

# Grey Whale

*Eschrichtius robustus*



This photo was taken for the US Marine Mammal Commission and is in the public domain.

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The Grey Whale is a truly unique species of mammals. These one-of-a-kind whales have come extremely close to extinction twice in the past three centuries. Now due to protection laws and environmentalists their population has been restored to about 23,000 whales world-wide.

## Characteristics

Grey Whales are dark grey in colour with numerous patches of white, yellow and orange. The white, yellow and orange patches are barnacles and parasites attached to the whales. These barnacles attach themselves to the whale's blowholes, on top of the whale's head, and on the upper fore part of their back.

Grey Whales have hairy sensory bristles on their snouts and on the front of their heads, which they use as "tactile sensors" similar to the way cats use their whiskers.

This type of whale has two flippers, a series of small ridges along its back and also near the flukes or tail. Just like the Beluga Whales, Grey Whales do not possess a dorsal fin, which can be observed on the backs of Orca Whales (also known as Killer Whales).

One of the most unique characteristics that separate Grey Whales from other whales is that they are Baleen Whales. This means that Grey Whales do not have any teeth in their mouths. Instead, the whale's jaws contain about 160 pairs of short, smooth baleen plates. These plates are made of the same material as human finger nails and hair. These plates overlap each other and each one is frayed at the bottom and on the sides. They are around 38 cm (15 inches) in length and 25 cm (10 inches) in width. Grey Whales feed by scraping the right side of their mouth along the ocean floor and taking into their mouths everything that is on the bottom of the ocean. Then the baleen plates filter out all of the nourishing, organic food, which the whale swallows right away. If there are things such as mud remaining in the whale's mouth, it spits it out with the use of its enormous tongue that weighs around 1,000 to 1,360 kg (1 to 1.5 tons) by itself.

Grey Whale males are around 9 to 15 meters (35 to 50 feet) in length and may weigh from 25,000 to 35,000 kg (28 to 38 tons). Female Grey Whales are usually observed to be larger in size, somewhere from 12 to 15 meters (42 to 50 feet) in length and 31,000 to 44,000 kg (34 to 48 tons) in weight. At birth Grey Whales are about 4.5 meters (15 feet) long.

## Life Cycle

Female Grey Whales begin to give birth when they are around eight years of age. The gestation period usually starts in the late fall and takes around 13.5 months, after which the baby whale, or calf, is born. Female Grey Whales typically give birth every second year.

Before giving birth, pregnant females travel to warm water lagoons to give birth and raise their calves. Lagoons are protected from creatures which may attack the calves, such as large sharks, and the currents in lagoons surrounding the baby whale once it has been born are not overpowering for it. At the moment of birth, the calf instinctively swims to the surface of the water within ten seconds for its first breath. Within thirty minutes of its birth, the calf can already swim comfortably around its mother.

The diet of a calf consists of its mother's fatty, nutritious milk, of which it drinks from 22 to 36 kg (50 to 80 pounds) per day. The milk which calves feed on contains 53% fat. Usually the mother and her baby stay together and continue nursing for about a year.

Grey Whales do not stop growing until around the age of 40. The average lifespan for a Grey Whale is between 50 to 60 years.

## Habitat

In the summer Grey Whales may be found in the shallow coastal waters of the Bering Sea around Alaska, the Beaufort Sea north of Canada, and in the Chukchi Sea between Alaska and Russia. Small populations may also be found in the eastern Pacific Ocean coastal waters from Oregon to southeast Alaska.

When the northern waters become too cold, Grey Whales migrate south to warmer waters. They typically spend the winter in the Pacific Ocean around Mexico and the southern United States. The migration takes around two to three months because they travel around 16,000 km (10,000 miles) to their desired warmer waters.

While migrating, Grey Whales typically travel in small pods of three, but pods vary in size up to as many as sixteen Grey Whales. Once in the warmer waters, large groups of hundreds of Grey Whales form. Breeding between whales typically happens when they are in these larger groups. Long term attachments are not usually made between whales.

Grey Whales eat only in the winter time. They eat when they are in the polar seas. Grey Whales usually feed on amphipods, krill, lopepods, plankton, and molluscs. Their diet may also include squid and fish from the ocean floor. An adult whale may consume as much as 300 kg (660 pounds) of food per day, that totaling to 154,000 kg (340,000 pounds) of food during their four-month feeding period.

There is also a very small population of Grey Whales that live in the western Pacific Ocean around Korea and Japan.

