

AQUATIC TURTLES

SPECIES

Graptemys kohnii (map turtles), *Chrysemys picta* (painted turtles), *Trachemys scripta* (sliders), European pond turtles, chicken turtles, peninsula cooters, river cooters, alligator and common snapping turtles, *Trionychidae* spp. (soft-shell turtles), *Kinostemon* spp. (mud and musk turtles).

HOUSING/CAGING

A 10 to 20 gallon aquarium works best for housing aquatic turtles under four inches in length. Turtles from 4 to 8 inches in length will require a 55 gallon aquarium or larger. Turtles greater in length will most likely require a pond of 100 gallons or more. Keep in mind that most sliders, snappers, soft-shelled turtles and cooters will eventually exceed 8 inches in length as their adult size. Keep the water at least as deep as the turtle's shell is long; shallower water is better for bottom-dwelling turtles and snappers. Haul-out areas for basking are necessary for many species. The recommended substrate is gravel or pebbles that are at least two times larger than the head of the turtle, to prevent ingestion. The basking area must be large enough for the entire turtle to be out of the water, can be made of plastic, brick, rock or drift wood, must be secured so it cannot topple and trap the turtle below water, and can be easily removed from the aquarium for regular cleaning. A water filter is necessary to maintain good water quality. Change the filter cartridge at least monthly and change part of the water (20-50%) weekly. Always wash your hands after handling aquatic turtles; they can be carriers of *Salmonella* bacteria, which can cause severe gastrointestinal illness in people.

LIGHTING

Ultraviolet (UV) light is necessary for vitamin D synthesis and calcium metabolism. Sunlight is best, but UV lamps can provide **adequate** amounts of UV light when left on for **12** hours daily. UV lights should specify that they provide both UV-A and UV-B light and should be replaced every 6 months as their ability to produce UV light diminishes past that point.

HEATING

Water temperatures between 75°F and 85°F are good for most species. Proper environmental temperature is one of the most important aspects of keeping captive turtles: low temperatures will reduce the turtle's desire to eat. An aquarium cover or hood will help retain heat in the tank (one with a built-in lamp is even better). If the aquarium top is open, heat the air with a heat lamp focused on part of the haul out area -- this will satisfy the turtle's desire to bask in the sun. Use a timer, or simply turn off the lamp at night. The temperature will drop when the lamp is shut off, so supplemental heating may be required to maintain the water temperature during the winter.

FEEDING

Feeding requirements for aquatic turtles change over the life span of the turtle. Hatchlings and juveniles are primarily carnivorous, eating small fish, commercial turtle foods, earthworms, mealworms, and trout chow. Also offer a mix of greens such as romaine lettuce, collard and mustard greens. As the turtle ages and becomes an adult it will become primarily herbivorous, so more of their diet should consist of greens and vegetables, with some commercial turtle pellets also offered. **Never feed spinach, cabbage, broccoli, or cauliflower** as these contain high levels of oxalic acid, which can be detrimental to turtles. Some species of turtles, such as soft-shell turtles and snappers will remain primarily carnivorous their entire lives.

VITAMIN/MINERAL SUPPLEMENT

Juvenile turtles require extra calcium for proper shell growth. Dust food with a calcium supplement (such as Nekton™ or ReptiCal™) twice a week. Over-supplementation of vitamins and minerals to adult turtles can cause both damage to the kidneys and shell abnormalities.

REFERENCE

1. de Vosjoli, P. *Red-Eared Sliders*. Irvine CA: BowTie Press, 2001.
2. www.avsbbooks.com