



SPECIES FACT SHEET

Indo-Pacific Bottlenose Dolphin *Tursiops aduncus*

Classification:

Kingdom:	Animalia
Phylum:	Chordata
Class:	Mammalia
Order:	Cetacea
Family:	Delphinidae
Genus:	<i>Tursiops</i>
Species:	<i>aduncus</i>

Conservation Status: Data Deficient



Identification: Indo-Pacific bottlenose dolphins, like most dolphins, have a hydrodynamic shape and a powerful fluked tail that allows them to reach speeds of 40 km/h or more. Their dorsal surfaces are dark grey and they have a lighter grey to white underbelly when they are born that gains speckles as they age. They do not grow as large as Atlantic bottlenose dolphins but can still reach lengths of 2.6 m and weights of 230 kg. Dolphin genitalia are internal but females have two mammary slits adjacent to the genital slit that males do not. In Shark Bay, the dolphins tend to be on the small side for Indo-Pacific bottlenose dolphins, averaging 2 m in length. Extensive observational work and photographs have allowed individual identification of hundreds of dolphins in the area based on unique patterns of nicks and cuts out of the dolphin's dorsal fins.

Distribution: Indo-Pacific bottlenose dolphins are found in tropical and temperate coastal waters of the Indo-Pacific region. In Shark Bay, and other locations where they have been studied, individuals establish home ranges that overlap with many other individuals. In Shark Bay, bottlenose dolphins can be found in every habitat from nearshore sandflats and shallow seagrass banks to deeper open waters.

Growth and Age: Calves are born at a length of 0.7-1.2 m. Adult Indo-Pacific dolphins can live to almost 50 years in the wild. Dolphins have conical teeth that are never replaced and rings inside their teeth are used to estimate age in a manner similar to counting rings of a tree. Ages of free-swimming dolphins can be estimated from the amount of speckling on their bellies. Speckling starts around the genital slits at around 8-12 years of age and gradually spreads to the underbelly, the sides, and around the eyes as the dolphin ages. In Shark Bay, females mature at about 14 years old. Males may mature at a similar age, but they may not reproduce successfully until much later because of intense competition among males. In Shark Bay, it is thought that females live longer than males

Reproduction: Dolphins can reproduce year-round but there is a peak in births in October and November in Shark Bay. Gestation lasts for 12 months, and young dolphins can swim immediately. A young calf can be distinguished by its uncoordinated surfacing (popping to the surface like a cork) and the presence of fetal folds on its sides. Females nurse their calves for three or more years and will only nurse a single calf at a time. Young dolphins are highly susceptible to tiger sharks. In Shark Bay, more than half don't survive their first several years. Females can become pregnant with a new calf within weeks of losing one.

Diet: Indo-Pacific dolphins mainly eat fish but also eat squid, cuttlefish, and even small stingrays. Dolphins in Shark Bay appear to feed almost exclusively on fishes. Dolphins forage in many habitats in Shark Bay and exhibit a wide range of foraging behaviors that are used in particular habitats or for specific fish species. Some dolphins have foraging specialties. A small group of dolphins exhibit a unique foraging behavior where they pick up a basket sponges from the sea floor and wear it over their rostrum (beak) like a glove. The sponge protects a dolphin's rostrum from being damaged as they drag it through the sand, rocks, and shells in an attempt to find and flush prey.

Social behavior: The dolphins of Shark Bay are some of the best-studied in the world. They have complex societies and relationships. Females tend to be found in groups that change in size and composition (which individuals are present) frequently. Males, on the other hand, tend to form preferential relationships with a small number of other males. Juveniles tend to be found in their own groups. To find out about the incredible findings of the Shark Bay Dolphin Research group please follow this link (www.monkeymiadolphins.org).

SBERP Research: SBERP studies on dolphins have focused on how they respond to spatial and temporal variation in the abundance of their fish prey and their predators – tiger sharks. We have found that more than 70% of dolphins have scars or wounds from tiger shark attacks and at least 10% of the dolphin population is attacked unsuccessfully each year. Despite these high attack rates, few adult dolphins are killed by sharks each year. When sharks are not in the bay, dolphins are usually found foraging in shallow waters where most of their prey is found. However, when sharks increase in abundance, dolphins largely avoid feeding in the shallow habitats where sharks are most common and instead spend time foraging for the less abundant fish in deep waters. Many juvenile males, however, appear to continue foraging in shallow waters when sharks are around.