## Behaviour

Grey Whales emit various sounds which include grunts, clicks and whistles. Their breathing, also known as the "spout" is a noisy stream of air that rises 3 to 4 meters (10 to 13 feet) above the water and may be heard half a mile away from the whale.

Grey Whales also breach and spyhopp for communication or to make their presence known. Breaching involves the whale jumping partially out of the water and then falling back into the water at an angle, while splashing and making a loud noise. Spy hopping is a name given to the

action when a whale pokes its head up to 3 meters (10 feet) above the water and then turns around slowly and looks at the surroundings or "spies".

Grey Whales are mammals that breathe air at the surface of the water through their blowholes. They can dive for up to 30 minutes under water and go as deep as 155 meters (500 feet). When Grey Whales are at rest they breathe two or three times a minute because they sleep at the water's surface. When migrating, however, whales do not sleep at all and they travel both night and day.

Grey Whales usually swim at 3 to 10 kilometres per hour (2 to 6 miles per hour). If in danger, their speed may increase up to 16 to 18 kilometres per hour (9 to 11 miles per hour). Their feeding speed is much slower at 1.6 to 4 kilometres per hour (1 to 2.5 miles per hour).

## Threats

Other than humans, only Orca Whales (also known as Killer Whales) and large sharks pose a threat to Grey whales.

Grey Whales are listed under the Canadian Species at Risk Act (SARA) as a "species of special concern". The Grey Whales which are found in the waters around Korea and Japan are now close to extinction. It is believed that Grey Whales once lived in the Atlantic prior to the 17<sup>th</sup> century, but that group is now extinct.

In the 1850s human whalers found the breeding lagoons of Grey Whales in Mexico. This led to the killing of whales in their breeding lagoons and an alarming decrease in the whale's population. Then, once again, at the turn of the 20<sup>th</sup> century Grey Whales came extremely close to extinction due to hunting by humans. In 1946, international laws were passed concerning the hunting of Grey Whales and the International Whaling Commission was formed.

When Grey Whales were hunted in 1850s, the whalers called these intelligent mammals "Devilfish" because when being hunted they always put up a fight for survival. Although today Grey Whales are a "protected species" we must also fight for the rights of these magnificent creatures and ensure that their population in the world only increases and they never become extinct.

## What We Can Do To Help

Never pollute the oceans and other waterways of the world. Animals like the Grey Whales live in the water and depend upon a healthy marine environment for survival. Toxic chemicals, abandoned fish nets, and human waste like pop cans, fast food containers, plastic bottles, cigarette butts, and old tires can be devastating to marine animals.

## Where & When to View the Grey Whale

Grey Whales like to stay in coastal waters close to land, and are a favourite and often seen whale for many people on the west coast of North America.

In May to early June, during their northward migration, Grey Whales can often be seen in the waters between the Queen Charlotte Islands and the northern B.C. mainland. See the bibliography for the B.C. Adventure website for information on how to see Grey Whales off the coast of B.C.

There are many opportunities for seeing Grey Whales off the coast of Oregon throughout the year. See the bibliography for the Whale Watching Spoken Here website and details on where and when to spot whales in the waters off the coast of Oregon.

In January through to April Mexico is a great place to see Grey Whales mating and calving around the Baja California peninsula. See the bibliography for the Kuyima website for one possible place to see whales in the waters off the coast of Mexico.

## **Bibliography**

### ***Web Resources:***

B.C. Adventure website – Information on whale watching opportunities in B.C. Canada  
<http://www.bcadventure.com/adventure/whales/>

Whale Watching Spoken Here website – Information on whale watching opportunities in Oregon, USA

<http://whalespoken.org/>

Kuyima Ecotourism website – Information on whale watching opportunities in Mexico on the Baja Californian peninsula

<http://www.kuyima.com>

Whale Times website – a great child focussed website all about whales

<http://www.whaletimes.org>

Enchanted Learning website – a great child focussed website with information on Gray Whales

<http://www.enchantedlearning.com/subjects/whales/>

IMAX film “Whales” website – description of the IMAX film and some interesting facts on many species of whales:

<http://www.whalesfilm.com>

Vancouver Aquarium website – facts about Grey Whales and other marine wildlife

<http://www.vanaqua.org/education/aquafacts/graywhales.html>

Species at Risk website – Environment Canada website:

<http://www.speciesatrisk.gc.ca/>

The Marine Mammal Center website – focussed on marine mammal survival and conservation

<http://www.tmmc.org/learning/education/whales/gray.asp>