# Sea Turtles

There are 7 species of sea turtles that dwell all over the planet: Leatherback, Green, Kemp's Ridley, Olive Ridley, Hawksbill, Loggerhead and Flatback.

#### All 7 species are currently critically endangered or threatened.



Although sea turtles have lived on our planet for over 200 million years, increasing threats caused by humans are driving sea turtles towards extinction. The population of leatherbacks has declined by 95% in just the past 25 years.



Major threats to the survival of sea turtles include:

- Illegal poaching and harvesting of adult sea turtles and eggs on nesting beaches
- Development and destruction of nesting beaches
- Shrimp nets and longline hooks (turtles can get caught and drown)
- Pollution and plastic debris

 $\rightarrow$ Sea turtles mistake plastic bags and other debris for food such as jellyfish.

 $\rightarrow$ Pollution affects the health of turtles and makes them more susceptible to disease.

#### Climate change

→Rising sea levels impact nesting beaches, warming temperatures negatively impact food resources for all sea creatures.

 $\rightarrow$  Temperature influences the sex of new sea turtle hatchlings.

#### Leatherback





- The leatherback turtle, also known as the "giant mariners," is Earth's largest marine reptile, growing up to 6 ½ feet in length. They are known for their size, their soft and leathery carapace and their diet of jellyfish.
- Leatherback turtles are the deepest diving reptile and migrate the greatest distances. They swim from near the Arctic to the tropics and as far south as New Zealand and the Southern Ocean. The soft shell compresses at great depths and helps the leatherback to dive as deep as it does.
- Greatest threat: Longline and gill net fishing are currently the greatest threats to leatherback turtles. Additionally, the few nesting beaches for leatherbacks are being threatened by development.

## Kemp's Ridley





- For years, the nesting beach of the Kemp's ridley, a cousin to the Olive ridley turtle, was a mystery. In the 1950's it was discovered that certain areas in Mexico were the primary nesting grounds for the Kemp's ridley.
- This turtle is primarily found in the Gulf of Mexico, but will also feed along the east coast of the U.S.
- The Kemp's ridley feeds on bottom-dwelling animals like crab and certain mollusks.
- Greatest threat: The eggs of Kemp's ridleys are considered a delicacy and egg harvesting has been detrimental to the Kemp's ridley population. Adult turtles are also being drowned in droves as shrimp trawlers fish for marine crustaceans.

#### **Olive Ridley**





- Compared to the other species of sea turtles, Olive ridley turtles are smaller and lighter in color. They prefer the tropical to warm-temperate Pacific and Indian Oceans. Their color and size helps them to cool more effectively.
- When it is time to nest, Olive ridleys come ashore in groups of thousands, and unlike other turtles, they do so in the daytime as well as at night. They are also the fastest nesters (completing nesting in about 60 minutes) of all the sea turtles.
- Greatest threat: Industrial turtle and egg harvesting of the numerous turtles that come ashore to nest has caused a massive decline in the Olive ridley population. Besides food consumption, Olive ridleys are harvested for their medicinal use and supposed aphrodisiac properties.

#### Green





- The green turtle is a grass-eater and is everything you would expect to see in a sea turtle: inquisitive face, round shell and well-formed flippers.
- They are truly international, swimming and feeding in the coastal waters of over 140 countries that border the Atlantic, Pacific, and Indian Oceans. The largest nesting colonies are at Tortuguero on the Caribbean coast of Costa Rica and on Raine Island on the Great Barrier Reef in Australia
- Greatest threat: Large-scale egg collection has decimated the green turtle population. Despite improved conservation efforts, egg collection still occurs at 45% of all nesting beaches. Because of its fat and muscle, juvenile green turtles are also illegally harvested for consumption. Disease, such as malignant fibropapillomatosis, is a growing threat and affects 42% of the green turtle population.

#### Hawksbill





- Hawksbill turtles are best known for their distinctive beak and unique amber and yellow scutes that cover its shell.
- They inhabit coral reefs in the Caribbean, Red Sea, or Seychelles and have a diet rich in sponges. The feeding habits of hawksbills help to maintain the ecosystem of coral reefs.
- Greatest threat: the hawksbill turtle has been hunted nearly to extinction for its shell to make tortoiseshell hair clips and jewelry. Today, the ban on international tortoiseshell trade and an increase in eco-tourism (thus, increasing that value of a live turtle to the locals) has provided hope that the numbers of hawksbill turtles will rebound.

Text source: Spotila, J.R. 2004

## Loggerhead





- Loggerhead turtles are properly named for their huge head and crushing jaw, which helps them feed on large shellfish. Unlike the other sea turtle species, loggerhead turtles will bite if you disturb them while nesting.
- The carapaces of loggerheads are full of life, often covered with barnacles and algae.
- Loggerheads feed in the Atlantic Ocean, from Brazil to Canada, and also along the coasts of Mexico, Cuba, the Bahamas, and the Gulf coast of North America.
- Greatest threat: Development of nesting beaches and longline fishing targeting sharks and swordfish are now major causes of loggerhead mortality.

#### Flatback





- The flatback turtle is named for the relatively flattened shape of its carapace. Of all sea turtle species, the least is known about flatback turtles.
- These turtles do not migrate and their distribution and nesting is limited to the continental shelf of Australia and Australian beaches.
- Flatbacks are carnivores and feed on the sea cucumbers, shrimp, jellyfish and mollusks that live on the soft ocean floor.
- Greatest threat: Because the range of flatback turtles is limited to Australia, no
  international treaties are needed for its conservation. Even though the Australian
  government protects the nesting beaches and turtles as sea, many flatbacks are killed in
  shrimp trawls.