

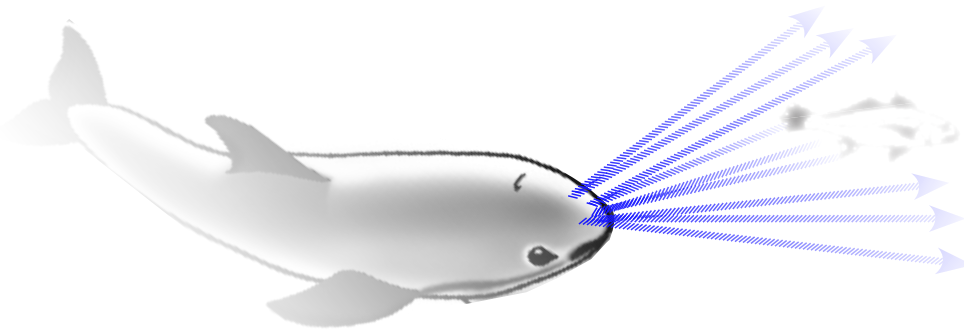
# Echolocation: Using Sound to See



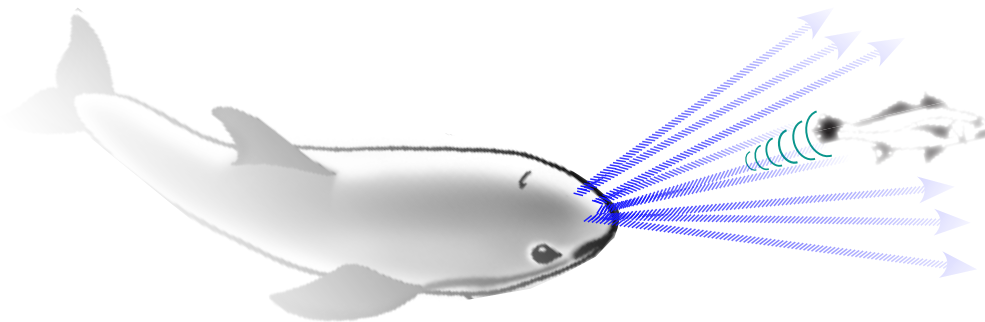
Vaquitas hunt fish and squid on or near the ocean floor. The water in the Gulf of California is not clear. Vaquitas rely on sound to find their way and find food. Using sound to see is an adaptation called **echolocation**.

To echolocate, a vaquita sends out beams of sound. The sound is produced and sent out of its melon (the forehead area).

When the sound hits something, it bounces or echoes back. The bounced sound is picked up by the lower jaw and interpreted by the porpoise.



Echolocation is an incredible adaptation. Using sound, a whale can tell how big something is, how far away it is, how fast it is moving, and much more.



Though no studies have been done with the vaquita, scientists have studied echolocation in bottlenose dolphins. Scientists have shown that a dolphin's echolocation is so accurate, it can distinguish the difference between two objects with only a millimeter difference in size. That's thinner than a dime's difference in size. Can you look at two identical objects and see such a tiny difference?

Scientists believe most/all toothed whales can echolocate. Baleen whales, like gray whales or blue whales, cannot echolocate.