

## Water Turtles as Pets

**History and Biology:** Despite the name, water turtles spend their time on land and in freshwater. Their size ranges from small to medium and they are found in almost all areas of the United States. Native species to Oregon include the Western Painted Turtle and Western Pond Turtle. Neither of these species are legal to own, and should not be taken from the wild for pets.

Most water turtles spend time on land or basking on logs and rocks in the water, as well as diving into ponds and wetlands to catch prey. They are very active and tend to have spirited personalities. Many species native to the Midwest, South and East Coast are prohibited as they can do well in the climate of the Pacific Northwest.

### Housing:

- A water turtle should have a large enclosure where  $\frac{1}{2}$  is dry land, and the other half is water. **Lids 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. The length of the enclosure is more important than the height, as most water turtles will live on the bottom.
- Dry land is essential, as this allows for basking which helps the shell and skin dry out. This helps prevent infection and allows for adequate ultraviolet light exposure.
- The half of the enclosure that is aquatic, requires a good filtration system and should have a submersible water heater with a thermostat. If no filtration system is provided, the water should be changed daily.
- Substrate in the enclosure should be artificial turf or reptile carpet for the dry half. 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.
- The substrate in the aquatic half should be easy to clean, and siphoned regularly to remove solid waste. If rock or gravel is used, it must be large enough that the turtle cannot accidentally ingest it, but not be so large that the shell can be damaged.

### Heating and Lighting:

- **For temperate species, day-time ambient air temperatures inside the habitat should be kept between 73 – 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.

- **For tropical species**, day-time ambient air temperature should be 75 – 88 degrees F.
- Water temperature will vary according to the species, but should be kept above 70 degrees F.
- 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 air temperatures should not fall below 68-70 degrees F for temperate species, and 70-75 degrees F for tropical species.
- Heating for the habitat can be achieved through heat lamps or reptile heating pads placed under the aquarium. It is best to use heat lamps which emit no light, or emit a dim purple or red light at night. 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 water turtles and should be left on directly over the enclosure for 12-14 hours during the day. **Water 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 turtle 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 due to the short lifespan of the UV-B spectrum. 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:

- **Water turtles are mostly carnivorous, though consumption of some plant material is normal.** Good prey items include small fish, earthworms, silkworms and small slugs as they are high in protein, have good Calcium to Phosphorus ratios, and are low in fat.
- Good commercial pelleted food exists for water turtles. Pretty Pets and T-Rex make good water turtle food and should be soaked in water prior to feeding.
- **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.**

