

Bottlenose Dolphin

Tursiops truncatus

Deilf bolgshronach



The bottlenose dolphin is one of the most well known species of marine mammals. They have a robust body and a short, thick beak. Their coloration ranges from light gray to black with lighter coloration on the belly. Inshore and offshore individuals vary in color and size. Inshore animals are smaller and lighter in color, while offshore animals are larger, darker in coloration and have smaller flippers.

Bottlenose dolphins range in length from 1.8 to 3.8 m with males slightly larger than females. Adults weigh from 136-635 kg). This is a long-lived dolphin species with a lifespan of 40-45 years for males and more than 50 years for females.

Bottlenose dolphins are commonly found in groups of 2 to 15 individuals. Offshore herds sometimes have several hundred individuals.

The flukes (lobes of the tail) and dorsal fin are formed of dense connective tissue and do not contain bone or muscle. The animal propels itself by moving the flukes up and down. The pectoral flippers (at the sides of the body) are for steering.

Their search for food is aided by a form of sonar known as echolocation, they locate objects by producing sounds and listening for the echos. A broadband burst pulse of clicking sounds is emitted in a focused beam in front of the dolphin. To hear the returning echo, they have two small ear openings behind the eyes, but most sound waves are transmitted to the inner ear through the lower jaw. As the object of interest is approached, the echo grows louder, and the dolphins adjust by decreasing the intensity of the emitted sounds. (This contrasts with [bats](#) and sonar, which reduce sensitivity of the sound receptor.) The inter-click interval also decreases as the animal nears the target. Evidently, the dolphin waits for each click's echo before clicking again.

They communicate through burst pulsed sounds, whistles, and body language. Examples of body language include leaping out of the water, snapping jaws, slapping the tail on the surface

and butting heads. Sounds and gestures help keep track of other dolphins in the group, and alert other dolphins to danger and nearby food. Lacking vocal cords, they produce sounds using six air sacs near their blow hole. Each animal has a uniquely identifying, frequency-modulated narrow-band signature vocalization (signature whistle)

The tonal whistle sounds (the most melodious ones) allow dolphins to stay in contact with each other (above all, mothers and offspring), and to coordinate hunting strategies. The burst-pulsed sounds (which are more complex and varied than the whistles) are used "to avoid physical aggression in situations of high excitement", such as when they are competing for the same piece of food, for example. The dolphins emit these strident sounds when in the presence of other individuals moving towards the same prey. The "least dominant" one soon moves away to avoid confrontation.

The bottlenose dolphin has a single blowhole located on the dorsal surface of the head consisting of a hole and a muscular flap. The flap is closed during muscle relaxation and opens during contraction. Dolphins are voluntary breathers, and must deliberately surface and open their blowholes to get air. The bottlenose dolphin typically rises to the surface to breathe through its blowhole two to three times per minute, although it can remain submerged for up to 20 minutes.

Dolphins can breathe while "half-asleep". During the sleeping cycle, one brain hemisphere remains active, while the other hemisphere shuts down. The active hemisphere handles surfacing and breathing behavior. The daily sleeping cycle lasts for about 8 hours, in increments of minutes to hours. During the sleeping cycle, they remain near the surface, swimming slowly or "logging", and occasionally closing one eye

Females sexually mature at ages 5–13, males at ages 9–14. Females reproduce every two to six years. The gestation period averages 12 months. Births can occur at any time of year, although peaks occur in warmer months. The young are born in shallow water, sometimes assisted by a (possibly male) "midwife", and usually only a single calf is born. Twins are possible, but rare. Newborn bottlenose dolphins are 0.8–1.4 m long and weigh 9–30 kg. The calf suckles for 18 months to up to 8 years, and continues to closely associate with its mother for several years after weaning. Adult males live mostly alone or in groups of two to three, and join pods for short periods of time. Adult female and young dolphins normally live in groups of up to 15 animals

A dolphin's diet consists mainly of small fish, crustaceans, and squid. Its cone-like teeth serve to grasp, but do not chew food. When they encounter a shoal of fish, they work as a team to herd them towards the shore to maximize the harvest. They also hunt alone, often targeting bottom-dwelling species. The bottlenose dolphin sometimes hits a fish with its fluke, sometimes knocking it out of the water, using a strategy called "fish whacking".

Dolphins can exhibit altruistic behaviour toward other sea creatures. On Mahia Beach, New Zealand, on March 10, 2008, two pygmy sperm whales, a female and calf, stranded on the beach. Rescuers, including Department of Conservation officer Malcolm Smith, attempted to refloat them four times. Shortly, a playful bottlenose dolphin known to local residents as Moko arrived and, after apparently vocalizing at the whales, led them 200 m along a sandbar to the open sea, saving them from imminent euthanasia. The species sometimes shows curiosity towards humans in or near water. Occasionally, they rescue injured divers by raising them to the surface. They also do this to help injured members of their own species. In November 2004, a dramatic report of dolphin intervention came from New Zealand, four lifeguards, swimming 100 m off the coast near Whangarei, were approached by a shark (reportedly a great white shark). Bottlenose dolphins herded the swimmers together and surrounded them for 40 minutes, preventing the shark from attacking, as they slowly swam to shore.

Commercial 'dolphin encounter' enterprises and tours operate in many countries. The documentary film "The Cove" documents how dolphins are brutally captured and sold to these enterprises while the remaining pods are slaughtered.

Photos: Wikicomons