

# A publication by:

# NORTHWEST WILDLIFE PRESERVATION SOCIETY

#### Fin Whale

Balaenoptera physalus



Photo by Agga Rosing-Asvid, from Wikimedia Commons

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The fin whale is the second largest living animal in the world (after the blue whale) and is native to British Columbia as well as other oceanic regions worldwide. The fin whale is also known as the finback whale, or razorbacks.

Fin whales are a type of baleen whale. Baleen whales are large marine mammals that do not have teeth and instead have plates that are similar to bristles that filter out food. Unlike teeth, they are made from keratin, the same material that makes up parts such as fingernails and hooves in other animals. Although both toothed and baleen whales are considered cetaceans, they are categorized into their respective categorized due to distinctive differences, including but not limited to having teeth or baleen.

There are 2 currently recognized subspecies of fin whale. *The Balaenoptera physalus physalus* is found in the North Atlantic and *the Balaenoptera physalus quovi is* found in the Southern Ocean.

Despite their size, fin whales are fast swimmers, swimming up to 37 km/hr (23 mph and are nicknamed "greyhounds of the sea".

Fin whales are considered "Endangered" under the IUCN Red List and throughout the United States. However, they are currently considered "Threatened" in Canada and BC.

### Characteristics

Fin whales are very large baleen whales, with a streamlined shape and are 22-26 m (73-85 feet) long and weighting 120,000 kgs (260,000 lbs)! The females are slightly longer than the males. As baleen whales, they have no teeth but baleen and two blowholes.

They are mostly dark grey to brown-black with a white underside in colour. The underside of their flippers and tail is also white. Some whales have light-grey v-shaped marks that begin behind the blowholes. There may be other light grey markings and striping on the body. The unique markings can be used to identify individual whales.

The lower jaw is coloured asymmetrically, with the left lower jaw being black and the right lower jaw white. This is unusual in mammals. The asymmetrical colouring is also reflected on their baleen plates but reverses on their tongue.

From the surface, distinguishing features include the narrow, cone shaped blow; a sickle shaped dorsal fin that usually appears soon after the blow and behind the dorsal fine, a ridge along the back (which gives the nickname "razorback").

Fin whales can look similar to and be confused with blue whales and sei whales, especially from a distance. However, they are darker and have a larger dorsal fin than blue whales and have the distinctive, odd jaw colouration that sei whales lack.

Juvenile fin whales look like (relatively) smaller versions of adults and are about 6 metres (18 feet) long, and weigh 2,275 kgs (5,000 lbs) at birth.

# Life Cycle

Fin whales reach sexual maturity between 6-15 years.

They have a gestation period of 11-12 months and nurse for about 6-7 months with a single offspring, known as a calf.

As the live most of their lives in the open ocean, little is known about the breeding habits of fin whales. It is believed that fin whales breed in warmer waters during the winter months, but there is no clear evidence of breeding grounds.

Although there is no clear data on the lifespan of fin whales, it is thought that they live long lifespans of about 50-100 years.

#### **Habitat**

Fin whales can be found in all of the world's oceans except the ice capped polar regions. They tend to migrate to warmer waters in the winter months and towards the poles during the summer or they may just dive deeper. The migration patterns of fin whales worldwide are not well known. There also may be populations that do not migrate or migrate minimally.

Although they swam too fast for early whalers, they were hunted extensively from 1905 to 1967. During this time in BC, with the introduction of the steam engine, over 24,000 baleen whales (including but not limited to fin whales) were hunted off the BC coast. In BC, commercial whaling was banned in 1967 but the impacts still linger.

Whaling greatly reduced the populations of fin whales in BC and worldwide. In BC, the population of fin whales has been slowly rebounding since 1967.

### **Behaviour**

Fin whales are baleen whales and are therefore filter feeders. They mostly eat small marine invertebrates, crustaceans, krill, squid and fish. To eat they will open their mouths to engulf the food, close their mouth and then expel the water out through the baleen. The baleen traps the small prey which they then swallow. When Fin whales eat, they tend to turn so the right (light-coloured) side faces downward as their prey cannot see that as well.

Although not extensively studied, Fin whales have been known to exhibit cetacean behaviours such as breaching (leaping) and spyhopping. However, they have not been observed doing these behaviours often, although they have been known to leap clear out of the water, which is unusual for a whale of that size.

