

Common Dolphin

Delphinus delphis (short-beaked)



Photo courtesy of NOAA

The common dolphin is a playful and intelligent animal. For fun, the common dolphin will often bow ride — riding the pressure waves generated by boats or large whales. Like most other cetaceans, it is a social animal that lives in large family groups. It has a fatty area at the front of the head called the melon that it uses for echolocation. The common dolphin is also very vocal, communicating through clicks, whistles and pulses.

Characteristics

The common dolphin is a small dolphin. An adult common dolphin is 1.5 to 2.5 meters (5 to 8 feet) in length, and weighs 70 to 140kg (150 to 300 pounds). The dolphin's streamlined body is adapted to swimming over long distances. Its dorsal fin is triangular or sickle shaped.

The common dolphin is more colourful and patterned than most other dolphins, earning it various nicknames such as white bellied, saddleback, crisscross, or hourglass dolphin. The two species of common dolphin look similar. They both have dark grey or black backs and their bellies are light grey or white. Along their sides, they tend to be light grey from the dorsal fin to their tail, and tan from their dorsal fin to their eyes. This characteristic hourglass pattern divides their darker tops from their lighter belly. A dark line that runs across their head connects dark circles around their eyes. A black line also runs from their lower jaw to their flippers. Their beaks are usually dark with a white tip.

The main difference between the two species of dolphin is that the long-beaked dolphin has a longer beak and is more muted in colour than the short-beaked dolphin. The profiles of the two species also differ in that the short-beaked dolphin has a more rounded head that meets the beak at a sharper angle. The short-beaked dolphin is also relatively heavier and has larger dorsal fins and flippers.

Habitat & Behaviour

Common dolphins tend to like waters that range from 10 to 28 degrees Celsius (50 to 82 degrees Fahrenheit). They are found in nearly all tropical, subtropical and warm temperate seas. In the Atlantic Ocean, they are found from Nova Scotia, Canada and Iceland down to the southern tip of Africa. In the Pacific Ocean, they range from Victoria, British Columbia, Canada and Japan down to southern Australia and Argentina. They are also found in the Mediterranean Sea, the Black Sea, the Red Sea, the Persian Gulf, and occasionally in the North Sea. The long-beaked dolphin is more common in coastal waters, while the short-beaked dolphin is more common in offshore waters.

The common dolphin's diet varies by region and season, comprised mostly of fish, squid and octopus. Fish typically eaten by common dolphins include cod, herring, anchovy, pilchard, hake and sardines. Common dolphins can eat up to a third of their body weight in food in a day. Common dolphins have 40 to 55 pairs of teeth in each jaw, but they swallow their food whole. Their teeth are used to capture their prey but not for chewing it.

Common dolphins can hunt in groups called pods to herd schools of fish. Sometimes they are joined by bottle-nosed or white-sided dolphin pods while hunting. These hunting groups can include 10 to 500 members, and typically last less than an hour. Although common dolphins typically swim between 6 to 8 km/hr (4 to 5 miles/hr), they can swim up to 30km/hr (18 miles/hr) when hunting to outdistance their prey. They can also dive down to a depth of 200 meters (656 feet), though most of their food is found within 9 to 50 meters (30 to 165 feet) of the surface of the water.

Porpoising is perhaps the most well-known maneuver of dolphins. This is where they repeatedly leap out of the water, and re-enter it in clean arcs. Porpoising is often used in long-distance travels, when chasing prey, or when escaping predators. Breachings, where dolphins jump up and then splash into the water, are often used to confuse schools of fish, and to alert other pod members to the presence of food. Breaching may also be used to shake any clinging organisms, such as parasites or barnacles, from their skin. Common dolphins are often found bow-riding on the pressure waves of boats or large whales. They also race alongside boats. Both behaviours do not seem to have any purpose, other than having a bit of fun.

Dolphins and other toothed-whales use echolocation to locate prey and obstacles in the water. A series of high-frequency clicks are produced and passed through the melon, the fatty area at the front of the head. The beam of sound hits objects, and the echoing sound is received through the fat of the lower jaw, amplified to the ear, and interpreted by the brain. Dolphins can identify the signature echoes of their preferred prey by this method.

Dolphins make whistles, pulses and clicks in combination, but little is known about their roles in communication. Each dolphin has their own signature whistle, and calves can use this to locate and identify their mothers.

Although common dolphins are not monogamous, they do form strong social bonds with family members. They have been observed to support sick or injured members, and they seem to exhibit grief when a member dies.

Dolphins cannot go into a deep sleep because they must be conscious to breathe. Instead, they rest half of their brains at a time. The awake half of the brain regulates breathing. Dolphins can hold their breath for 15 minutes, but they usually surface every few minutes to breathe. Air is taken in through the blowhole located on the top of the head.

Life Cycle

Common dolphins live about 30 to 40 years, and reach sexual maturity at about 3 to 4 years. Courtship and mating occur in the spring. Courtship behaviour includes playful pursuit, swimming close together, stroking each other with flippers, and rubbing bodies together. Mating is done belly to belly.

Being a mammal, common dolphins give birth to live young after 10 to 11 months of gestation. Calves are born tail first, are about 90cm (35 inches) long, and weigh about 10kg (22 pounds). The newborn calves are quickly incorporated into the family group after birth. The family group will often form protective pods, swimming close together with the more vulnerable members like the calves in the centre. A calf rarely strays more than a few feet from its mother and feeds on its mother's nutrient-rich milk. Because dolphins do not have lips, they cannot suck milk from their mothers. Instead, their mother contracts muscles and squeezes its milk into a calf's mouth. After six months, calves will begin to eat solid food, and they will be fully weaned after a year and a half.

Threats

Natural predators of dolphins are sharks and orcas, but fisheries and pollution pose the biggest threats to this animal. Common dolphins sometimes get caught in the nets of commercial fisheries and drown. They are also sometimes killed by humans because commercial fisheries see them as a source of competition for fish.

Because dolphins use echolocation, noise pollution can play a factor in murky waters where visibility is low. If other noises, especially sonar, interfere with echolocation, dolphins can lose track of where they are and beach themselves.

Common dolphin populations are currently not at risk of extinction, although there is concern for the drop of numbers in the Mediterranean Sea.

What We Can Do To Help

Most dolphin species have the problem of being caught up in commercial fish nets, or being shot by commercial fishers. As consumer groups and animal activists have educated the public on this issue, the rate of fishery-related dolphin mortality has dramatically decreased. One way to ensure that the deaths continue to decrease is to look for 'dolphin-friendly' labels on canned fish, and to take into consideration the guidelines put out by the Monterey Bay Seafood Watch. A link is available in the bibliography to the Monterey Bay Seafood Watch website.

Written by: Sophia To

Bibliography

Monterey Bay Seafood Watch website:

<http://www.mbayaq.org/cr/seafoodwatch.asp>

American Cetacean Society website:

<http://www.acsonline.org/factpack/common.htm>

University of Michigan Museum of Zoology website:

http://animaldiversity.ummz.umich.edu/site/accounts/information/Delphinus_delphis.html

Mount Allison University website:

<http://www.mta.ca/~kvernes/mammalweb/dolphin/dolphin.htm>

Jaap's Marine Mammal Pages website:

<http://ourworld.compuserve.com/homepages/jaap/delphin.htm>

Whale Web website:

<http://www.whale-web.com/dolphins/common.html>