

Box Turtles as Pets

History and Biology: Box turtles are small land tortoises native to southern, central and the eastern United States. In the wild they live in a variety of habitats, ranging from subtropical woodlands and shore areas to the plains. The most common varieties include Eastern, Ornate, Three-Toed and Gulf Coast. **None of these species are native to Oregon and should not be released.**

Box turtles have a “hinge” in their plastrons, and tend to be shy of new things, but can become very outgoing over time if comfortable and well socialized. Box turtles tend to be very intelligent, and most enjoy the company of their owners and other box turtles if given a big enough enclosure and ample resources. **Box turtles are capable of living from 45-75 years when healthy. Because of their long life span, it is important to remember that owning a box turtle is a long-term commitment.**

Housing:

- A box turtle should have a large terrarium designed for reptiles. Generally, these are longer and less tall than those made for fish. **Lids should be used and should be closed down with aluminum foil or plexi glass to help trap heat and humidity.** Up to 75 percent of the top can be closed off.
- It is important to remember that a larger enclosure will require more heating to keep the turtle at an appropriate ambient temperature.
- Substrate in the enclosure should be artificial turf or reptile carpet. Coconut husk, corn cob and play sand are not appropriate, and may cause gastrointestinal obstruction if ingested. Reptile sand, even if it is dissolvable, should also be avoided as it can also cause gastrointestinal obstruction, mouth rot, an infection of the mouth, and can scratch the eyes. Additionally, particulate or sand type bedding can get stuck in the flank recesses where the back legs fold into the shell, causing sores and infection.

Heating and Lighting:

- **Day-time ambient temperatures inside the habitat should be kept between 75 – 85 degrees F as measured with an accurate thermometer, such as a dial or mercury thermometer.** Temperature readings should be taken at several areas in the enclosure, including in the shade. The shade temperature is often the most accurate as it is not affected by heat lamps or heating pads.
- Temperatures that are too low or too high will cause decreased immune system function and metabolism, which leads to disease and failure to thrive. Night time temperatures should not fall below 68-70 degrees F.
- Heating for the habitat can be achieved through heat lamps or reptile heating pads placed under the terrarium. It is best to use heat lamps which emit no light, or emit a

dim purple or red light. Ceramic heat lamps are readily available at most pet stores in the reptile section, or are available on-line. **Hot rocks should be avoided as they can cause burns.**

- Lighting is critical to the health of the box turtle and should be left on directly over the enclosure for 12-14 hours during the day. **Box turtles require both visible “white” light, and ultraviolet (UV) light, specifically UV-B. UV-B is found in sunlight and is essential as it helps the dragon synthesize vitamin D which aids in the absorption of dietary calcium.** Without UV-B, metabolic bone disease (hypocalcemia) will result.
- All UV lights are not equal. Some bulbs only provide UV-A which does not aid in synthesizing vitamin D, but may have some psychological and emotional benefits. High-quality broad-spectrum or full-spectrum fluorescent tube lights often provide good UV-B, though it is important to change these bulbs every 6-8 months as the lifespan of the UV-B spectrum is limited. It is important to remove any plexi-glass, glass or plastic shields which are often screwed into the fixture to provide more security for the bulb. UV-B rays will be blocked by the plexi glass, glass or plastic so the turtle will not receive adequate UV-B.
- Mercury vapor lamps are also available. These lamps provide UV-A and UV-B. They also produce a fair amount of heat and should be kept 18-24 inches away from the turtle. Mercury vapor bulbs also cost a little more, usually \$40 – \$120.
- **As a general rule, incandescent bulbs do not provide adequate UV and should not be used as the only UV source.**

Diet:

- **Box turtles are opportunistic omnivores** and should be fed small insects and other small prey. Small earthworms and silkworms are good choices as they are high in protein, have good Calcium to Phosphorus ratios, and are low in fat. At least half of the diet should be vegetables with proper Calcium to Phosphorus ratios. Appropriate vegetables are leafy greens that include kale, mustard greens, varieties of leaf lettuce, parsley, watercress, endive and dandelion greens. A few fruits are appropriate which include blackberries, raspberries and papaya.
- Good commercial pelleted food exists for box turtles. Pretty Pets and T-Rex make good box turtle food and should be soaked in water prior to feeding. Pelleted food can be offered with a variety of fresh vegetables.
- A small bowl of water should be provided at all times. It should be cleaned daily as bacteria may actively reproduce in the water bowls at the higher ambient temperatures in the terrarium. Large bowls of water should not be left in the terrarium, as turtles may urinate and defecate in the bowl and then develop skin and/or respiratory infections from sitting in and drinking the contaminated water.
- **The only safe supplements to use include the multivitamin supplements Reptocal or Reptivite. A small pinch over the food once a week is all that is needed.**

