

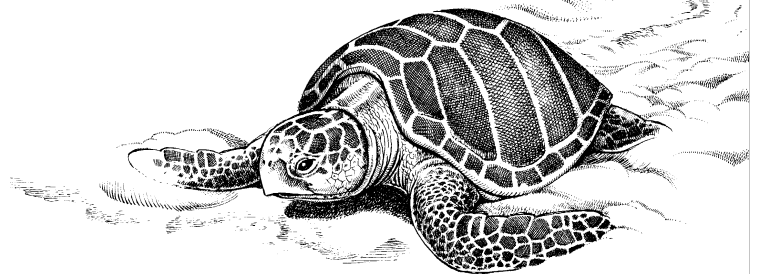
Kemp's Ridley Sea Turtle Program Data Sheet

The Kemp's ridley sea turtle, *Lepidochelys kempii*, is the smallest of the five species of sea turtles found in the Gulf of Mexico (others include loggerhead, green, hawksbill, and leatherback). It has an average length of 23 to 27.5 inches and average weight of 100 pounds. This sea turtle is the only one with an almost circular upper shell. The young are dark gray in color but change as they mature. Adults are olive green above and yellow below. Their diet consists mostly of crabs. The Kemp's ridley adult's range is chiefly in the Gulf of Mexico, but immature turtles, probably carried by the currents, often appear along the Atlantic coast as far north as New England and Nova Scotia. Their nests consist of 80-100 eggs with an average of around 100.

The species' primary nesting ground is on the beach near Rancho Nuevo, Tamaulipas, Mexico. To help insure their survival in the event of a disaster effecting the beach, the governments of the US and Mexico joined together to establish a second nesting beach at Padre Island National Seashore. Kemp's were known to nest on the island sporadically. During each summer from 1978 to 1988 approximately 2,000 Kemp's ridley eggs were transported from Rancho Nuevo to the National Seashore. Here they were incubated and the hatchlings were temporarily released into the water. They were then recaptured and transported to a facility near Galveston, Texas. The young turtles were raised until they were a year old. This effort was called the "head start" program. This program enhanced their survival rate by releasing young turtles that were too big for most predators to eat as opposed to the natural process in which only one out of every one hundred hatchlings survive to maturity. Hopes were high that because the Kemp's ridley always returns to the beach of its birth for its own nesting, that the turtles would return to Padre Island National Seashore as adults. This is where the hatchlings were first released into the water and "imprinted" with a memory of the island. Of the 22,507 eggs received, 17,358 (77.1%) hatched and 13,454 turtles were released into the Gulf of Mexico after 9 to 11 months of head starting. From 1979 to 1996, seventeen Kemp's ridley nests were documented along the Texas coast, most of which were found at the National Seashore. Two of the nests found in 1996 were from turtles that had "living tags" and had been incubated at the National Seashore. In 1997 nine Kemp's ridley nests were located on the Texas coast. Seven of these were found on North Padre Island (including the National Seashore), one on Mustang Island, and one on South Padre Island. Visitors to the island located five of the nests, while National Seashore employees were able to examine only three nesting turtles. None of the turtles in 1997 had any tags or markings linking them to the program. In 1998, 13 Kemp's ridley nests were located and 800 hatchlings released. Three had living tags identifying them as "head start" turtles released over 10 years ago.

During the nesting season of 1999, a total of 16 Kemp's ridley nests were found resulting in the release of 1,237 turtles into the Gulf of Mexico. Three of the nesting turtles were returnees from the original "head start" program. The public is invited to attend releases at Padre Island National Seashore. Most releases occur between March and August during nesting season. These events are fascinating, educational, and entertaining for all ages.

**The Hatchling Hotline
(361) 949-7163**



The Last Hatchling

The moment at a sea turtle release when the last Kemp's ridley hatchling of a clutch makes its first contact with the Gulf is exhilarating. The crowd cheers and bursts out in applause as they watch the surf snatch the infant from the security of the release and into its new world. For an hour or more dozens of people have lined the shore, fascinated by the trials of maybe a hundred two-inch long turtles struggling over fifty feet of sand and seaweed, desperately trying to reach the water before being whisked away by a hungry gull. The disappearance of the last hatchling into the turbulent surf signals another chance that the species will survive. If all 100 hatchlings were to survive to adulthood, the entire adult population of the species (estimated at 7,500 turtles) would increase by about 1.5%. Unfortunately, out of the hundred released maybe five will make it to maturity.

It is ironic that for a quiet, innocuous sea turtle, life is a constant solitary battle against the world. From the moment of birth sea turtles are on their own. The mother turtle comes ashore long enough to dig a nest, lay her eggs, and cover them up. She then goes immediately back into the water. Because she is facing away from the nest as she lays the eggs and buries them with her rear flippers, the mother never sees her own young. For the next 45-60 days the eggs lay waiting either to hatch or to be discovered by a coyote, raccoon, or other opportunistic predator. Once hatched, the infants must dig their way through about a foot of sand to reach the surface and crawl up to a hundred feet to reach the Gulf. Some are not strong enough to reach the surface and die in the nest. The ones that do reach the surface must now, if there are no coyotes or raccoons present, face other predators: gulls and crabs. A flock of gulls could decimate a sea turtle clutch in a few minutes. Crabs will either drag a hatchling into their burrows or go about snipping the tendons in the front flippers of several hatchlings leaving them immobile until the crab can return and feed at leisure. It is believed that once in the water, the survivors strike out for the floating mats of seaweed in the Gulf. Along the way, many will be lost to marine predators. Once in the mats they will hide and feed on the small animal life they find until about a year old and too big for most predators to eat. Then they leave the seaweed to forage around the Gulf and (sometimes) the Atlantic, for the rest of their lives.

Of course, humans may interrupt this cycle anywhere along the way for either good or bad. For the most part, humans have interrupted to the sea turtle's detriment. In some countries, people may rob nests in order to sell the eggs at market. However, a primary cause of unnatural death among Kemp's ridleys is believed to be drowning in shrimping nets. Sea turtles are reptiles and must breathe air. If they are entangled in a net for too long, they drown. Humans may also bring about the death of Kemp's ridley and other sea turtles by other means, including dumping garbage into the Gulf of Mexico or into rivers and streams that flow to the Gulf. If sea turtles become entangled in discarded nets or six-pack rings or if they mistake enough garbage for prey, they may die.

But people may also help the Kemp's ridley to survive. Governmental and private organizations have sprung up to help sea turtles survive in the modern world. At Padre Island National Seashore, the National Park Service has teamed up with another federal agency, the U.S. Geological Survey, and private companies to study and help restore the Kemp's ridley to the Gulf. During the sea turtle nesting season, which runs from late March through August, volunteers and staff biological technicians patrol the shoreline searching for sea turtle nests. The eggs are incubated at the seashore and the hatchlings released. If we are lucky enough to find a nesting mother, she is examined, tagged, and released the same day. Different types of tags may be used, but if the budget permits, a radio transmitter will be placed on her back so that her travels around the Gulf may be studied via satellite relay.

Kemp's ridley sea turtles are only one of the five Gulf of Mexico sea turtle species and 491 other animals on the federal Endangered Species list as of May 31, 2000. Therefore, the disappearance of the last hatchling into the surf signals something else as well: another chance for the vanishing wildlife of North America to survive.