

Antillean Manatee *Trichechus manatus manatus*



Distribution

Family: Trichechidae
Order: Sirenia

Description

The Antillean manatee is slow moving aquatic mammal. They range in color from gray to brown. The manatees' reaches adulthood at about six years of age and the oldest in captivity reached over 60 years of age. Adult manatees in Puerto Rico measure about 10 feet (approx. 3 meters) in length and weigh between 1,200 to 2,000 pounds (approx. 544 to 907 kilograms). At birth, calves measure over 3 feet (approx. 1 meter) and weigh between 35 and 60 pounds (approx. 15 to 27 kilograms). Puerto Rican manatees are smaller and more slender than Florida manatees. Sexes are distinguished by the position of the genital openings. Females appear heavier and bulkier than males of the same length. The manatee body is round, tapering into a spoon or paddle-shaped tail. Their body is covered with sparse hairs and their snouts with stiff whiskers called vibrissae that give it another sensory tool. Manatees have unique lips that help them gather, grasp

and manipulate food and have teeth (molars) that they keep replacing as long as they live. Because they are mammals they must come up for air. Their nostrils are like little valves located at the tip of the snout above the mouth and can remain tightly closed when they dive under water. Manatees can remain submerged for 15 to 20 minutes. Manatees have two front flippers with three nails on each. Their scientific name, *Trichechus manatus*, means three (*tri*) and nails (*chechus*).

Biological Information

Reproduction

Females are able to reproduce at about 4 to 5 years of age and typically give birth to only one calf but there have been a few cases of twin births. The gestation period of the manatee is about 11-13 months. Calves are completely dependent on maternal care for survival, nursing for up to two years.

Habitat

Manatees in Puerto Rico inhabit mostly coastal shallow marine areas, but will also occur in fresh water. They may be encountered in canals, rivers, estuaries (the mouth of the rivers) and saltwater bays.

Diet

Manatees are herbivores, feeding primarily on seagrasses and aquatic plants that grow in shallow coastal waters and rivers. The Antillean manatee feeds primarily on three seagrass species in Puerto Rico: paddle grass (*Halodule wrightii*), turtle grass (*Thalassia testudinum*), and manatee grass (*Syringodium filiformis*). Occasional use of mangrove and accidental ingestion of green algae and hydroids has been reported.

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Distribution

In Puerto Rico, manatees are more common along the east and south of Puerto Rico. Surveys show concentrations in several “hot spots” including Ceiba, Vieques Island, Jobos Bay in Salinas and Boquerón Bay. Other important areas are the San Juan Bay, Luquillo, Guayanilla, Lajas, Cabo Rojo and Mayagüez. Manatees in Puerto Rico are least abundant along the north coast, between Rincón and Dorado. Manatees have also been reported, although only in few instances, around Culebra Island. No records exist from Mona or Desecheo Islands.

Sighting records for the USVI are virtually non-existent, with only one significant record of presence in that area. The Antillean Manatee is also present along the coasts of the Greater Antilles, the Gulf of Mexico, the eastern coast of Central America and further south along the north coast of South America all the way to northeastern Brazil.

Threats

Boat strikes are the primary mode of human-caused manatee deaths in Puerto Rico. The majority of natural deaths happen during or immediately after birth. Stressful environmental conditions, such as hurricanes, may cause calf strandings, which may eventually die without the protection and nourishment their mother provides. Improper use of watercrafts also contributes to these strandings. Excessive speeds can result in a fatal strike to the mother, or noise stress to the mother and the calf. If the mother dies, the calf will be left alone, and if the mother is frightened and stressed enough, she may leave her calf behind.

Increases in commercial and recreational activities along the coast could affect manatee habitat. Construction and expansion of ports and marinas could damage seagrass beds, as well as improper boatmanship especially in shallow sea grass areas.

Contaminated water and discharges make their way into the rivers polluting manatee drinking water and food sources. Human demands for potable water will likely increase, possibly limiting sources of clean drinking water for manatees. In the future, the potential loss of fresh water sources may be the most limiting habitat factors for manatees.

And last but not least, solid waste and debris also threatens manatee survival. In 2008, six manatees were trapped in the Rio Loco after solid waste and debris clogged the mouth of the river, in Guánica.

Conservation Measures

The West Indian Manatee was designated as an endangered species in 1970. Manatees are protected through a number of Federal and Commonwealth laws that specify that manatees should not be given food or water, touched or followed. The primary regulations at the Federal level are the Endangered Species Act of 1973, as amended, and the Marine Mammal Protection Act of 1972. Puerto Rico Commonwealth laws include several regulations that provide protection for the Antillean manatee and its habitat, such as the New Wildlife Law of 1999; Regulation No.6766 for the management of vulnerable and endangered species; the Aquatic Safety and Navigational Law of 2000; and Law No. 147 for the protection, conservation, and management of coral reefs in Puerto Rico.

Preservation of sea grass beds is essential to ensure the continued existence of the manatee in Puerto Rico. The public is encouraged to follow all boating regulations, avoid damaging sea grass beds with anchors and propeller scaring, and enjoy encounters with these animals from a distance. Likewise, use of polarized sunglasses during boating of any kind is recommended to avoid collisions, since these glasses filter sunlight glare on the water’s surface and improves visibility. Keeping solid waste and fishing lines out of rivers and streams can also contribute to manatee conservation.

Government agencies, at the state and Federal level, work with developers to incorporate conservation in development project to address adverse effects to manatee habitat. The Caribbean Ecological Services Field Office implements a Rescue, Rehabilitation and Release Program for the Antillean manatee population in Puerto Rico. Manatee strandings in PR are managed by the DNER Marine Mammal Program with the collaboration of the Manatee Conservation Center and the Puerto Rico Zoo.

One possible strategy for manatee conservation could be the designation of federal Manatee Protection

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Areas (MPAs), where speed limit zones and/or havens can be set in certain manatee important areas. MPAs in Puerto Rico are still in the planning stage and studies are underway to better understand manatee coastal habitats and will identify the most suitable regions of the island for the species. The DNER also has a manatee conservation and protection plan that establishes boat slow speed zones within important manatee areas in Puerto Rico.

Other strategies used to minimize threats to manatees include: no wake areas, marked navigation channels, boat exclusion areas, and standard construction conditions for marinas and boat ramps. Regulatory speed buoys can help boaters identify navigable waterways and remind them of speed zone regulations to avoid or minimize collisions with manatees.

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Additional Information

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