



Indoor Box Turtle

A comprehensive guide on caring for your box turtle kept indoors

Enclosure

Box turtles typically reach 4-6 inches in length and will continue to grow throughout their lives (although their growth rate slows when they reach their mid-teens). These turtles are long-lived and can reach over 50 years of age with proper care. Box turtles can be found from the temperate forest of North Eastern America to the deserts of Southern America and Mexico. They can be found in all types of habitats. Box turtles do best when kept in **outdoor enclosures**. But, if that is not a possibility it is an option to keep a box turtle inside. The minimum size for an appropriate indoor terrarium would be a 40-gallon breeder tank.



Substrate & Decor

Box turtles require a substrate that holds moisture. The most simple substrate for a box turtle enclosure is organic soil with no manure or other additives in it. Other appropriate substrates include cypress mulch, a 50/50 mix of organic soil and coco coir, or Modified Orchid Substrate (Atlanta Botanical Garden). Substrates to avoid include: play sand, pine and cedar wood shavings, paper, and clay-based bedding. These products are not suitable and can have negative effects on box turtles. Small to large flat rocks should be added to the enclosure, as box turtles will use them to keep their long nails trimmed. Change out substrate every 6 months or sooner if it becomes foul. Dependent upon the individual turtle and substrate type used changing needs may vary.

Plants are okay to add to the enclosure, but make sure that they are non-toxic plants for reptiles; box turtles are omnivores and may attempt to eat the plants.

Modified Orchid Substrate (Atlanta Botanical Garden)

1 part peat moss (coco fiber)

1 part fine horticultural charcoal

2 parts fine orchid (fir) bark

2 parts milled sphagnum

1 part medium tree fern fiber

Mix and moisten well for 24 hours before use (if possible), as components tend to be very dry!

Ecologically friendly substitutes:

-Coco fiber in place of peat moss (see www.peatmoss.com for information on environmental restoration practices from peat moss producers).

-Bruc Fiber (twigs of an ericaceous shrub, *Erica arborea*, harvested in the Mediterranean region) in place of tree fern fiber

AGB Recipe credit of Atlanta Botanical Garden

Lighting, Heat, & Humidity

Box turtles require a basking area with temperatures from 80-85°F during the day. This can be achieved by using a ceramic heat emitter or basking bulb indoors. Ideal nighttime temperature is between 72-75°F. In addition to a basking area, box turtles require UVB lighting to help them metabolize Vitamin D3. Vitamin D3 helps turtles with calcium uptake that is important for bone and shell growth. A UVB light should be on for 12 hours per day as it is important to maintain day-night cycle. There are multiple options that exist for UVB light and heat sources. For UVB lights it is best to stick with fluorescent tube bulbs (such as Reptisun 10.0) that stretch the length of tank or mercury vapor bulbs that also provide a heat source. If you choose a fluorescent tube bulb, you will also need to provide a day heat source such as a ceramic heat emitter or under tank heater. If you use a mercury vapor bulb during the day, you may still need a ceramic heat emitter or under tank heater if the nighttime temperatures drop too low. It is important to always use a thermostat or rheostat with any heat source. This will prevent temperatures from becoming too high in the enclosure.

Box turtles also require humidity in their enclosures to reduce the risk of eye infections. To maintain humidity, a good misting twice a day throughout the enclosure is needed.

Measuring Temperatures

The best and most accurate way to measure temperatures is with an infrared temperature gun. This way you can point it specifically on the basking spot to get an accurate reading. The thermometers that stick to the side of the tank are only good for measuring ambient air temperature, and often are not very accurate. You can also purchase a thermometer with a probe, which are handy at measuring a temperature in a specific place in the tank. When using a probe place it turtle level. Thermostats will come with a probe that can be kept under the basking spot to regulate that temperature.

Co-habitation

Never co-habitat indoor box turtles, this is only an option for box turtles kept outdoors in large enclosures. Both males and females can engage with in aggressive behavior towards other box turtles and keeping box turtles indoors just does not provide enough space to provide for their needs.



Feeding & Supplements

Box turtles can be very picky eaters; the best solution is to always offer them a wide variety of food. They can be feed a variety of bugs, including crickets, mealworms, superworms, and nightcrawlers. While all ages of box turtles can be fed the same diet, juveniles should be given a higher proportion of protein – up to 90%. As box turtles age, their diet will change to include more produce and the amount of produce offered should be increased accordingly. Adult box turtles should consume approximately 70% produce and 30% protein.

As with protein sources, it's important to also offer a variety of produce options. Good produce to feed a box turtle include leafy greens such as dandelion greens, turnip greens, mustard greens, collard greens, bok choy, and romaine. **Stay away from spinach and kale; they have negative impact on calcium uptake.** Additional vegetables that can be fed are: carrots, bell peppers, zucchini, squash, beets, yam, and peas. Apart from insects and vegetables, fruits should also be provided, and make up about 5% of their diet. Healthy fruit are: apples, grapes, cantaloupe, bananas, persimmons, cherries, papaya, and berries.

These foods listed above are some suggestions of common foods fed out – they are not the only ones! Mix and match to see what your box turtle enjoys. Be aware that there are also plenty of commercial pellet foods available that can be offered with produce and protein to provide a well balanced meal.

Hatchling and juvenile box turtles should be fed every day and adults should be fed at least every other day.

It is necessary to sprinkle calcium powder with D3 on either insects or produce before feeding to your box turtle. This is an important supplemental requirement. Calcium powder on produce may cause your box turtle to dislike their produce. If this is the case, switching to powdering insects is often helpful. In addition to using a calcium supplement, providing a cuttlebone can also be a good source of calcium if your box turtle is interested.

Water

Always give your box turtle access to water. A large, shallow saucer pan or water dish with approximately 2 inches of water for adults (less for younger turtles) will allow the turtle to soak and drink water in its enclosure. Water needs to be changed daily as they often drag debris into

water and defecate in there. This is to prevent bacteria accumulation or unwanted harmful build up to occur in the bowl that could cause illness. Fruits and vegetables also provide hydration for box turtles.

Box Turtle Maintenance

Spot clean the enclosure everyday focusing on removing uneaten food and fecal matter. Soak your turtle in warm water once a week to maintain proper health (such a healthy defecation and humidity levels).

Exercise

Box turtles love to roam safely around the house/room. Make sure you always know where your box turtle is during exercise and they not free-roaming around any animals that may cause them harm, such as dogs.