

# Fin Whale



*Balaenoptera physalus*

## Physical Description:

At 75-85 ft., fin whales or finback whales are the second largest species of whale (blue whales being the largest). They weigh between 40-80 tons. Females are slightly larger than males by 5 to 10% and adult males in the southern hemisphere are also slightly larger than their counterparts in the northern hemisphere. Fin whales have a sleek, streamlined body with a V-shaped head. Fin whales belong to the rorquals, a family that includes the humpback whale, blue whale, Bryde's whale, sei whale, and minke whale. Rorquals all have dorsal fins and throat grooves that expand when the animal is feeding. Fin whales have a prominent, sickle or hooked shaped dorsal fin located about two-thirds of the way back on their bodies. They have a series of 50-100 grooves on the underside of their bodies extending from under the lower jaw to the navel. Fin whales are light gray to brownish-black on their backs and sides. They have small, tapered fins while the fluke is wide, pointed at the tips, and notched in the center. The underside of the tail flukes is white with a gray border. Their ventral surfaces are white and they have unique asymmetrical head coloring – dark on the left side of the lower jaw and white on the right side. Many individuals have light gray chevrons (lines or stripes that form a “V”) behind their heads.

## Photo Identification Methods:

Individual fin whales can be identified by their chevron patterns, streaks of lighter coloration on their backs, and by the size and shape of their dorsal fins.

## Natural History:

### Species Subtypes:

There are two documented subspecies of fin whale: *B. physalus physalus* in the North Atlantic and *B. physalus quoyi* in the Southern Ocean. There is also a population of fin whales in the North Pacific which some scientists consider to be a separate, unnamed subspecies. These three populations rarely mix and there are geographical stocks within these ocean basins.

For management purposes, fin whales in U.S. waters have been divided into four stocks: 1) Hawaii ~ 174 whales; 2) California/Oregon/Washington ~ 2,541 whales; 3) Alaska (Northeast Pacific) ~ 5,700 whales; and 4) Western North Atlantic ~ 1,678 whales.

### Reproduction:

Little is known about their social and mating systems. Similar to other baleen whales, long-term bonds between individuals are rare. Fin whales are believed to migrate to subtropical waters for mating and calving during the winter months.

**Life Cycle:**

Fin whales are most often found alone but social groups of 2-7 whales are not uncommon. In the North Atlantic, they often are seen feeding in large groups that include humpback whales, minke whales, and Atlantic white-sided dolphins. Fin whales can live for 80-90 years. Adult males reach sexual maturity at 6-10 years of age and females at 7-12 years of age. After 11-12 months of gestation, it is thought that females give birth to a single calf in tropical and subtropical areas during mid-winter. Calves appear to be born at 3-4 year intervals and are 14-20 ft. (5.5-6.5 m) at birth, weighing 2 tons. Calves nurse for 6-8 months and are weaned when they are 30-40 ft. (10-12 m) in length.

**Range:**

Fin whales are found in deep, offshore waters in all oceans of the world, primarily in temperate to polar latitudes, and less commonly in the tropics. While they typically stay under water for about 6 to 8 minutes long, they can stay under as long as 30 minutes and dive as deep as 1,800 feet. They may migrate to subtropical waters for mating and calving during the winter months and to the colder areas of the Arctic and Antarctic for feeding during the summer months. In the eastern North Pacific, fin whales occur year-round off the central and southern California coast. They occur in summer off the entire coast of western North America from California into the Gulf of Alaska. Offshore, fin whales occur across the North Pacific north of 40°N, at least from May to September in summer, with some tendency for a northward shift in distribution in high summer, when they also enter the Okhotsk Sea. They occur in the Bering Sea and some have been seen in the Chukchi Sea. Fin Whales occur, albeit in small numbers, in Hawaiian waters in both summer and winter.

Recent evidence suggests that during winter, fin whales may be dispersed in deep ocean waters. While they occur year round in a wide range of latitudes and longitudes, fin whales will move into and out of high-latitude feeding areas, although there may not be any large marked seasonality in distribution. Their overall migration pattern is complex and specific routes have not been documented. Whales can occur in any one season at many different latitudes, perhaps depending on their age or reproductive state as well as their “stock” affinity. There may be resident groups of fin whales in some areas, such as the Gulf of California, the East China Sea, and the Mediterranean Sea.

In recent years, there have been increasing sightings of fin and humpback whales in the Salish Sea. It is currently not known why this increase in sightings is happening although it may be related to factors such as increased population numbers and/or changes in food supply/distribution or water temperature.

**Diet:**

Fin whales feed on a variety of prey: krill, small schooling fish (herring, capelin, and sand lance) and squid. They can consume up to 2 tons of food a day, however, they fast in the winter. They have a series of 262-473 fringed overlapping plates of baleen hanging from each side of the upper jaw. The plates are made of keratin and can measure up to 30 inches (76 cm) in length and 12 inches (30 cm) in width. During feeding, large volumes of water and food can be taken in the mouth because the pleated grooves in their throat expand. As the mouth closes, water is expelled through the baleen plates and the food is trapped on the inside fringes to be scrapped away by the tongue, then swallowed.

## Status:

Prior to modern whaling methods, fin whales were largely protected from whalers because of their speed and preference for the open sea. However, as blue whales became depleted, the whaling industry turned to fin whales as a replacement. As many as 30,000 fin whales were taken each year from 1935-1965 by commercial whalers. The International Whaling Commission placed them under full protection in 1966 beginning with the North Pacific Population. Current population estimates are unavailable, but it is thought that present populations are about 40,000 in the northern hemisphere and 15,000 to 20,000 in the southern hemisphere. The fin whale is listed as endangered throughout its range under the Endangered Species Act of 1973 and is listed as depleted throughout its range under the Marine Mammal Protection Act of 1972. Fin whales are still hunted in Greenland, subject to catch limits under the International Whaling Commission's (IWC) "aboriginal subsistence whaling" scheme. Iceland resumed commercial whaling of fin whales in 2006 and Japan kills fin whales as part of its scientific whaling program.

## Threats:

Current threats to fin whales include habitat loss, loss of prey, vessel impacts including harassment and ship strikes, acoustic disturbance, entanglement in fishing gear (particularly inshore fishing gear – gillnets and lobster lines), and commercial whaling (in some countries). Of note is that out of all the species of large whales, fin whales are the most often reported as hit by vessels.

## Fun Facts:

- Among the fastest of the great whales, fin whales are capable of bursts of speed of up to 23 mph (37 km/hr) leading to its name as the "greyhound of the sea".
- They are actually named for their fin being way back on their bodies (i.e., "finback").
- Fin whales sometimes mate with blue whales and hybrids have been documented.
- The asymmetrical coloration pattern on the head of fin whales is reversed on their tongue.

## Sources:

[www.nmfs.noaa.gov](http://www.nmfs.noaa.gov)

[www.acsonline.org/fact-sheets/fin-whale/](http://www.acsonline.org/fact-sheets/fin-whale/)

<http://www.iucnredlist.org/>



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