

SPERM WHALE



The **sperm whale** (*Physeter macrocephalus*), or **cachalot**, is the largest of the toothed and the largest toothed predator. It is the only living member of genus *Physeter*, and one of three extant species in the sperm whale family, along with the **pygmy sperm whale** and **dwarf sperm whale** of the genus *Kogia*. The name *sperm whale* is a clip of *spermaceti whale*. Spermaceti, originally mistakenly identified as the whales' semen, is the semi-liquid, waxy substance found within the whale's head. The sperm whale is also known as the "cachalot", which is thought to derive from the archaic French for "tooth" or "big teeth". According to Encarta Dictionary, the word *cachalot* came to English "via French from Spanish or Portuguese *cachalote*, perhaps from Galician/Portuguese *cachola*, 'big head'".

Interesting Facts:

- The sperm whale is the largest toothed whale, with adult males measuring up to 20.5 metres (67 ft) long and weighing up to 57,000 kilograms (56 long tons; 63 short tons).
- By contrast, the second largest toothed whale, Baird's Beaked Whale measures 12.8 metres (42 ft) and weighs up to 15 short tons (14,000 kg).
- It is among the most sexually dimorphic of all cetaceans. At birth both sexes are about the same size, but mature males are typically 30% to 50% longer and three times as massive as females.
- The sperm whale's unique body is unlikely to be confused with any other species. The sperm whale's distinctive shape comes from its very large, block-shaped head, which can be one-quarter to one-third of the animal's length.
- The S-shaped blowhole is located very close to the front of the head and shifted to the whale's left. This gives rise to a distinctive bushy, forward-angled spray.
- The sperm whale's flukes are triangular and very thick. Proportionally, they are larger than that of any other cetacean, and are very flexible.
- The whale lifts its flukes high out of the water as it begins a feeding dive. It has a series of ridges on the back's caudal third instead of a dorsal fin. The largest ridge was called the 'hump' by whalers, and can be mistaken for a dorsal fin because of its shape and size.
- The sperm whale's lower jaw is very narrow and under slung. The sperm whale has 18 to 26 teeth on each side of its lower jaw which fit into sockets in the upper jaw. The teeth are cone-shaped and weigh up to 1 kilogram (2.2 lb) each. The teeth are functional, but do not appear to be necessary for capturing or eating squid, as well-fed animals have been found without teeth or even with deformed jaws.
- In 1959, the heart of a 22-tonne male slain by whalers was measured to be 116 kg (255 lbs), about 0.5% of its total mass.
- The brain is the largest known of any modern or extinct animal, weighing on average about 7.8 kilograms (17 lb), more than five times heavier than a human's, and has a volume of about 8,000 cm³.
- The olfactory system is reduced, suggesting that the sperm whale has a poor sense of taste and smell.
- By contrast, the auditory system is enlarged. The pyramidal is poorly developed, reflecting the reduction of its limbs.
- The sperm whale's eye does not differ greatly from those of other whales except in size. It is the largest among the toothed whales, weighing about 170 g. It is overall ellipsoid in shape, compressed along the visual axis, measuring about 7×7×3 cm.