestion and healing. Cool areas (ex: the water) slow the metabolism and promote activities like rest and energy conservation.

To promote optimum health and metabolism, your musk turtle will need the following temperatures within its enclosure:

- Basking area temperature: 90-95°F
- Water temperature (juveniles): 78-80°F
- Water temperature (adults): 72-78°F

Both land and water heat sources should be turned off at night to create a natural drop in temperature.

Heating the land:

To heat the basking area, you will need two 90-100w halogen flood heat bulbs and two narrow dome lamp fixtures rated for at least 100w. Hang the fixtures from the ceiling so it is the same distance from the basking area as the UVB lamp. If the bulbs get a little too warm, you can plug the lamps into lamp dimmers and reduce the heat that way. If the bulbs are a little too cool, you will need higher-wattage bulbs.

Keep track of your basking area temperature with a terrarium digital probe thermometer such as the **Bio Dude Digital Thermometer / Hygrometer**.

Heating the water:

Heat the water with an aquarium water heater that is rated for the amount of water in the enclosure, such as the **Fluval E100**, which also comes with a plastic cover. Water heaters which don't come with their own protective plastic cover must have one added to prevent accidental burns.

Keep track of water temperature with a digital probe aquarium thermometer like the **Zacro LCD Digital Aquarium Thermometer**.

Water Maintenance

Aside from keeping the water at the right temperature, you also need to keep it clean. This involves 1) excellent filtration and 2) regular water changes.

Choose a canister-style filter capable of handling at least 2-3x the amount of water present in the enclosure, because most filters are made for fish, and turtles are MUCH messier than fish. So if you have a small Waterland tub with up to 20 gallons of water, you will need a filter that can handle at least 40 gallons of water, like the **Fluval 307 Canister Filter**.

But a great filter alone isn't enough. You also need to replace the 30% of the water once every 1-2 weeks, depending on your enclosure's needs. This helps keep the water clear, and more importantly prevents certain waste products from building up to toxic levels. Use a siphon or water pump to facilitate the process. If you drain the water into a bathtub or sink, don't forget to *thoroughly* disinfect it afterward!

Basking Area

Musk turtles are only semi-aquatic, not fully aquatic, so they need land as part of their enclosure. They use this area to warm up, dry out, and soak up UVB. One of the reasons a Waterland tub is recommended in this guide is because they are designed for turtles, and already have a built-in land area for basking and walking around as desired. Layer the "land" portion of the tub with drainage material and bioactive-ready substrate (such as the **Bio Dude Terra Fauna kit**), inlay a piece of flagstone or stone paver for the basking spot, and add edible live plants and CUC.

Decorating the Enclosure

Enclosure décor is more than just making your setup look good. It's also an important part of providing environmental enrichment to your musk turtle, which enhances your pet's quality of life by providing opportunities to express natural behaviors. Aside from swimming, walking, and basking, musk turtles also like to dig underwater, hide in plants, nibble on underwater plants, and chase fish.

Fine-particle aquatic substrates, pieces of wood, rocks, underwater hideouts, edible live plants, and even (compatible) live fish can be a good way to decorate and enhance your enclosure's enrichment value. Avoid using gravel or pebbles, as pet turtles are known to occasionally ingest them.

Food

Musk turtles are omnivorous, which means that they require a balanced diet of both plant- and animal-based foods. How often they need to eat, and how much of each food type, depends on the turtle's age:

Musk turtles younger than 6 months:

- protein food or pellets daily

Musk turtles older than 6 months:

- protein food or pellets every other day
- vegetable food daily

A portion of protein should be as much as your turtle can eat in 5-10 minutes, a portion of vegetables should be the same size as the turtle's shell, and a portion of pellets should be about the same size as your turtle's head. Always offer food in the water, not on land.

Variety is the key to balanced nutrition, so here's a quick list of options for your slider's diet:

Protein foods: crickets, earthworms, dubia roaches, discoid roaches, freeze-dried shrimp/krill, frozen bloodworms, silkworms, snails

Vegetable foods: collard greens, dandelion greens + flowers, endive, green leaf lettuce, kale, red leaf lettuce, romaine lettuce, raw grated squash, carrots, green beans, raw grated sweet potato

Turtle pellets: Omega One Juvenile Turtle Pellets, Omega One Adult Turtle Sticks, Tetra ReptoMin, Zoo Med Natural Aquatic Turtle Food, Mazuri Aquatic Turtle Diet

Musk turtles are not particularly fast hunters, so live fish may not be an optimal food for this species. They also generally prefer foods that sink to the bottom of the swimming area rather than float.

If you would like to bond with your turtle a bit, try offering it a bit of food via soft-tipped feeding tongs!

Supplements

Turtle pellets cover most of the supplement role in a musk turtle's diet, but you still need extra calcium. Because calcium powder disperses in water, use a **cuttlebone** instead. Cuttlebones provide extra dietary calcium and also help keep your turtle's beak well-trimmed.

Depending on the size of your turtle, it may be best to put the cuttlebone into your turtle's tank whole or to chop it into chunks. However, *don't toss the cuttlebone into your musk turtle's enclosure without removing the hard plastic backing first!*

Expect to replace your turtle's cuttlebone every 1-2 months.

Information courtesy of ReptiFiles.