

Southern Stingray

Dasyatis americana

Relatives: Class: Chondrichthyes – cartilaginous fishes

Order: Myliobatiformes - stingrays

Family: Dasyatidae – includes the Atlantic stingray

The Southern stingray is in the subclass Elasmobranchii with sharks, skates and rays. These cartilaginous fish have an upper jaw that is not connected or fused to the skull, they have 5 gill slits and their bodies are smooth or covered with rough denticles or placoid scales. Other general characteristics of stingrays include eyes located on the top of the head, flattened crushing teeth, 5 paired gill slits on the underside of the body, and pectoral fins that look similar to wings.

Southern stingrays are further grouped into the Batoid Fishes (Batoidea) which include skates, rays, guitarfishes, and sawfishes. The Family Dasyatidae includes 70 species of stingrays.

Description: They have a whip-like tail with a venomous barb used for defense.

Their dark bodies and white underbellies are ideal camouflaging on the ocean floor.

Shuffling your feet in the sand when entering the water will encourage rays to swim away and limit negative interactions.

Size: Adults can reach widths of 5 feet (150 cm) and lengths of 2.5 feet (75 cm). Life span is unknown, but estimated between 12-13 years (UofM).

Habitat: The Southern stingray prefers coastal or estuarine habitats with sandy bottoms.

Range: The Southern stingray occurs in the Atlantic Ocean from New Jersey to Brazil, as well as the Gulf of Mexico.

Predators: Humans, many species of sharks including great hammerheads and other large fish.

Diet/Prey: The Southern stingray has multiple rows of teeth that are relatively uniform except for smaller teeth near the outer corners of the mouth.

They rely on electro-reception combined with a strong sense of smell and touch to locate bivalves, crustaceans, clams, and worms.

Aquarium Diet: Cut fish and shrimp

Reproduction: Southern stingrays are ovoviviparous which means that eggs are retained within the body of the female and receive nourishment from a yolk sac. This is the method of reproduction for the "live-bearing" fishes where the pups hatch from their egg capsules inside the mother's uterus and are born soon afterward.

Fun Facts:

- The barb is enveloped in a venomous tissue and is only used for self-defense.
- Here at SCA, husbandry team members clip the keratin barbs as needed, usually a couple of times a year.
- Southern stingrays breathe through spiracles, gill opening behind the eyes, when they are resting on the bottom.
- Stingrays are of considerable importance to eco-tourism (Stingray City in the Cayman Islands).

Conservation Connection: The Southern Stingray is listed as a Species of Least Concern in the US. Little information is available about populations and fishing pressures elsewhere. Spine venom is currently being researched for medical applications (UofM). Many people are unaware of where the barb is on a stingray's tail. Misinformed fisherman think that they are doing a good deed by cutting the entire tail off when they catch them. However, they cannot survive in the wild without that essential defense mechanism, so this is not a good practice.

References: <https://www.flmnh.ufl.edu/fish/Gallery/Descript/SouthernStingray/SouthernStingray.html>

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