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NORTHWEST WILDLIFE PRESERVATION SOCIETY

Green Sea Turtle

Chelonia mydas



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Characteristics

The green sea turtle gets its name from the greenish colour of its shell, skin and scales. Adult green sea turtles generally weigh between 110-190 kgs (240-420 lbs), with a full grown adult being able to reach lengths of 1.5 metres (5 feet). Their four flippers resemble paddles that allow it to easily swim under water and even reach speeds of up to 35 km/h. The green sea turtle has a single pair of scales in front of its eyes instead of the usual two pairs that are often found on other turtle species. The colour of its shell can vary from a blend of brown, olive, grey, or black. Its underside is generally a yellowish, or white in colour. New born turtles are dark brown or almost black, but are generally white on the dorsal side. The turtle's jaw is serrated, which helps it chew seagrasses, corals and catch jellyfish.

Life Cycle

Green sea turtles embark on long migrations from feeding sites to nesting areas. Mating takes place every 2 to 4 years, and is usually in shallow waters of tropical areas. Females return to the same nesting sites every time to lay eggs, with their breeding season being in late spring or early summer.

Several weeks after breeding, females will choose an area on a sandy beach to nest. Females will dig a hole in the ground with their flippers and fill it with at least 100 eggs. The pits will be covered back up with sand, and the females will return to the ocean with the buried eggs hatching about a month later. The most dangerous period in a green sea turtle's life is when it moves from its nest to the sea. Many land and air predators prey on baby sea turtles as they attempt to

make their way to the sea. A successful nest would be one that has one or two sea turtles survive and grow to full sized adults.

Green sea turtles have long life spans. A healthy turtle can live from 80 to 100 years or more, but can take 10 to 25 years to reach sexual maturity.

Habitat

Green sea turtles are found in all temperate and tropical waters, but generally tend to remain near coastlines and bays. There are two subspecies of green sea turtle, those being the Atlantic green sea turtle and the Eastern Pacific green sea turtle – both having their own feeding and breeding grounds. The Atlantic green sea turtle is found along the shores of Europe and other parts of the Atlantic Ocean. The Eastern Pacific green sea turtles can be found in the Indian Ocean and Pacific Ocean including the west coast of North America from Alaska to Chile.

Behaviour

Sea turtles typically warm themselves by swimming up to the surface of shallow water. However, the Eastern Pacific green sea turtle will move onto land to bask in the sun. This behaviour is rare among sea turtles as many species will only leave the water during nesting times. Juveniles are omnivorous, and will eat invertebrates like small crustaceans, worms, jellyfish, sea grasses and algae. As adults, green sea turtles are herbivores, with their diet only consisting of algae, various sea grasses, and some soft corals. The green sea turtle is the only herbivore among the seven different sea turtle species.

Threats

Shortly after birth, newborn turtles are preyed upon by a great many predators, including crabs, gulls, frigatebirds, raccoons, coatis, large fish, and many more. As fully grown adults, their natural predators are carnivores in the ocean like sharks and orcas.

Green sea turtles are an endangered species. Populations have dramatically declined all over the world in the last century. Their greatest threat to survival is the killing of turtles for their meat and eggs. Turtle parts are also used for leather. Populations are further reduced by boat propeller accidents and destruction of nesting grounds by human activities. These activities include coastal development and vehicle traffic on beaches. An increasing cause of mortality is accidental catch by commercial fisheries using techniques like trawling. Like other reptiles, turtles must breathe air so they often drown when caught underwater in fishing nets.

Green sea turtle feeding grounds such as sea grass beds are at risk from pollution and sedimentation due to coastal development.

What We Can Do To Help

- Do not purchase products made from sea turtles.
- You can attempt to start a community wide effort to protect turtle nesting grounds if you live near them.
- Avoid sections of beaches that are closed off to make way for sea turtles moving onto shore to lay eggs.
- Encourage the use of low pressure sodium lighting for buildings near turtle nesting sites. Light from buildings confuses newborn turtles so that they crawl to buildings rather than the ocean.

Interesting Facts

- Green sea turtles can hold their breath for up to two hours, especially in colder waters.

- By feeding on sea grasses and algae, green sea turtles maintain sea grass beds so that they are more productive and stay in a healthier state. Sea grass beds are important habitat as they resemble nurseries for several types of fish and invertebrates.
- Sea grass digested and excreted by green sea turtles becomes nutrients for many plant and animals species in underwater ecosystems.
- Sea turtle have existed on Earth for over 250 million years, since before, during and after the period of the dinosaurs.
- Turtles have even existed for even longer than crocodilians.
- Turtles belong to the order Chelonia, which is a derivative of a Greek word meaning 'tortoise'.
- All turtles and tortoises possess a top shell (carapace) and bottom protective plate (plastron).

Where & When to view green sea turtles

Green sea turtles are often seen in Hawaii, Puerto Rico, Mexico, the East coast of Florida, the Caribbean and the Virgin Islands. Since they are usually in tropical waters, green sea turtle sightings in B.C are quite rare. While they have been seen off the coast of B.C., due to the general lack of clear waters as in tropical areas, they are not as frequently observed.

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