

# GEORGIA AQUARIUM ANIMAL FACT SHEET

## Whale shark *Rhincodon typus*

### Range/Habitat

- The whale shark is found worldwide in the tropical Atlantic, Pacific and Indian Oceans between 30 degrees north and 35 degrees south.
- It usually found offshore but will come close inshore, sometimes entering lagoons or coral atolls. It has been reported to frequent shallow water areas near estuaries and river mouths, sometimes during seasonal shrimp blooms.

### Physical Characteristics

- The whale shark is the largest of all fishes; it is not a whale. Because of its size, it is impossible to weigh accurately. The female is larger than males as in all shark species.
- Newborns have been found measuring 21-25 inches (53.34-63.5 centimeters) long.
- The largest accurately measured whale shark was 40 feet 7 inches (12.18 meters), although there are reports of a 60-foot (18 meters) whale shark in 1925. The average size is between 18-32.8 feet (5.5-10 meters) in length.
- It has a broad, flat head, small eyes, five large gill slits, two dorsal fins on its back and two long pectoral fins on its sides with a sweeping tail.
- Unlike most shark species, its mouth is located at the front of the head instead of the underside of the snout.
- It can be recognized by the two-toned pattern of light spots on its dark back with a white underside.

### Diet/Feeding

- The whale shark has a HUGE mouth, which can reach up to four feet (1.4 meters) across.
- It feeds on planktonic and nektonic prey, such as fishes (sardines, anchovies, mackerel, small tunas and albacore), small crustaceans and squids that it strains from the water through its gills.
- The food is usually small since its throat is small and makes a right angle to the stomach. Sometimes larger species, such as tuna may be scooped up as they consume the smaller species and the whale shark somehow manages to swallow them.
- It has 300 rows of tiny teeth along the inner surface of each jaw, just inside the lips. Many scientists believe that their teeth are used to hold whatever is scooped into the mouth, although it is probable that they are used in processing larger food items.

### Conservation Status

- The IUCN Redlist currently lists this species as "Vulnerable".
- It is also listed in Appendix II of CITES.

- Their population has decreased dramatically in recent years due to market demand for whale shark in Asian markets

### **Additional Information**

- The skin of a whale shark can be as thick as four inches (10 centimeters), which limits possible predators to killer whales, great white sharks, tiger sharks and man.
- The whale shark is a slow-moving shark that is often seen feeding at the surface.
- Whale sharks feed by speeding up and opening its mouth. It swims through swarms of prey, such as fish eggs, zooplankton, small fishes, etc, moving its head from side to side and sucking in the food. As it swims, a steady stream of water flows through the mouth. It has gill rakers that are located at the rear of the mouth. The gill rakers filter the food. This is called passive filter feeding.
- It is known to be highly migratory, covering almost 808 miles (1300 kilometers). It will migrate between ocean basins and national jurisdictions, but will usually return to the same sites annually. Based on tagging and DNA studies, males tend to do long-distance migrations while females migrate only short distances. Although it is the largest fish, the whale shark is not easy to find. There are only nine places in the world that are known to provide predictable whale shark sights. These places are all located in tropical waters and include Belize, Baja, Cozumel and Australia, among others, during different seasons.
- The whale shark is ovoviviparous, meaning that the embryo is formed within eggs retained in the mother's womb. The yolk is not connected to the mother after the egg case is formed. When the fetus reaches term and uses up the nutrients in the yolk sac, the fetus breaks free of the egg and is delivered out of the womb through the cloaca. The litter size can be more than 300 pups.
- It is often seen in a vertical position with the head at or near the surface when feeding. When it is actively feeding on zooplankton, the shark will turn its head from side to side, with part of the head lifted out of the water. It will open and close its mouth 7-28 times per minute, with suction gulps that are synchronized with the opening and closing of the gill slits.

### **Sources**

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