



*Photo Credit: University of California Berkeley

Central American/Neotropical Wood Turtles

[*Rhinoclemmys* spp.]

Ornately Colored and Patterned New World Chelonians

The Central American, or Neotropical wood turtles are a genus of medium sized to large, semi-aquatic to terrestrial turtles found over much of Central and South America, with range depending upon the exact species. Other common names for these species can include the Central American wood turtles, Ornate wood turtles, Painted wood turtles, Atlantic wood turtles, or the Neotropical wood turtles, or any combinations of these names thereof. These turtles can be highly variable in coloration, with a depressed to domed carapace and skin color ranging from blackish to olive brown, brown, to yellowish brown in color. *R. pulcherrima* and *R. punctularia* tend to be the most colorful and sought after species, having an ornately patterned carapace, head, neck, and limbs of reds, oranges, and yellows. Central American wood turtles, as with their North American counterparts, the North American wood turtle (*Glyptemys insculpta*) are among the most perceptive and intelligent turtles, with several accounts and scientific studies and reports demonstrating these turtles to have the cognitive ability to solve simple to moderate in difficulty puzzles and mazes in laboratory settings. These turtles also use their strong cognitive abilities to locate and capture prey as well, with perhaps the best known example of such are these turtle's habits of stomping their fore limbs on the ground to simulate rainfall or other disturbances to draw earthworms and other invertebrates to the ground surface. Wood turtles, both North American, and Central/South American species, can often make for overall very entertaining, intelligent, and perceptive pet turtles to keep in captivity.

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota

Kingdom: Animalia

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Reptilia

Order: Testudines

Suborder: Cryptodira

Superfamily: Testudinoidea

Family: Geoemydidae

Subfamily: Rhinoclemmydinae

Genus: *Rhinoclemmys*

Species: *Rhinoclemmys* spp.*

*Taxonomy subject to change and revision.

Lifespan and Longevity

Neotropical wood turtles may attain longevity of 30 to 40 years or more with proper care and conditions.

Species

Nine species, and several subspecies thereof are currently recognized. They include the Brown wood turtle (*R. annulata*), Furrowed wood turtle (*R. areolata*), Maracaibo wood turtle (*R. diademata*), Black wood turtle (*R. funerea*), Colombian wood turtle (*R. melanosterna*), Mexican spotted wood turtle (*R. rubida*), Painted wood turtle (*R. punctularia*), Large nosed wood turtle (*R. nasuta*), and Ornate wood turtle (*R. pulcherrima*).

Distribution and Habitat

The Central American/Neotropical wood turtles are a widely ranging genus of turtles, ranging over much of Central America to northern South America, including Mexico and Panama, to Ecuador and Brazil. Exact ranges are dependent on the species and/or subspecies. Depending on the species, these turtles can range from primarily aquatic to terrestrial, although most are semi-aquatic-semi terrestrial and seldom wander far from water. They occupy a variety of habitats from the humid, moist rivers and streams within tropical to sub-tropical rainforest or woodlands, to savannah regions within this range.

Origin/History

Rhinoclemmys spp. Fitzinger 1835. Specific subspecies would have other first describing authors at other years and time.

Ornate Wood Turtles, and other Rhinoclemmys species are commonly imported, but there are also captive bred specimens occasionally available. Captive bred individuals would become the best pets and are less prone to harboring parasites and other illnesses. It is not certain when these turtles were first imported, although they have been available for at least several decades.

The nominate subspecies, Rhinoclemmys pulcherrima pulcherrima, would typically be the most colorful and commonly kept and imported of the Rhinoclemmys species.

Experience Level Required

Intermediate/Moderate.

Size

Depending on the subspecies, Neotropical wood turtles usually reach a carapace, or upper shell length of 5 ½ to 7 ½ inches, which females being dimorphic and larger than males.

Housing and Enclosure

Enclosure System: Semi-Aquatic to Somewhat Terrestrial. Most of the commonly kept species of Neotropical/Central American wood turtles should be considered semi-aquatic, and require sufficiently humid conditions. Provide a sturdy, escape proof aquarium or commercially available plastic or galvanized stock tank or turtle tub of sufficient size with an elevated dock or basking area/access to dry land using a substrate dam. The latter are perhaps preferred for maintaining aquatic to semi-aquatic turtles in, as they are easier to clean, move/transport, and maintain than aquariums. A minimum of a 50 to 90 gallon enclosure with a shallow water dish or pan or other aquatic gradient that can easily be drained, and which the turtle(s) can readily enter and exit from are also recommended options. As a general rule, provide a minimum of 10 gallons of space per inch of shell for most chelonians. A general rule of thumb to follow for Central American wood turtles is to provide water is only deep enough to allow for complete

