



SPECIES FACT SHEET

Loggerhead sea turtle *Caretta caretta*

Classification

Kingdom:	Animalia
Phylum:	Chordata
Class:	Reptilia
Order:	Testudines
Family:	Cheloniidae
Genus:	<i>Caretta</i>
Species:	<i>caretta</i>

Conservation Status: Endangered



Identification: Loggerhead sea turtles are one of the largest hard shelled sea turtles (the soft-shelled leatherback turtle is much larger). Individuals can grow shells over 1 m in length and can weigh over 200 kg. The carapace has five to six pairs of costal scutes and is irregularly patterned with hues of brown, orange, and red. The plastron is a whitish/yellow color. Loggerhead turtles have a large head with two pairs of prefrontal scales between the eyes, a powerful crushing beak, and a large neck. Females have very short tails while adult males have a very elongated tail protruding well past the carapace. They can easily be distinguished from green turtles by their much larger heads. They also have shorter flippers and a more domed carapace.

Distribution: Loggerhead sea turtles can be found in just about all tropical and subtropical marine waters and they penetrate into temperate waters as well. They can be found in cooler waters than green turtles. Loggerhead turtles can travel very long distances between feeding grounds and nesting beaches. Female sea turtles are thought to return to nest at the same beach where they hatched. After hatching, baby sea turtles swim out to sea and spend several years (known as “the lost years”) utilizing flotsam and sargassum (algae) rafts caused by converging ocean currents as refuge. Once loggerheads reach a length of 40-50 cm many individuals move to shallower coastal feeding grounds, but some individuals also can be found in more offshore waters. Loggerhead turtles are found in high abundance in Shark Bay.

Diet: Loggerhead turtles are carnivorous throughout their lives. As juveniles, they feed on various organisms that also use the flotsam and sargassum floats as refuge. Adults use their strong crushing jaws to feed on crustaceans, mollusks, sponges, and various pelagic cnidarians (jellyfish and comb jellies). To feed on bivalves that are partially buried in the sand, loggerhead turtles will use their flippers to excavate the sand and then crush the bivalve with their heavy beak. In Shark Bay, schools of small fish flock to feeding loggerhead turtles to pick up scraps.

Reproduction: Little is known about mating behavior or the reproductive movements of males, but they are thought to attempt breeding every year. During a nesting season a female will lay two to five clutches of about 100 golf ball sized eggs at 12-14 day intervals. Females return to the same nesting beach every two to three years to lay their eggs. Incubation times are around two months and are temperature dependent. One study showed that a temperature increase as small as one degree Celsius can decrease the incubation period by five days. Sex determination is also temperature dependant with lower temperatures yielding more males and higher temperatures yielding more females. Hatchlings are about 5 cm long and generally emerge at night in search of reflections from the ocean to guide the start of their dangerous journey. Many terrestrial predators such as crabs, raccoons, and shorebirds gorge themselves at these hatching events. Of the turtles that make it to the waters edge, many drown trying to make it through the surf zone or become meals for fish and seabirds. It is estimated that only 1 in 1000 hatchlings survive to adulthood. The nesting beach of Dirk Hartog Island in Shark Bay's Western Gulf is one of the most important nesting grounds in the Indian Ocean.

Growth and Age: Loggerhead turtles reach sexual maturity when their carapace is about 90 cm long and they are between 15 and 30 years of age. They are fairly slow growing and can live to be 50 years or more. The combination of high hatchling mortality, slow growth rates, and late maturation age make them very sensitive to habitat degradation and overexploitation.

Ecological Importance: Loggerhead sea turtles are some of the largest predators of benthic invertebrates and may play an important role in structuring the composition and dynamics of benthic communities. However, there have been few studies that explicitly look at their ecological role.

SBERP Research: SBERP's sea turtle research is one of the most world's most intensive investigations of sea turtle foraging grounds. We have found that the loggerhead population appears to be very healthy. Large mature individuals are common and population numbers are high. Loggerhead turtles are eaten by tiger sharks, and appear to be attacked quite frequently. Almost 20% of females and between 50 and 60% of males have evidence of being attacked by tiger sharks. The reasons for these differences between males and females are currently being investigated. Currently, SBERP is studying how loggerhead turtles might change their habitat use or diving behavior to reduce the risk of predation from tiger sharks and the long term movements of male turtles using satellite tags. Go to the SBERP website (www.SBERP.org) to learn more about these ongoing projects!

