CETACEANS OF SINDHUDURG

The Konkan Cetacean Research Team
What are Marine Mammals and Cetaceans

Marine mammals are a group of mammals that live in an aquatic environment (e.g., land-locked lakes, rivers, estuaries, oceans etc.). Most importantly, they get all or most of their food from the aquatic environment. Cetaceans are a group of marine mammals, which include whales, dolphins and porpoises. These animals are fully adapted to live their lives under water and never return to life on land. Their body plans are greatly modified from their familiar terrestrial mammals.
Cetaceans are divided into two sub-groups, the toothed cetaceans (Odontocetes) and those without teeth (Mysticetes). Toothed cetaceans include about 71 species of river and ocean dolphins, porpoises, beaked whales, orcas and sperm whales.

Mysticetes include about 14 species of whales that have the characteristic baleen; fibrous bristles made of the same material as human hair, hanging from their upper jaws like large plates.

Cetaceans of the Sindhudurg Coast

The most common dolphin found in Sindhudurg is the Indopacific humpback dolphin. These occur close to the shore in shallow waters, mostly around estuaries and river mouths.

The Indopacific finless porpoise occurs from the coast up to 100m depth, but is relatively uncommon. It is a cryptic animal and difficult to spot because of the absence of the dorsal fin.

Other cetaceans like Bryde's whales and blue whales also occur in this region. Their presence is relatively rare.
Cetaceans of Sindhudurg

Blue Whale (Dev Maasa/Teev)

Indo-Pacific finless porpoise (Buliya)

Sperm Whale

Indian Ocean Humpback Dolphin (Gaada Reda)

Bryde’s Whale (Dev Maasa/Teev)
What makes whales, dolphins and porpoises mammals?

Cetaceans are air breathing, warm-blooded animals.

They are viviparous and give live birth to their young ones. They are also distinguished by the presence of mammary glands with the help of which they nourish their offspring.

How do Cetaceans survive in the sea?

Cetaceans are mammals that are adapted to spend their entire life in the sea. Their streamlined bodies, smooth skin and tail flukes to help them swim fast. Two flippers present on the two sides of their bodies’ aids in balance during swimming.

The head shape of cetaceans has been modified to suit breathing under water. The nostrils or blowhole is located at the top of the head so as the head is not required to be lifted fully out of the water. These animals come to the surface of the water to breathe at regular intervals, but many cetaceans can stay underwater for long periods of time. They open the blowhole to gulp in air at the water surface and before going down again they close their blowholes to prevent water to enter them.

They also have a blubber layer which serve many functions; insulation, streamlining and energy storage.

Cetaceans generally live in groups called pods or schools. They are highly intelligent and social animals. Some species like whales are generally solitary but aggregate in large numbers during feeding and reproduction.
Females give live birth to their young. Baby cetaceans are called calves. Calves are born with soft flukes and fins, which makes it easier for them to slip out during birth. They usually come tail first, the blowhole comes out last. This stops the calf from taking in water into the lungs. Cetaceans give birth near the water surface, which allows the calf to surface quickly to take its first breath. Mother feeds milk to their calves, which is secreted from the mammary slits located near the tail. The milk is rich in fat, which helps the calves develop a thick layer of blubber, which keeps them warm.

Mothers take care of their calves and protect them for a long time after birth.

While resting, cetaceans sleep by “switching off” half of their brains at a time. The other half remains switched on to breathe and to detect predators.

Cetaceans have a weak sense of smell. They have a good eyesight both above and below water as well as a keen sense of hearing. Cetaceans also use echolocation for navigation, detecting predators and prey and to find members of their own group.

They force air through small tubes located inside their blowholes to generate clicks. This sound then passes through a fatty organ called the melon located in the forehead that helps to focus the clicks. The clicks are reflected from the objects towards which they are directed. The reflected sound then creates an image that help the cetaceans locate the object.
**Dolphins and Porpoises**

Humpback dolphins are called so because of their distinctive hump on the back near the dorsal fin. They are large animals about 7 ft. in length and have long beaks and conical teeth. They feed on mackerel, mullets, sardines and shoals of other small fish.

Porpoises are smaller than dolphins grow up to about four ft. They don’t have beaks or a dorsal fin. Their teeth are blunt and mushroom shaped. They feed on crustaceans mainly.

**Baleen whales**

Baleen whales are the largest of the marine mammals. These include the Blue whale which is the largest living creature on the earth; more than 30 meters (up to 100 ft.) in length.

Blue whales and Bryde’s whales are the two species of baleen whales found along Sindhudurg.

Baleen whales are mainly solitary, to be found in large aggregation on foraging or breeding grounds. These animals migrate long distances from polar to tropical waters.

These animals are batch feeders, gulping large quantities of water and swallowing large shoals of krill, fish and zooplankton and use their baleen to filter prey and push water out with help of their tongues.

Baleen whales are not believed to echo-locate, as do dolphins and porpoises. They use low-pitched sounds for communication that travel long distances.
What KCRT is doing?
A group of researchers study cetaceans along Sindhudurg. They are trying to find out how many dolphins, porpoises and whales are present along the Sindhudurg coastline.

What can you do to help?
When you see dolphins, click pictures of their fins and send them along with details of where and when you sighted them on our email: the.kcrt@gmail.com.