

CHANDELEUR ISLAND SEA TURTLES

The Chandeleur Island Chain provides habitat and shelter for a wide variety of animal species, both aquatic and terrestrial. Among these are five species of sea turtles, three of which are known to nest on the Chandeleur Islands: Kemp's Ridley (*Lepidochelys kempii*), Green Sea Turtle (*Chelonia mydas*), and Loggerhead (*Caretta caretta*). The Kemp's Ridley is the smallest and most critically endangered species of sea turtle in the world. Its carapace, or shell, is on average 30 inches long and often heart-shaped. They inhabit areas with muddy or sandy bottoms where their preferred prey, crabs, are plentiful. Females typically remain at sea for about 10 years before they return to the inshore areas to breed and lay their eggs on select beaches, Chandeleur Island being one of them. Loggerhead sea turtles are about 36 inches in length at maturity. Prey species commonly found on Chandeleur Island include fighting conch and whelks. They do not reach breeding maturity until about 35 years of age. During the nesting season, females return to the same beach where they were hatched to nest. They may repeat this a few times during each nesting season. Loggerheads are listed as a threatened species.



**MEASURING SEA
TURTLE CRAWL**



SEA TURTLE OBSERVATIONS

In Summer 2022-2024, surveys conducted by biologists from the Louisiana Department of Wildlife and Fisheries and Louisiana’s Coastal Protection and Restoration Authority observed tracks, aka “crawls,” from nesting female Kemp’s Ridley, Green, and Loggerhead Sea turtles. Surveyors also observed Kemp’s Ridley hatchlings headed to the surf zone. This was the first direct observation of sea turtle hatchlings on Chandeleur Island in over 75 years. At least 136 sea turtle crawls were observed on the island during these surveys, definitively showing that both Kemp’s Ridleys, Green, and Loggerhead sea turtles are actively nesting at the Chandeleur Islands. Of the seven sea turtle species known worldwide, five of these species are known to inhabit the coastal zones on the Gulf of America, with five of these species observed nesting or feeding around the coastal zones on the Gulf of America. Researchers are only just beginning to observe nesting and foraging around the Chandeleur Islands. What is clearly understood, however, is the importance of available suitable nesting habitat such as the Chandeleurs for their continued survival. With the effects of climate change, sea-levels are rising and storms are becoming more frequent and damaging threatening the sea turtle nesting habitats on Chandeleur Island. The time for restoration of this vital nesting habitat is now. The table below was adapted from Lamont et al (Journal of Ecology and Evolution, August 2023). The data represents sea turtle crawl density observations between May and July 2022. The crawl observation rate for the Chandeleur Islands emphasizes the importance of this island chain to the continued survival of many species, including sea turtles.



ADULT KEMP'S RIDLEY



ADULT LOGGERHEAD



**JUVENILE KEMP'S RIDLEY
HATCHLINGS ON
CHANDELEUR ISLAND**

COUNTY	SURVEY LENGTH (KM)	CRAWLS/KM/DAY
Franklin	98.0	0.128
Gulf	47.0	0.273
Bay	71.1	0.041
Walton	48.7	0.019
Okaloosa	38.0	0.013
Santa Rosa	11.2	0.020
Escambia	64.8	0.024
Alabama	74.8	0.018
Chandeleurs	23.0	0.234