

The Kid's Times:

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Kemp's Ridley Sea Turtle



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Sea turtles need to surface to breathe every few minutes.

Sea turtles are graceful saltwater reptiles, well adapted to life in their marine world. With streamlined bodies and flipper-like limbs, they are graceful swimmers. When they are active, sea turtles must swim to the ocean surface to breathe every few minutes. When they are resting, they can remain underwater for much longer periods of time.

How did the Kemp's ridley get its name?

Kemp's ridley sea turtles are named after Richard M. Kemp, the fisherman who first described these sea turtles in Florida. No one is sure why "ridley" was added to the name.

What do they look like? This is the smallest of all sea turtles. Adult Kemp's ridley sea turtles weigh 80-120 lbs and are 26-30 inches long. Their wide, almost round **carapace** is olive gray, and their **plastron** is white to yellowish. The **hatchlings** are darker colored, almost black, and only 2 inches long when they are born.

Where do they live?

Kemp's ridley sea turtles live primarily in the coastal waters and bays of the Gulf of Mexico and the northern Atlantic Ocean. They are most common along the Gulf coasts of Mexico, Texas, Louisiana, and Florida, and are also found in large number on the Atlantic coast of Florida, Georgia, and even as far north as New England during the summer and fall! The Kemp's ridley sea turtles prefer **shallow** waters where they can find food on the sandy or muddy bottom.

How long do they live?

Scientists have estimated that Kemp's ridleys reach **maturity** at about 12 years of age. It is unknown how long Kemp's ridley turtles live, but like other sea turtles, they are likely long-lived.

What do they eat?

Kemp's ridley turtles live their first years well offshore in the Gulf of Mexico, where they feed on small animals and plants they find in the mats of floating **algae**. After returning to shallow coastal areas, crabs become their preferred food.

What is an "arribada"?

Arribada is the Spanish word for arrival. It is used to describe the mass nesting of Kemp's ridley sea turtles. Nesting in large groups may be a defense against predators or a result of environmental factors influencing nesting. With many turtles coming ashore together and

many nests subsequently hatching at the same time, it may help them to reduce predation.

When and where do females lay their eggs?

Female Kemp's ridleys nest from April to July, during the day. Kemp's ridleys are the only sea turtles to nest during the day. Kemp's ridleys lay an average of 2-3 **clutches** per season and return to the beach to nest every 1-3 years.

Almost the entire Kemp's ridley sea turtle population nests along the coast of the state of Tamaulipasan, on the Gulf coast of Mexico, just south of the U.S./Mexico boarder. The females dig an egg chamber in the sand where they lay approximately 100 **pliable**, ping-pong sized eggs. The eggs **incubate** for 50-70 days, and then the hatchlings emerge and make their way to the ocean.

Who are their predators?

Hatchlings are much more susceptible to **predators** than adults. Crabs and rac-



Sea turtle hatchlings make their way from the nest to the ocean

coons feed on hatchlings when they emerge from their nest on the beach, and fish and seabirds are a threat to hatchlings in the water. Only sharks are large enough to prey upon adult sea turtles. Their flippers are especially vulnerable. Man is also a predator of the Kemp's ridley turtle.



CMA Aquarium.org

Juvenile sea turtle feed near the surface and can mistake balloons for food, which can be deadly.

How many are there?

A video from 1947 showed 40,000 nesting females participating in one "*arribada*" on the primary nesting beach in Mexico. By the mid 1980s, the total number of nests for the entire nesting season was down to 700. With strict protection and heroic efforts, the numbers of nests has slowly been increasing and there were almost 7000 nests in 2003. Although this is a sign of recovery, the nesting numbers are still far below what they were when the video was taken in 1947.

Why are they in trouble?

Human activities have been the main cause of the decline in the Kemp's ridley sea turtle population. In the past, it was common for people to collect turtle eggs and kill adults for meat. Today, human development threatens many of the nesting beaches. Coastal construction, beach armoring, beach driving, beach cleaning, and beachfront lighting are significant threats to nesting females and their hatchlings. Also nesting on one beach in Mexico, Rancho Nuevo, makes them very susceptible to natural or human induced disasters and disease that could affect the entire population.

Threats to Kemp's ridley sea turtles in the water include entanglement in fishing gear such as shrimp trawls, gillnets, and fishing lines; pollution and trash; and collisions with recreational boats. Shrimp trawl entanglement has been particularly devastating to the Kemp's ridley sea turtle population.

One surprising threat to sea turtles is the balloons that people let go. These balloons often float over the ocean before popping, and sea turtles can choke on the pieces of the balloon that fall into the water.

What is being done to help them?

The Kemp's ridley sea turtles were listed as endangered under the Endangered Species Act (ESA) in the United States in 1970. This makes it illegal for anyone to disturb, kill, or take the eggs of the Kemp's ridley. Although the population is showing early signs of recovery, the species is still considered highly endangered.

The United States and Mexico work cooperatively to protect and recover Kemp's ridleys on the nesting beaches and in the marine environment. Nesting females and their nests are fully protected by enforcement officers in Mexico. The National Marine Fisheries Service is working to reduce threats to Kemp's ridleys in their marine habitats.

In both the United States and Mexico, shrimp fishermen are required to use Turtle Excluder Devices (TED's) in shrimp trawls, which allow turtles to escape from the nets when they are caught. It is believed that the institution of TED regulations has

contributed to the increasing numbers of nesting adult females documented on Mexican nesting beaches.

What can you do to help sea turtles?

It is possible for anyone to help support sea turtle conservation. You can help participate in beach cleanups or attend a public sea turtle walk. You can do a presentation on turtles for a class to raise awareness, adopt a turtle, or follow a sea turtle telemetry project. You can help just by remembering not to release balloons or throw trash into the ocean. You can help spread the word to your family and friends that sea turtles are an important part of our environment and should be protected.



Erin E. Seney, 2004

An adult female sea turtle makes her way back to the ocean after laying a clutch of eggs on her natal beach.

Glossary:

Algae: Aquatic plants with stems, roots and leaves that produce chlorophyll

Carapace: The top shell of a turtle

Clutch: A group of eggs

Hatchling: A turtle just emerged from the egg

Incubate: To warm an egg or clutch of eggs to help promote development of an embryo(s)

Maturity: For sea turtles, the age when the turtle can reproduce

Plastron: The bottom shell of a turtle

Pliable: Easy to bend; Flexible

Predator: An animals that eats other animals for its food

Shallow: Not very deep

Shrimp trawl: A large net pulled behind a boat with mesh small enough to catch shrimp

