Whales and dolphins take up a distinguished place in the animal kingdom. Since ancient times they drew people's attention; whilst some civilizations considered them to be divine, others sought to exploit them as an important source of food. There are records of Phoenicians hunting whales in the Mediterranean 1000 years before Christ. In more recent history whaling has resulted in extinction of many species with several more still critically endangered. At present, whales and dolphins are much more appealing to us for the purposes of research and observation. Hence they face less direct threats, yet the modern relationship between man and sea puts before them new, indirect, but still dangerous challenges.

Whales and dolphins appeared on the Earth some 55 millions of years ago, evolving from ancient land mammals. Today, their closest terrestrial relative is the hippopotamus. Adaptations to the marine environment resulted in the highly distinguishing characteristics of whales and dolphins. Front limbs were replaced by pectoral fins while rear limbs assimilated into the body and the strong tail developed as an extension to the back-bone. To conserve body heat, a thick layer of blubber under skin developed. In the blood twice the amount of erythrocytes and myoglobin, than humans allows for very long deep dives; some species dive deeper than 2500 m and longer than an hour.

Whales and dolphins are also record holders. The largest animal ever to live on Earth is the blue whale (Balaenoptera musculus). This beast can grow to more than 30m long and weigh 180 tons. While suckling a blue whale calf can gain 90 kg a day. The blue whale is also the loudest animal on the planet - their low-frequency sounds can be heard hundreds of miles away.

Bottlenose dolphin *(Tursiops truncatus)*

These dolphins live in all seas and oceans in the world except for the Polar Regions. In the Adriatic, they are believed to be the only permanent resident marine mammal species left. Bottlenose dolphins are very social animals. Physical contact is very important a way of establishing social status. Jumps are sometimes a matter of showing the strength, but can also be a way of communication. Being at the top of marine food chain, they can also be indicators of the general state of marine environment. A sudden increase of the number of recreational vessels on the sea during the summer season can push them away from the area they normally use as feeding ground.

Common dolphin *(Delphinus Delphis)*

Fin whale *(Balaenoptera physalus)*

Common dolphin *(Delphinus delphis)*

This species inhabits tropical and sub-tropical areas of Atlantic and Pacific oceans. They also live in Mediterranean and years ago they lived in the Adriatic. The probable cause of their disappearance is the degradation of their natural habitat and overfishing. Common dolphins were considered a competitor for pelagic blue fish and were killed in a state sponsored campaign which led to a significant decrease in the Adriatic population. For the last three decades encounters with this species is very rare.

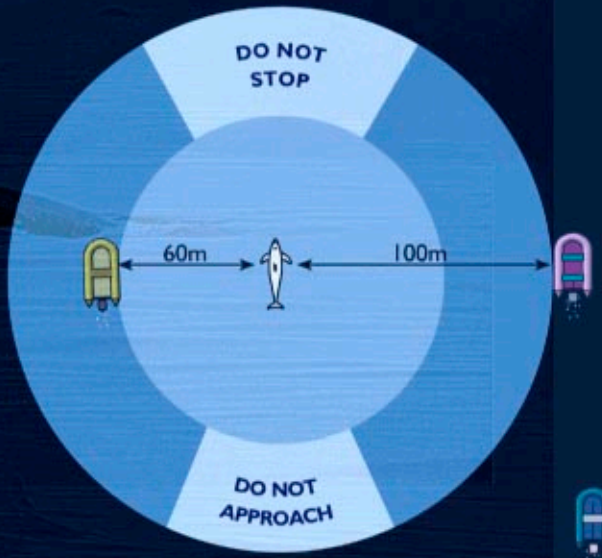
Striped dolphin *(Stenella coeruleoalba)*

It's a small species that inhabits tropical and sub-tropical off-shore areas of all the oceans and seas. In Mediterranean it is the most abundant dolphin, whilst in the Adriatic it is only rarely seen. It has natural predators - sharks and killer whales, but the biggest threat comes from humans. They are often accidentally entangled in gill nets set for tuna and sword fish. Habitat degradation and over fishing, which has narrowed their source of food, together with pollutants such as organo-chlorines, which weaken their immune system, present a clear threat to their survival in nature.

Striped dolphin *(Stenella coeruleoalba)*

Fin whale *(Balaenoptera physalis)*

Fin whales live all oceans, especially cold, Polar Regions. There is, however, a big population living in the Mediterranean. Some of these animals visit the Adriatic and the last sighting was recorded on 20th June 2007around the island of Vis. Before the end of 19th century, when the steam engine and the explosive-loaded harpoon were invented, Fin whales were too fast for whaling ships. These new technologies, however, made them the most hunted species in 20th century - 725.000 were killed in the southern hemisphere alone. At this moment the size and status of their population in oceans remains unknown. Although collisions with ships occur, Fin whales are rarely hunted deliberately.



Encountering whale or dolphin...

...out on the sea really is an experience to remember. We would all like to observe them from close distance, but since they are wild animals some rules should be obeyed so that they are not disturbed.

1. Approach them slowly, keeping your course parallel to them, while avoiding sudden changes in speed and heading;
2. Put the engine to idle and let them approach your boat if they want;
3. Do not produce any disturbing sounds, especially with engine;
4. Make sure there is only one boat within 100 m and no more than three boats within 200 m;
5. Do not stay with them for longer than 30 minutes;
6. Leave the area, gradually only accelerating when more than 100 m away
7. Do not try to feed them or swim with them; dolphins can weigh around 300 kg - a friendly contact for them can be a serious for you.

Threats

Modern technologies allow fisheries to exploit virtually all marine resources - all commercially viable species are being caught, in all areas, all year round. As a result, there is less food available for whales and dolphin. To satisfy their nourishment demands they have to swim greater distances and leave their natural habitats.
Furthermore, lots of whales and dolphins end up as by-catch in fishing nets - the number is estimated to around 300,000 individuals per year!
Another big problem is underwater noise. This is today considered to be one of the most persistent sea pollutants. It can affect whales and dolphins in more than one way. When exposed to high level of underwater noise they spend less time on the surface and avoid areas usually used as fishing grounds Also, sea traffic corridors can act as a natural barrier which only few brave animals will dare to cross to try to reach some other area of interest. This can lead to the division and isolation of population reducing their viability.
Another acoustic threat are modern naval sonar devices that can produce sounds more intense than that of a rocket launch. Since whales and dolphins use sounds for navigation and communication this sonar can completely disable their echo-location and even cause physical injuries. Cases of mass stranding have often been recoded in areas where navy exercises have been held.

Have you seen a dolphin or found a stranded one?

Please, report it. Your information can be of a great value for further research and conservation of marine mammals.

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Marine mammals in the Adriatic