Fin whales generally travel in pods of 2-8 animals but may come together into groups of about 100 animals during some feeding periods. There does not seem to be long-term social bonds within and outside the pods, however this has not been extensively studied

They "sing" whale songs. However, these "songs" are too low for humans to hear and as such, are not all that well studied.

#### **Threats**

The only natural predator of the fin whale is the orca.

Humans are by far their greatest threat. Large ship strikes can be fatal to fin whales, as well as general boat and ship traffic is known to disturb this and other species.

As ocean animals, fin whales are subject to ocean-related conservation concerns including as fisheries, nets, debris, pollution, noise, climate change and the decline of major prey species.

Although reported fin whale deaths are rare, fin whales have been known to get entangled in the nets and fishing gear of commercial fisheries.

Fin whales are also negatively impacted by chemical pollution and oil spills in the ocean. In addition to harming them, it also negatively impacts stocks of their prey. In addition to traditional pollution, Fin whales are also impacted by "sound pollution" made by loud human activity in the water.

Although baleen whales like fin whales are not known to echolocate (though there is some suggestion that they may be able to varying degrees), they still have a relatively keen sense of hearing. Whales evolved to live in quiet ocean environments and the excessive noise is uncomfortable for the whales, makes it more difficult to communicate with each other and may cause hearing loss.

Fin whales rely on their prey species such as krill. Climate change, pollution and other human factors that affect stocks of krill and other small marine prey affect species that rely on that food source, including baleen whales such as the fin whale.

While whaling ended in 1967 in BC and has been largely banned internationally in 1986, Iceland, Norway and Japan continue to whale commercially under various "loopholes" with the International Whaling Commission.

### What We Can Do To Help

Fin whales are ocean animals and by helping to conserve the ocean and its related marine habitats, you can help conserve fin whales and other marine species.

• Help clean up the shoreline! The Great Shoreline Clean-Up (<a href="http://www.shorelinecleanup.ca/">http://www.shorelinecleanup.ca/</a>) is an event held twice a year to clean up beaches. Of course, you don't have to wait for that to clean up the beach.

- Avoid dumping waste in the ocean including unneeded fishing gear and other debris including trash.
- Be "whale wise" when boating around whales. Respect the laws, follow the guidelines and treat
  whales with respect when boating close to whales. (<a href="http://wildwhales.org/watching-whales/whale-watching-guidelines">http://wildwhales.org/watching-whales/whale-watching-guidelines</a>)
- Help support efforts to end whaling practices and to "save the whales" and get involved with organizations that are trying to end whaling. Several organizations such as the Whale and Dolphin Conservation (WDC <a href="http://us.whales.org/">http://us.whales.org/</a>), the World Wildlife Fund (<a href="https://www.worldwildlife.org/species/whale">https://www.worldwildlife.org/species/whale</a>), and many others are trying to end whaling worldwide.
- Try to only purchase and eat seafood from sustainable sources that also try to avoid by-catch, including unintended entanglement. For example, fisheries that have been Ocean Wise recommended. (http://www.oceanwise.ca) and/or MSC certified (https://www.msc.org/).

Fin whales and other baleen whales almost disappeared in BC in the mid-20<sup>th</sup> century due to whaling. The population is now slowly rebounding and once very rare; there have been more sightings in recent years. With effort, it is possible for population numbers to recover.

# **Other Interesting Facts**

Fin whale/blue whale hybrids have been documented multiple times and seem to be not uncommon. The Fin whale parentage of these hybrids can female or male.

Fin whales cannot be kept in captivity, in large part due to their size.

Fin whales were too fast for whalers to catch prior to the invention of the steam engine.

The asymmetrical pigmentation on the lower jaw (white on the right and black on the left) of the fin whale is highly unusual for mammals.

"Rorqual" is a non-scientific name for the family of large baleen whales that possess ventral pleates or grooves. The scientific family name is Balaenopteridae.

The fin whale is the second largest animal on our planet and is larger than virtually any species of dinosaur.

Fin whales weigh as much as 17 elephants!

### Where & When to view the animal.

Fin whales can sometimes be spotted during the winter and summer months in BC's offshore waters, Hecate Strait, Dixon Entrance, Queen Charlotte Sound and have been spotted west of Vancouver Island and Haida Gwaii, They can also be sometimes seen in Caamano Sound and Squally Channel

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