

MATING & CALVING

Gray whale courtship and mating behavior is complex, and frequently involve three or more mixed genders. Primarily, the mating and calving both occur in the lagoons of Baja California, although both have been observed during the southward migration beginning in December.

Gray whales reach sexual maturity at 5 to 11 years of age, or when they reach 36-39 ft. (11-12m) in length.

The gestation period is approximately 11 months. Calving begins about mid December, and peaks in early February. Females give birth every 2-3 years after they become sexually mature at the age of 7-8. Calves nurse about 7-8 months on milk that is up to 51% fat. The calves' growth is rapid, and sustained by the thick, lumpy milk which sticks to the baleen. In the Baja lagoons, there is almost constant physical contact between mothers and calves. The lagoon water temperature can help to conserve the newborn whale's body heat.



A gray whale blow

FEEDING

The gray whale is a “baleen” whale belonging to the sub order mysticetes. They gather their food by tilting their head to one side and skim the ocean floor, sometimes making a hole in the seabed as large as a desk top and about a foot deep. They use their tongue to push the water, mud and sand out against the baleen trapping the amphipods (shrimp-like animals) in the baleen plates, and use their tongue to scrap the food off the baleen.

In the summer feeding grounds of the Bering and Chukchi Seas, they feed primarily on benthic amphipods (bottom-dwelling, shrimp-like animals). During migration they feed little or not at all. Some individuals remain in the Pacific Northwest waters off-shore of the states of Washington, Oregon and also British Columbia, Canada during summer months to feed on mysids and other planktonic animals.

Baleen consists of up to 130-180 plates that hang down from the upper jaw. It is made of keratin, a fibrous material that is similar to the fingernails. It is stiff and solid at its outer edge, tapering to a fringed point. The thick baleen is white to yellow and the plates are spaced about 1/8 inch apart. The gray whale has the coarsest baleen of all the baleen whales.

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Gray Whale

(*eschrictius robustus*)



Gray whale
Photo by NOAA

The gray whale is the most common large baleen whale seen from shore along the west coast of North America.

The early morning hours on a cloudy day are the most favorable for spotting the gray whale. At Face Rock Wayside, Beach Loop Drive, Bandon Oregon, the altitude is about 70 feet above sea level. At this height, visibility on a most days is around eleven miles to the horizon. Twice a year on their migration southbound and the return north, the gray whale can be seen passing within view along the Oregon coast.

The migration from the northern arctic ocean to Baja California is approximately 10,000 miles 'round trip, the longest known for any mammal. In November, gray whales start to leave their northern summer feeding grounds in the Chukchi and Bering Sea. Pregnant females lead the way, followed by mature adults of both sexes, then juveniles. In the spring the last to head north are the females with calves, staying closer to the shore in shallow water to assist the calf that is not fully able to swim in deeper water.

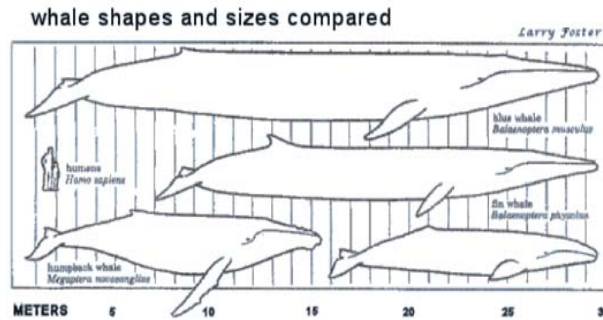
After years of protection from commercial hunting, the gray whale population has recovered sufficiently to be removed from the endangered species list in 1994. At that time, the population was estimated at about 23,000 which is was then thought to exceed the pre-whaling population.

Gray whales are protected under the Marine Mammal Protection Act of 1972 by National Marine Fisheries Service guidelines that require boaters to not approach closer than 100 yards (95 m) of the whales. Inappropriate tourism can be a harassment that affects the animal's use of important habitat. Even though industrial development in calving and migration areas may be the greatest threat to the gray whales' future in the past, there is today evidence that shipping is looking into ways to alter their shipping lanes to avoid harming the whales.

The **transient orca** tends to show up along the Oregon coast during late April and May and may target females and calves migrating north.

Whales travel at about six miles per hour on their southern migration, and about half that speed when going north; especially females with a calf. By early February most have reached their breeding and calving grounds at the lagoons along the west coast of Baja California.

The immature animals, adult males, and females without calves are the first to head North passing Oregon in March and April. Females with calves move somewhat slower, passing the Oregon Coast as late as May. In recent years the gray's have been seen in the summer months feeding on mycids that swarm around the kelp beds in Oregon and Washington.

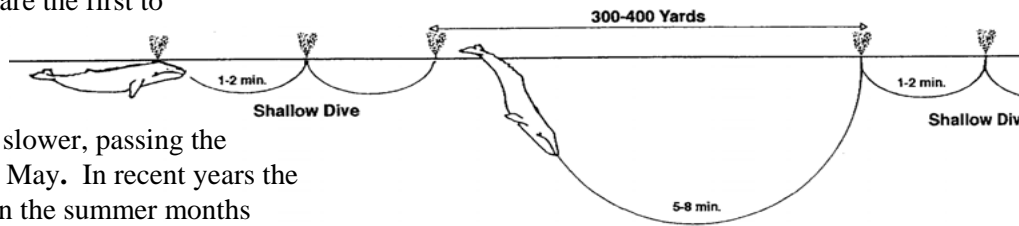


Breaching - this may be the gray whale's most spectacular behavior. One-half to three-fourths of its body length comes out of the water, then pivots and falls on its side or back, creating a tremendous splash! Biologists believe that they may take this action to knock off the parasitic barnacles and whale lice, or it is a form of communication, or they do it for fun! If one whale is seen breaching, there are often others that will follow.

PREDATOR

The orca.

DIVING PATTERN



The Blow and Sounding - These are the most commonly seen behaviors. Because they are air-breathing mammals, they come to the surface about every 3 - 5 minutes. When they do, they exhale with great force through the twin blowholes on the top the head. The warm compressed breath condenses into a small "cloud" which is often mixed with the water that was in or near the blow holes. After a few shallow dives they usually do a deep dive that is referred to as "sounding" and takes about 5 minutes before they are again seen on the surface."

Spy Hopping - The whale brings its head up vertically out of the water for several seconds. Some biologists speculate that this is for visual orientation, but the eyes are often under water. It has been suggested that these mammals are not good navigators, which is why they swim so close to the shore. It may be that when spy hopping they are listening to the sounds of the surf.

QUICK FACTS

- **Adult Male length:** about 40 ft. (12 m)
- **Adult Female length:** about 45 ft. (13m).
- **Weight for both** 30 - 40 tons (31.5 metric tons).
- **Female gives birth** about every 2 - 3 years
- **Gestation Period:** about 11 months
- **Calf birth Weight:** about 1 ton (0.9 metric ton)
- **Calf length at birth:** 12 - 15 ft. (4.5 m)
- **The fluke** (tail) is about 10 - 12 ft. (3.7 m) across, pointed at the tips
- **Full Migration** from the Arctic seas to Baja lagoons is approximately 10,000 miles (16,000 Km).
- **Primary Diet:** bottom feeders; benthic (bottom-dwelling) amphipods (shrimp-like animals)

Resources: American Cetacean Society, NMML, NOAA, Oregon Institute of Marine Biology; Whale Watch Spoken Here. Photos: Pubic Domain & NOAA.