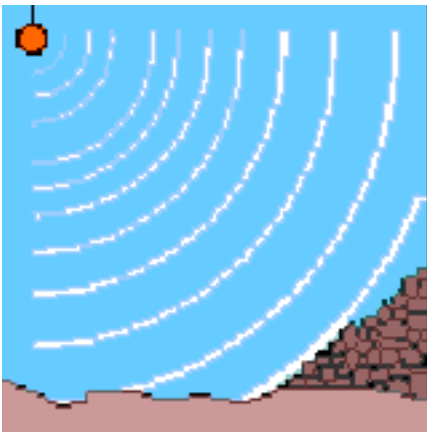


Whales, dolphins and sound

Sound is very important to whales and dolphins for hunting, navigating and communicating. Toothed whales and baleen whales use sound quite differently. Toothed whales and dolphins (for example killer whales and bottle-nose dolphins) use echolocation for hunting and navigating, while baleen whales (for example humpbacks and blue whales) generally produce a series of sounds which are frequently termed 'songs' that are used for communicating.

Whale songs

Whale songs consist of distinct sequences of groans, moans, roars, sighs and high pitched squeals that may last up to 10 minutes or longer. It is thought these sounds could be used for communicative purposes such as to identify other individuals, for long-range contact and to warn others of threats as well as navigation. Baleen whales do not have vocal chords so scientists are still unsure how whale songs are produced.



Listen to whale songs

- [Blue whale song \(MP3 - 333.71 KB\)](#)
- [Fin whale song \(MP3 - 269.02 KB\)](#)
- [Humpback whale song \(MP3 - 275.77 KB\)](#)
- [Dwarf minke whale song \(MP3 - 188.03 KB\)](#)

Note: Both the blue whale and fin whale songs are five times their normal speed. Normally sounds from these whales are too low for humans to hear.

Echolocation

Toothed whales (including dolphins) have developed a remarkable sensory ability used for locating food and for navigation underwater called echolocation. Toothed whales produce a variety of sounds by moving air between air-spaces or sinuses in the head. Sounds are reflected or echoed back from objects, and these are thought to be received by an oil filled channel in the lower jaw and conducted to the middle ear of the animal.

When swimming normally, the sounds emitted are generally low frequency; the echoes from these sounds provide information about the seafloor, the shorelines, underwater obstacles, water depth, and the presence of other animals underwater. A recent theory suggests that very high intensity focussed sounds may be used to stun or disorient prey in hunting.

Echolocation is extremely sensitive and some scientists think it may provide toothed whales and dolphins with a three dimensional view of the world. The whistles, clicks, groans and other noises made by many toothed whales are also thought to be also important in communication between individuals.

Listen to a sperm whale echolocating

- [Sound of a sperm whale echolocating \(MP3 - 197.59 KB\)](#)

<https://www.environment.gov.au/marine/marine-species/cetaceans/whale-dolphins-sound>