GREEN SEA TURTLE (Chelonia mydas)

General Characteristics

The name of the green turtle originates from the green color of the fat located beneath its carapace (shell). The carapace is oval shaped and has four pairs of costal scutes (non-overlapping) and the margin is sometimes scalloped, but not serrated like the hawksbill. Coloration of the green turtle's carapace is variable in adults, usually earth tones such as, pale to dark greens or yellow, sometimes



with radiating stripes. Their plastron is yellowish in color. Their head is rounded, approximately 15 cm (6 in.) wide and easily distinguished by having one pair (instead of two pairs like most sea turtles) of prefrontal scales (scales located in front of its eyes). Within the eastern Pacific Ocean, some experts consider the East Pacific green turtles, commonly known as black turtles, a separate species

C. agassizii; however, genetic analyses do not support such taxonomic distinctiveness. Pacific green turtles are distinctly darker in color (grey or black).

Size

Costal

Scutes

The green turtle is the largest of the Cheloniidae family; their carapace typically measures 120 cm (4 ft.) in length and weighs up to 230 Kg. (507 lbs.). They have a single claw on each flipper. The largest green turtle ever found was 152 cm (5 ft.) in length and weighed 395 Kg. (871 lbs.). Pacific green turtles are smaller, typically measuring 80 cm (2 $\frac{1}{2}$ ft.) as seen in the photo on the right.





Habitat

Green turtles are found in all temperate, subtropical and tropical waters throughout the world. However, it is common for them to stay near the coastline and around islands, living in

bays and protected shores, especially in areas with seagrass beds. They are rarely observed in the open ocean.

Diet

The diet of the green turtle is thought to change significantly during its lifetime. Juveniles are carnivorous, often eating sea worms, crustaceans and aquatic insects, as well as grasses and algae. The green turtle is the only sea turtle that is essentially herbivorous as an adult, showing a tendency to eat mostly seagrass and algae. Their jaws are finely serrated, helping them graze on vegetation.

Green turtles play an important ecological role by delivering nutrients from nutrient-rich areas (for example, seagrass beds) to nutrient-poor areas like nesting beaches.

Carapace

Nesting

The green turtle is thought to be one of the longest living sea turtles, and reaching sexual maturity at a late age, estimated between 20 and 50 years. Green turtles are also known for their nesting site fidelity, which means the same turtle will return to the same beach each time she is ready to nest, often emerging within a few hundred yards of her last nest. They nest every two years or more, laying between three to five times per season. The green turtle lays an average of



115 eggs in each nest, where they will incubate for about 60 days. Nesting occurs throughout the east coast of the United States and Caribbean down to the northern coasts of South America. However, the largest nesting site in the western Hemisphere is located in Tortuguero, Costa Rica.

The Pacific green turtles have been spotted as far north as British Columbia, Canada and Baja California and as far south as Chile. Most nesting occurs in Mexico, Central America and the Galapagos Islands.

Hatchlings

Green turtle hatchlings are generally dark brown or black in color and easily distinguished by their white underside and white flipper margins. The typical carapace length is 49 mm (2 in.).



Migrations

Green turtles are highly migratory, utilizing a broad range of habitats throughout their lifetime. One method of tracking sea turtles is through the use of flipper tags which are placed on nesting turtles and encoded with a distinct number. Tag returns offer information vital for conservation efforts, but lack information regarding the actual migration route of the turtles that satellite tracking can offer. The longest running tagging project and one of the largest nesting colonies of green turtles is in Tortuguero, Costa Rica, where information collected from long term tag returns have shown that turtles nesting in Tortuguero disperse to feeding areas throughout the Caribbean, mainly to the Miskito Coast of Nicaragua. This information enables conservation efforts to be focused on specific geographic areas.

Current Status

The World Conservation Union (IUCN) classifies the species as Endangered (facing a very high risk of extinction in the wild in the near future).

Threats

One of the most detrimental human threats to green turtles is the intentional harvesting of eggs and adults from nesting beaches and foraging grounds. The meat of the green turtles is also considered to be a delicacy, thus is

commercially harvested. Bycatch in marine fisheries, habitat degradation and disease are other detrimental threats to green turtles.

Population Trends

Trends are difficult to determine for this species due to the wide fluctuations in year to year nesting. However, they still nest in significant numbers in Florida and some studies have shown stable, if not increasing, populations in areas such as Tortuguero, Costa Rica. This may be attributed to increased protection efforts.

Inter-American Sea Turtle Convention

Cooperative efforts from a variety of governmental as well as non-governmental organizations to conserve distinct sea turtle populations inhabiting the American Continent have existed for many years. The Inter-American Convention for the Protection and Conservation of Sea Turtles (IAC), which entered into force in May of 2001, provides an opportunity for dialogue and action favoring sea turtle management. The IAC is the only international body establishing legal instruments and guidelines that commit the Parties to, among others, protect and conserve populations of sea turtles and their habitat, reduce incidental capture and foster international cooperation for research and management of sea turtles. Currently, eleven countries- Belize, Brazil, Costa Rica, Ecuador, United States, Guatemala, Netherlands Antilles, Honduras, México, Peru and Venezuela – are Signatory countries, meanwhile two more, Nicaragua and Uruguay, have sent in the necessary instruments for accession to the Government of Venezuela, the official depository nation.

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