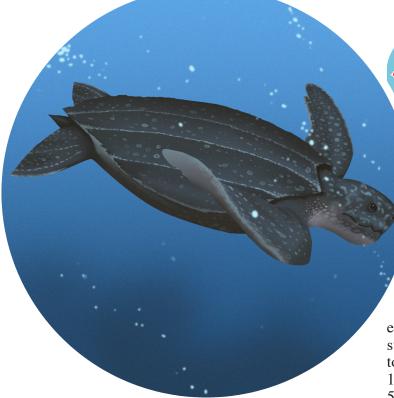
Leatherback Sea Turtle Dermochelys coriacea





Family: Dermochelyidae
Order: Chelonia (Testudinata)

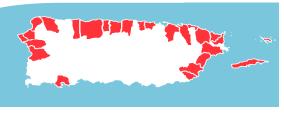
Description

The leatherback is the largest sea turtle species in the world. It can grow between 4 (1.2 meters) to 8 feet (2.4 meters) long, and weigh between 500 to 2,000 pounds (227 to 907 kilograms). It differs from other sea turtles in that it is the only one with a soft or flexible carapace. The surface of the leatherback's carapace, or back shell, is composed of leathery skin; it has no plates or scutes. Its body is black or dark gray with small, pale, whitish spots. Its carapace has seven ridges that cross lengthwise. The carapace is wider at the front, and narrow in the back. The leatherback's front flippers lack claws. This turtle's mandibles are softer than other turtles', which is why the leatherback usually feeds on soft organisms.

Biological Information

Reproduction

The leatherback takes approximately 16 years in reaching sexual maturity. After reaching sexual



Distribution |

maturity, the female leatherbacks travel to tropical waters every 2 or 3 years to nest. Although it is believed that sea turtles return to nest in the beaches in which they were born, the mechanism through which they orient themselves to do so has not yet been explained. Breeding season lasts from February through July. Females can nest up to 11 times throughout one season, with an interval of 9 to 10 days in between each nesting event. Leatherbacks choose soft, sandy beaches with strong waves, deep access, and no obstacles in which to lay their eggs. Each nest can contain between 80 to 100 eggs, and the incubation period can last between 55 to 75 days. Once the incubation period is over, the hatchlings abandon the nest at night and head towards the seashore. The hatchlings' sex is determined by the temperature prevalent during the incubation period. High temperatures usually result in female hatchlings, while cooler temperatures often result in males.

Habitat

This sea turtle is a pelagic species; that is to say, it spends the majority of its life in the open seas. The leatherback is the sea turtle with the largest migration. Its hydrodynamic carapace and big front flippers allow it to travel vast distances. Leatherbacks can dive for more than 1,000 feet (305 meters) deep on average, and have been observed diving at a depth of over 3,900 feet (1,189 meters).

Diet

As mentioned above, the leatherback's mandibles are more delicate than other sea turtle species, and could get hurt if they attempt to eat hard foods. The leatherback feeds primarily on jellyfish, along with tunicates and other soft-bodied organisms. It also consumes a type of jellyfish most other animals try to avoid: the siphonophores, the most famous of which is the Portuguese Man o' War.

Distribution

The leatherback sea turtle has the widest area of distribution among sea turtles. It can be found throughout the entire world, in waters both tropical and temperate. It is distributed throughout the Atlantic, Indian and Pacific Oceans. Turtles have been found as far north as the coast of British Columbia and the British Isles, and as far south as Australia, the Cape of Good Hope (South Africa), and Argentina.

In the Atlantic, the leatherback nests in beaches in Florida (US), St. Croix (USVI), and Puerto Rico. It also nests in Costa Rica; Panama, Colombia, Trinidad and Tobago Guyana, Surinam, French Guiana, and southern Brazil. In Puerto Rico, leatherbacks prefer the sandy beaches on the west, north and east shores on the island, with the shores seeing most of the nesting activity being the beaches of Fajardo, Maunabo and the island municipalities of Vieques and Culebra. Furthermore, nesting activity has been reported in: Yabucoa, Guánica, Isla de Mona, Mayagüez, Añasco, Rincón, Aguada, Aguadilla, Isabela, Hatillo, Arecibo, Barceloneta, Manatí, Vega Baja, Dorado, Toa Baja, Condado, Isla Verde and Loíza (Piñones).

Threats

In Puerto Rico, nesting areas have decreased due to the continuous development of beaches and coastal areas, primarily the construction of residential projects, touristic destinations and industrial areas, as well as urban sprawl. On the other hand, light pollution on the beaches disorients the females that have come out of the sea to lay their eggs, as well as the hatchlings who are trying to reach the sea for the first time. Adult sea turtles have few natural predators. A natural predator for a full-grown leatherback might be large sharks. However, hatchlings and juvenile sea turtles are prey for feral dogs and cats, marine birds, crabs, fish, and other predators. Nesting area vandalism, egg theft, and slaughtering of female turtles when they come out to lay eggs are other great threats this species faces. Leatherbacks are also specifically vulnerable to the presence of plastics in the sea; they can easily confuse a plastic bag with a jellyfish, and consume the plastic.

Conservation Measures

The leatherback sea turtle is protected by federal and state law, as are all other sea turtle species. The leatherback was listed under the Endangered Species

Act in 1970. Furthermore, an area in southwest St. Croix was designated as a critical habitat for the species in 1978.

The Endangered Species Act of 1973, as amended, prohibits the killing, harassing, trapping, purchasing or selling any species, as well as parts and products derived from the species. Although these clandestine activities are hard to detect and control, there has been a governmental unification, and efforts have been made to arrest, prosecute and fine these poachers. Citizen education regarding the importance of observing the law and preserving the species that make up our natural heritage is vital for sea turtle protection and recovery.

To aid in the recovery of the species, the Puerto Rico Department of Natural and Environmental Resources (PRDNER), the United States Fish and Wildlife Service, private associations and citizens and volunteers have taken upon themselves the task of patrolling the beaches during nesting season. In this manner, they prevent the illegal capture and slaughter of nesting females as well as egg harvesting.

References

Carr, Archie. 1952. Handbook of turtles. Cornell University Press, London.

Bustard, Robert. 1972. Sea turtles: their natural history and conservation. Taplinger Publishing Co., New York.

National Marine Fisheries Service and U.S. Fish and Wildlife Service. 1992. Recovery Plan for Leatherback Turtles in the U.S. Caribbean, Atlantic and Gulf of Mexico. National Marine Fisheries Service, Washington, D.C.

Lutz, P.L., and J.A. Musick (eds.). 1997. The Biology of Sea Turtles. CRC Press, Inc., Boca Ratón, FL.

Lutz, P.L., J.A. Musick, and J. Wyneken (eds.). 2003. The Biology of Sea Turtles, Volume 2. CRC Press, Inc., Boca Ratón, FL.

Additional Information

Caribbean Ecological Services Field Office Address: PO Box 491, Boquerón, PR 00622 Telephone: 787-851-7297 / Fax: 787-851-7440

Internet: www.fws.gov/caribbean



