

## ***SPOTLIGHT ON... GRAY WHALES***

### **Gray Whales: A Special Cetacean**



Do you ever wonder what kinds of marine mammals pass through Puget Sound or why? Have you heard about or seen Gray whales swimming along Puget Sound's shorelines? Perhaps you've even seen them feeding or swimming with your own eyes. There are many characteristics that make the Gray whale a special cetacean.

For example, Gray whales are a large whale sized between 40 and 50 feet long. Females are usually larger than males. Both males and females have a long lifespan lasting about 70 years. These whales can weigh anywhere from 15-39 tons, and eat up to 1.5 tons of food per day! Gray whales are baleen whales, meaning they pass food through a mesh rather than using teeth. These big animals swim into waters 150-400 feet deep to suction up organisms that live in marine sediment, like ghost shrimp and tube worms. They filter out sand and water with their baleen sieves. According to Orca Network, by digging up the mudflats for shrimp and worms and leaving pits that attract all sorts of detritus and prey items, gray whales increase the productivity of the mudflats for sea ducks and for themselves a year later. For an excellent example of how the gray feeds, watch this You Tube video on the Orca Network site: <http://www.orcanetwork.org/nathist/graywhales.html>. Listen closely! You might be able to hear the moans, rumbles, growls, or knocking sounds.

#### **Migration**

Full-grown Gray whales are excellent swimmers. Every year they swim a round trip migration of 7,000-12,000 coastal miles. This is the longest known migration of any mammal on the planet. Spring, summer, and early autumn find this species in their Arctic feeding grounds. Whereas in winter and early spring gray whales are found in their breeding grounds of Baja Mexico. This species likes to swim within one mile of shore due to their baleen eating habits, so it is common for boaters or kayakers to see them during their migration. About a dozen Gray whales come into Puget Sound every year. Their visit seems to be extending longer every year. The visitors particularly enjoy feeding off of Whidbey Island and Port Susan, where there are rich and abundant food supplies.



## Birthing

Another special feature of this species is how they protect their young. Historically whalers called Grays “devil fish” because they are fiercely protective of their young calves. Yet Gray whales are known to be very friendly in their Mexican birthing grounds, where they may approach boats and interact with humans. It is common to observe active behaviors such as spyhopping, breaching, mating, and other behaviors not commonly noticed up north.

## Eastern North Pacific Gray Whale Status

Originally there were three populations of this species. Over the last three to four centuries the North Atlantic population fell to extinction. The Western Pacific population is critically endangered, with about 100 whales spanning the waters near China, Japan, and Korea. The Eastern North Pacific population that swims in Puget Sound was removed from the Endangered Species list in 1994, but many people are still concerned about the welfare of this whale.

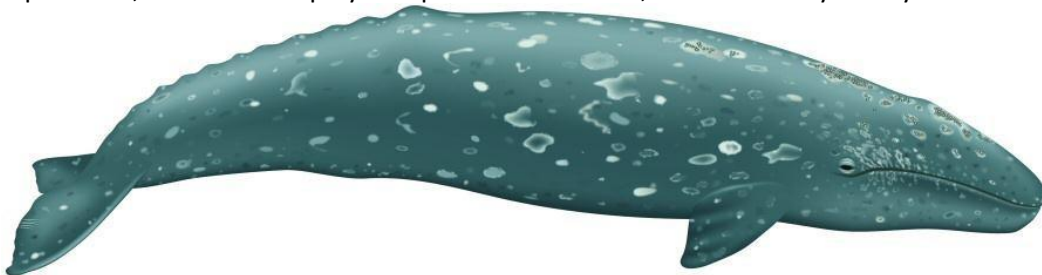
Two whales washed ashore in NW Washington in April 2010, which led to speculation about climate change in the marine environment that undermined the gray whale food supply. Necropsies, or whale autopsies, confirmed this theory; the whales were emaciated. This follows a decade long trend of population decline. In 1994, the Eastern North Pacific Gray whale population was at 20,000. By 2001 it dropped down to 16,000 or fewer.

