

PALM BEACH DOLPHIN PROJECT FACT SHEET

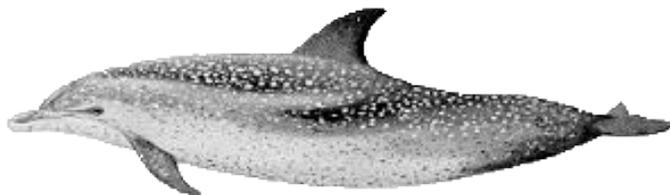


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ATLANTIC SPOTTED DOLPHIN

Stenella frontalis

CLASS: Mammalia
ORDER: Cetacea
SUBORDER: Odontoceti
FAMILY: Delphinidae
GENUS: *Stenella*
SPECIES: *frontalis*



The Atlantic spotted dolphin is considered playful and acrobatic. They love to ride the bow wave of boats and surf the wake of ships they encounter. They are also more likely to approach humans than other dolphin species, and become easily habituated to human activity in the wild, but do not survive in captivity.

PHYSICAL DESCRIPTION: Spotted dolphins are difficult to describe because their size and coloring vary according to their geographic location. Found only in tropical waters, and subtropical waters, there are two recognized species: the Atlantic species, *Stenella frontalis*, and the worldwide species, the pan-tropical spotted dolphin, *Stella attenuata*. Their long slim beak contains 35 to 48 small conical teeth in each side of the upper jaw and 34 to 47 small, conical teeth in each side of the lower jaw.

COLOR: Spotted dolphins change their coloration as they mature. Newborn calves are dark gray with a white belly (two-tones). As the animal grows older, dark spots begin to appear. First dark spots appear on the lower part of the body (speckled). When sexually mature, light spots begin to appear on the dark upper portion of the body (mottled). Eventually, the spots merge into almost solid color patterns (fused). This color pattern process is a visual indicator of the age of the dolphin.

FINS AND FLUKES: The dorsal (top) fin is tall and curved; the flippers are small and pointed. The flukes are small and pointed at the tips with a small median notch.

LENGTH AND WEIGHT: Length averages about 7 feet (2.1 m); weight averages 220 pounds (100 kg). Calves are 32 to 36 inches (80 to 90 cm) at birth.

FEEDING: Spotted dolphins feed on many varieties of fish and squid found in various water depths. They also feed on small fish and eels found buried in the sand in shallow waters.

MATING AND BREEDING: This species reaches maturity between 6 and 8 years of age or when the animal is about 6.5 feet (2 m) in length. Mating and calving take place throughout the year; the calving interval is believed to be about every 2 - 3 years, but in stressed populations mating takes place at an earlier age and calving at shorter intervals, a response to the enormous mortalities suffered from being entangled in nets by the tuna fishery. Gestation is 11 1/2 months and calves are nursed for 11 months. This interval is also longer for male infants, as mothers tend to spend more time caring for the boys. Female calves separate from their mothers earlier and spend a year babysitting the calves of other mothers before becoming mothers themselves.

DISTRIBUTION AND MIGRATION: Atlantic Spotted dolphins are generally found in groups of fewer than 50 individuals but have populations comprising hundreds of animals. These animals are highly social. Schools may contain both sexes and all

ages. Some populations are found exclusively in deeper water, some populations prefer to frequent shallow waters, especially for behaviors associated with child care and pregnancy. Atlantic Spotted dolphins are sometimes seen together with bottlenose dolphins.

NATURAL HISTORY: Like all mammals, dolphins are warm blooded, breathe air, give birth to live babies, feed their new born milk, and are born with hair. Being warm, blooded, or homeothermic, dolphins maintain a constant body temperature regardless of the surrounding water temperature. Unlike terrestrial mammals, including humans, dolphins are conscious breathers, meaning they must be aware of their breathing to avoid involuntarily taking a breath while underwater. Atlantic spotted dolphins are capable of diving to up to 60 meters, remaining underwater for up to 6 minutes. They are known to be preyed upon by sharks, but killer whales and other small-toothed whales may also be a threat.

The Atlantic spotted dolphin can often be seen traveling in small pods consisting of up to 15 dolphins. These dolphins enjoy maintaining a high level of social interaction with one another and can often be seen performing leaps and various acrobatic stunts. The Atlantic spotted dolphin communicates using vocal sounds and body language. When it comes to sound these dolphins use high-pitched clicks and whistles to communicate about nearby threats, food, a desire to play, and a number of other things. Each dolphin has its own unique frequency which helps them understand who is communicating, and also provides them with a geographic reference (location). This can be extremely useful when a mother for instances needs to keep track of one of her kids or when two friends are communicating with one another in a large pod. Body language is also important for communication. Dolphins may bump into one another or visualize their body language by spy hopping or leaping out of the water to alert other dolphins of various interests or threats or to display their physical abilities.

THREATS: Spotted dolphins are protected in U.S. waters by the Marine Mammal Protection Act. While the species is not considered endangered, they are, like all marine mammals, exposed to pollutants and biotoxins, and viral outbreaks. Studies of large, high mortality event over the last few decades suggest that the immune system of these animals can be severely affected by heavy metals, PCBs and other pollutants. Atlantic spotted dolphins are not listed as threatened or endangered under the Endangered Species Act, and the Western North Atlantic stock is not considered strategic under the Marine Mammal Protection Act. No fishery-related mortality or serious injury has been observed during recent years; therefore, total fishery-related mortality and serious injury can be considered insignificant and approaching the zero mortality and serious injury rate. There are insufficient data to determine the population trends for this species.

BIBLIOGRAPHY: For further details about Atlantic spotted dolphins you may want to consult the following literature:

- Marine Mammals of the World. FAO Species Identification Guide. Rome: FAO. Klinowska, M. 1991. Dolphins, Porpoises and Whales of the World: The IUCN Red Data Book. Gland, Switzerland: IUCN (World Conservation Union).
- Whales and Dolphins. Leatherwood, S. and R. Reeves. 1983. San Francisco: Sierra Club Books.
- Brunnick, B.J. 2000. The social organization of the Atlantic spotted dolphin, *Stenella frontalis*, in the Bahamas. Dissertation Thesis, Union Institute and University. 149 pp.

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*There is no seam between the doings of wild animals and human affairs.
We can't go on losing them and not loose part of ourselves.*

Kenneth S. Norris