



Giant South American Turtle

Kingdom: Animalia
 Phylum: Chordata
 Subphylum: Vertebrata
 Class: Reptilia
 Order: Testudines
 Family: Pelomedusidae
 Genus: *Podocnemis*
 Species: *expansa*



Photo courtesy of Jane Patrick

Habitat

- **In the Wild:** The giant South American turtle is found in the Amazon and Orinoco river basins and the islands of Trinidad and Tobago. They live in these two large rivers, their tributaries, ponds, lagoons and the flooded forests that surround the rivers in the rainy season.
- **Exhibit Location:** USS Antiquities

Characteristics

- Length: females average from 50–79 cm (19.7-31.1 inches), males from 40-50 cm (15.8-19.7 inches)
 Weight: up to 46 kg (101.4 pounds)
- Giant South American turtles are the largest turtles in South America.
- Giant South American turtles have wide, flat shells that are black, brown, or olive in color. They have gray bodies with 5 claws on their front limbs and 4 claws on the back. They have well-defined snouts and a square lower jaw. There are usually 2 barbels (threadlike growths that act like organs of touch) on the chin.
- Juveniles have yellow spots on the top of their heads that darken and fade with age. Additional red, orange or yellow markings on their heads remain through adulthood.
- **Lifespan: In the Wild** 20+ years; **In Captivity** About 25 years

Behaviors

- Giant South American turtles spend most of their time in the water and startle easily when on land. They are diurnal, most active in the midmornings and afternoons, and rarely come ashore to sun themselves.
- They are more communal (living together in groups) than other local turtles.
- Giant South American turtles clean each other by taking turns pulling algae and other debris off each other's shells.
- Females are very shy out of the water and dive in at the first sign of a disturbance.
- **Enrichments at the Zoo:** food items, moving of exhibit furniture

Reproduction

- Sexual maturity is determined by size, not age – females at 8 inches, males at 2 feet.
- Females lay their eggs during the dry season when the water levels are the lowest. This occurs at different times of the year throughout their habitat.
- The females sun themselves on the beach for 1-2 weeks before laying their eggs. At night the eggs are laid on the highest part of the beach in a hole 60-80 cm (23.6-31.5 inches) deep. The incubation period is 45-65 days.
- Average clutch size ranges from 50-180 eggs and depends on the size of the female.
- Giant South American turtles lay their eggs on the same beaches each year. Up to 500 turtles can be found laying their eggs on the same beach.
- On average, one male turtle hatches for every 30 female hatchlings.
- Newly hatched baby turtles often remain in the nest until the rains begin when they move down to the flooded river.

Diet

- **In the Wild:** fruits, seeds, leaves, stems, freshwater sponges, eggs, carrion
- **At the Zoo:** carrots, trout chow, Aquatic carnivore diet, fruit, crickets

Conservation Status

- **IUCN status:** At Lower Risk, but this status is Conservation Dependent; **CITES:** Appendix II
- Giant South American turtles were considered endangered between 1982 and 1996.
- The giant South American turtle is at risk for many reasons, most having to do with an increase in human populations and activity in their native habitats. Some examples of how humans have decreased the turtle population include: over-fishing, deforestation and conversion of the floodplains they live in to cattle farms, mercury pollution from mining, sewage pollution from growing villages, and construction that slows migration.
- It has been easier for countries to protect the giant South American turtle than many other native turtle species because they lay their eggs on the same beaches each year. This has made it possible for a small number of patrolling guards to protect a large number of turtles, helping their numbers increase in the wild.
- Predators: humans, Tegu lizards, ants, carrion birds, jaguars, wader birds, raptors, fish, crocodilians

Did You Know?/Fun Facts

- Many scientists believe that the gender of a hatchling turtle is dependent upon the temperature that the egg is incubated. The warmer the nest, the more female hatchlings. Global warming of a few degrees could lead to only small numbers of male hatchlings, causing turtle populations to drop even further.
- Because giant South American turtles are native over a very large area, they are known by many different names: arrau in Venezuela; charapa in Colombia and Peru; tartaruga and tartaruga da Amazonia in Brazil; tortuga, tortuga del Orinoco and zamurita in Colombia and Venezuela.
- Young turtles eat more animal products such as fish and eggs than adults.

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