Organizations like the World Wildlife Fund advocate for healthy habitat and legal protections for these marine mammals. Gray whales are sensitive to seismic surveys, offshore gas and drilling, and changes in abundance of intertidal organisms. The California Gray Whale Coalition recently petitioned the U.S. National Marine & Fisheries Service to list the Eastern North Pacific gray whale population as “depleted.” If approved, this status would then demand a conservation plan to support the whales. In recent years, annual calving dropped by about 60%. The National Oceanic & Atmospheric Agency is investigating this issue and will release a report soon. The top five concerns for population depletion and standings are overestimating the population which has led to over-harvesting; the drop in cow/calf numbers; predation by orcas; major changes in habitat and prey due to climate change; and a reduction in available prey species.

## Local Whale Watching: A Stewardship Activity

Despite the challenges the Eastern North Pacific Gray population is facing, Grays are commonly found in Puget Sound late January through early May. Here are two tips for identifying a Grey whale yourself.

- ❑ The Gray whale is very large and has a baleen filter. It is much larger than a kayak and most recreational boats. Gray whales are named for their color. Plus they often have white spots from whale lice and parasitic barnacles.
- ❑ If you see a whale and wonder what family it is from, look towards the dorsal (top) fin. If it is missing the fin and has a hump instead, with several spiny bumps towards the tail, it is most likely a Gray.





Now that you know what characteristics to look or listen for, you may be wondering about the best places in Puget Sound to whale watch. Look for whales off of Whidbey Island, Camano Island, and the San Juan Islands. In Snohomish County/Camano Island, Grays often visit Port Susan. Kayak Point County Park in Snohomish County has a great observation dock. Be patient though – it is never guaranteed! Several Gray whales break-off their northern migration to visit shallow Puget Sound waters to feed. They may stay for four months or even longer.

### **Watching Guidelines**

If you happen to see Gray whales or other marine mammals, there are several guidelines you should follow. NOAA, the National Oceanic and Atmospheric Agency, suggests people to stay at least 100 yards away from marine mammals. If boating, put the engine in neutral and allow the marine mammal to pass. Whales should not be encircled or trapped between boats or shore. People should not feed marine mammals, touch them, or swim with them to protect both marine mammals and humans from danger. Federal law prohibits pursuit of marine mammals.

### **Stranding**

If you see a stranded Gray or dead marine mammal, call the Marine Mammal Stranding Network to file a report. You can locate your network on this NOAA page: <http://www.nmfs.noaa.gov/pr/health/report.htm>

### **Keeping the Grays Here**

There are several things Shore Stewards can do to make sure these special cetaceans continue to have a healthy migration. Follow Shore Steward Guidelines number six, "Respect Intertidal Life," and number seven "Preserve Eelgrass Beds and Forage Fish Spawning Habitat." Shore Stewards can also join the Orca Net Sighting List or, for the more adventurous types, visit the San Ignacio Lagoon in Mexico with Orca Net! You can also look into the Cascadia Research adoption program for the "resident" gray whales that visit Puget Sound to feed every year.



## **Resources**

**American Cetacean Society:** <http://acsonline.org/>

**Algalita Marine Research Foundation:** <http://algalita.org>

**California Coastal Commission:** <http://www.coastal.ca.gov>

**Cascadia Research:** <http://www.cascadiaresearch.org/graywhale.htm>

**Cetacean Societies: Field Studies of Dolphins & Whales by J. Mann Jean-Michel Cousteau's Ocean Adventures** can be found at

<http://www.pbs.org/kqed/oceanadventures/episodes/whales/>

**Orca Network:**

<http://www.orcanetwork.org/nathist/graywhales.html> **Port**

**Townsend Marine Science Center:** <http://www.ptmsc.org/> **Puget**

**Sound Starts Here:** <http://www.pugetsoundstartshere.org/>

**World Wildlife Fund:** <http://www.worldwildlife.org/species/finder/graywhale/graywhale.html?>

*This "Spotlight On" publication was originally a Shore Stewards Newsletter produced by Jacqui Styrna, WSU Snohomish County Extension Natural Resources Team. Photos and additional content kindly provided by Susan Berta and Howard Garrett, Orca Network, and published in November 2010*



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