



Common Name: Loggerhead Sea Turtle

Scientific Name: *Caretta caretta* (Linnaeus, 1758)

Other Commonly Used Names: Loggerhead

Previously Used Names: None

Family: Cheloniidae

Rarity Ranks: G3/S2

State Legal Status: Endangered

Federal Legal Status: Threatened

Description: Adult loggerhead sea turtles have a carapace length of 80-110 cm (31-43 in) and weight of 75-150 kg (165-330 lbs). Scutes cover the carapace and plastron. The carapace, head, and flippers of young adults are usually reddish-brown to brown in color. However, the carapaces of older individuals can become covered in algae, barnacles, and a variety of other organisms, hiding the shell under a greenish or gray covering. The plastron base is usually cream or yellow but can become stained to a light brown. The skin of loggerheads is generally cream or yellow. The head is proportionally larger to body size than it is for other sea turtles.

Similar Species: Although belonging to different genera, green, hawksbill, and Kemp's ridley sea turtles are superficially similar in appearance to loggerheads. Loggerheads can be distinguished from green and hawksbill sea turtles by noting the position of the foremost costal

scute relative to the nuchal scute: These two scutes touch one another on the loggerhead, but not on the others. Loggerhead sea turtles lack the single, conspicuous pore on each bridge scute that Kemp's Ridley sea turtles possess. The reddish brown color, presence of epibota (barnacles and other encrusting organisms) on the carapace, and the relatively enlarged head are additional characters that help in distinguishing loggerheads from other marine turtles.

Habitat: In early life stages, from hatchlings to 10-12 years of age, loggerheads are believed to maintain a pelagic existence, living in association with rafts of sargassum weed and drifting with the main oceanic currents. Habitat use by loggerheads on the Georgia coast is poorly understood. Loggerheads are found throughout the marine and estuarine waters of Georgia during the warm months of spring, summer, and fall. They have been observed swimming or basking on the surface as far as the Gulf Stream, 104 km (62.4 mi) offshore, and are seen regularly as close as the creeks and tidal rivers of Georgia's extensive saltmarshes. Loggerheads are Georgia's primary nesting sea turtle, laying eggs on the beaches of every barrier island during the summer nesting season. The loggerheads that breed here have been identified genetically as part of a distinct breeding cohort that includes the turtles that nest in North Carolina, South Carolina, and North Florida south to Cape Canaveral.

Diet: A wide variety of organisms from sponges to fish, including whelks, moon snails, blue crabs, spider crabs and calico crabs. Hatchlings & juveniles consume insects and other small, marine invertebrates.

Life History: Nesting begins in early May and continues through mid-August in Georgia. When they nest for the first time, female loggerheads are usually at least 90 cm (35 in) curved carapace length and average about 100 cm (39 in). Age at first nesting is thought to be somewhere between 20 and 30 years for North Atlantic loggerheads. Longevity is not known. Loggerheads emerge at night, digging nests above the high water line or up into the dune face. They lay 50-170 eggs, with an average of approximately 120 per nest. Hatching occurs after approximately 60 days of incubation, beginning in mid-July and continuing through early October. Hatchlings leave the nests at night and crawl to the ocean. Female loggerheads do not generally nest every year but return to nest during every second or third season. Individuals average four nesting attempts for each season they nest. Few loggerheads under 50 cm (20 in) curved carapace length have been found in Georgia; more than 40 percent are 60-70 cm (24-28 in). Loggerheads in this size range are thought to have left the pelagic existence and settled into a coastal bottom-feeding lifestyle.

Range: Loggerheads are found in the Atlantic, Pacific, and Indian oceans, as well as the Mediterranean.

Threats: Mortality of loggerheads attributed to human interaction primarily impacts adults and large juveniles. Commercial fisheries, particularly shrimp trawling, have been identified as the most significant cause of mortality for post-pelagic loggerheads. It is estimated that shrimp trawling killed an estimated 5,000-50,000 loggerheads annually in southeastern U.S. coastal waters before turtle excluder devices (TEDs) became mandatory year-round in 1992. Boat strikes are responsible for approximately 15 percent of known loggerhead mortalities in Georgia. Natural predation on eggs and hatchlings can be very high (approaching 100 percent) on some

beaches that lack nest protection programs. In Georgia, raccoons and ghost crabs can destroy entire loggerhead nests by direct consumption or by opening a nest cavity and exposing eggs to secondary predation or septic conditions. Prior to intense management efforts, feral hogs on Ossabaw, St. Catherines, Little Cumberland, and Cumberland islands have historically had devastating affects on the reproductive success of loggerheads on those islands.

Georgia Conservation Status: Conservation lands harboring loggerhead sea turtle nesting beaches include Little Tybee Island Natural Area, Wassaw Island National Wildlife Refuge, Ossabaw Island Heritage Preserve, Blackbeard Island National Wildlife Refuge, Sapelo Island Wildlife Management Area, Wolf Island National Wildlife Refuge, Jekyll Island State Park, and Cumberland Island National Seashore.

Conservation and Management Recommendations: The Nongame Conservation Section coordinates two coast-wide programs for the conservation of sea turtles. The nesting program is a cooperative effort between the Georgia DNR, federal coastal management entities including the U.S. Fish and Wildlife Service and National Park Service, as well as private foundations. The program is directed at maximizing the reproductive success of loggerheads by ensuring that the highest number of hatchlings reaches the ocean every season. Dawn beach surveys of Georgia's barrier islands record the nests and non-nesting crawls of loggerheads from the previous night's activity. These nest patrols are run during loggerhead nesting season from mid-May through mid-August. Nests are protected from raccoon predation by wire screening and are monitored closely throughout the 60-day incubation period; feral hogs are controlled by trapping and shooting. Hatching success is determined by examining nest contents after the hatchlings have emerged and gone to the ocean. The Georgia Sea Turtle Stranding and Salvage Network is a coast-wide program in cooperation with the National Marine Fisheries Service (NMFS) and includes many of the same individuals and organizations that monitor loggerhead nesting, as well as volunteers. Dead or stranded live turtles are reported to the Nongame Conservation Section immediately after they are discovered on the beach. Initial external examinations are made to record any signs of trauma that may have contributed to the turtle's death. Approximately 50 percent of the stranded turtles are examined internally by necropsy to assess the general health of the animal. Trends in sea turtle mortality are documented and reported to the national sea turtle stranding coordinator at NMFS. Cumulative state stranding reports help NMFS determine management needs regionally and nationally. Trends in loggerhead nesting effort are currently the best estimate of the Georgia population of this species. Efforts in loggerhead conservation must be long-term endeavors and include all of the species' life stages.

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Website of interest: www.seaturtle.org

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