submersion, and at least two to three times the carapace length for adequate swimming and movement. A powerful water filter rated at least twice that of the amount of water in the enclosure is highly recommended for any semi-aquatic turtles, as they are messy and require frequent cleaning and regular water changes. Use a submersible water heater with a guard to maintain water temperatures of 75 to 85 degrees F. Substrate that should be used should be of sufficient depth of at least 6 inches or more to allow for burrowing and hiding opportunities, and should include cypress mulch, coconut fiber bedding, peat moss or sphagnum moss, and/or play sand mixtures. Substrates should be kept moist to prevent drying out, but not be overly wet. Additional rocks, logs, cork bark, live or artificial foliage can also be provided for additional foraging, basking, and hiding opportunities.

Temperature, Lighting, and Humidity

Providing the correct amounts of UVA/UVB overhead incandescent and florescent lighting, and calcium-to-phosphorus ratios is essential for ensuring the health and overall well-being of Central American wood turtles in captivity. Without UVA/UVB, or adequate amounts of it, they can be susceptible to the abnormal bone and shell growth and development known as Metabolic Bone Disease (MBD), and other health and development maladies. Pyramiding of the scutes and shell can also occur due to poor or improper diet, lighting, or heating. Always be sure to spot clean the enclosure for urates, feces, or uneaten food at least twice per week. Be sure to periodically replace the substrate, clean, and disinfect the enclosure and its furnishings at minimum every 2 to 3 months. These turtles require a thermal gradient using a ceramic or radiant heat emitter, UTH (or under tank heating pad), and UVA/UVB overhead lighting. Provide a basking area or platform for your turtle to emerge completely from the water and monitor at around 90 to 95 degrees F. Ambient temperatures should generally be 70 to 80 degrees F. A 12 to 14 hour light, or day/night cycle can also be utilized, and humidity kept relatively high for these species from around 60 to 75% using hand misting, or through use of a commercially available misting or fogging system. More specific lighting, heating, and humidity product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

Feeding, Diet, and Nutrition

Omnivorous; In the wild, Central American wood turtles are omnivorous, feeding on a variety of insects and other invertebrates, carrion, or dead and decaying plant and animal matter, crustaceans, mollusks, fungi, fruits, berries, and other plant and vegetable matter.

In captivity, providing a varied diet is important. These turtles tend to be omnivorous, and can be given a variety of prey or food items including feeder insects of appropriate size, including crickets, roaches, mealworms, waxworms, superworms, or other insects. Gut load feeder insects and supplement these turtle's diets with calcium and vitamin D3 at least two to three times weekly for their optimal health and well-being. Some commercially available aquatic turtle or omnivore mix diets can also be given. Other food items that can be used can include small feeder fish of appropriate nutritional value, redworms and earthworms, freeze-dried shrimp or krill, berries, and greens, fruits, and vegetables. Many of these are available in your local grocer's market, and can include turnip, mustard, and collard greens, bananas, tomatoes, watermelon, and several others. Additional books, websites, and other resources are also available that further detail foods that are suitable and unsuitable for these turtles. Small, frozen-thawed rodents can also occasionally be given, but any foods or diets high in fat or proteins should be done sparingly, if at all.

Commercially available canned or pelleted turtle diets are not good staples for feeding aquatic to semi-aquatic turtles, and should not exceed roughly 25% of their diets; Variety is always best. Do not overfeed these turtles as well, as obesity and other health related concerns can result.

Providing supplementation in their diets at least two to three times weekly is recommended. More specific dietary and supplementary product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

Handling

Hatchling Central American wood turtles can be initially shy and wary, but over time, and with regular handling and interaction, can often become very personable, intelligent, and outgoing turtles, especially when food is expected. Most small to mid-sized turtle and tortoise species that are not aggressive or prone to biting can be picked up and handled either by placing both hands along both sides of the shell, or from the rear of the carapace with the thumb on the carapace and index through pinky fingers on the plastron to reduce the chances of being kicked, scratched, or nipped when they are threatened. Although most species of chelonians are not outwardly aggressive, defensive, or dangerous, they can become stressed as a result of over-handling, however, and some species, and even individual animals can be shyer than others. These are some considerations to keep in mind when handling any chelonian species.

****Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens****

Contact

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