



GRAY WHALE (*Eschrichtius robustus*)



Gray whales are the most commonly spotted whale on the Oregon coast, and can be seen year-round. A number of gray whales stay off the Coast of Oregon each summer instead of migrating to Alaska. Gray whale bodies are covered with rough patches of white that are actually made up of organisms like whale lice and barnacles. They don't have a dorsal fin, only a dorsal ridge that looks like knuckles on its back. Unlike humpback whales, gray whales have flippers that are small and paddle-shaped, and their upper jaw extends past the lower jaw. They also have a comb-like set of plates in the upper jaw called *baleen*, which they use to filter invertebrates from the seafloor.

OVERVIEW

- **Oregon Conservation Strategy Species**
- **State Listing Status:** Endangered
- **Size:** 40-50 feet long
- **Weight:** Up to 80,000 pounds
- **Lifespan:** 40 to >80 years
- **Key Strategy Habitats:** Nearshore
- **Similar Species:** Humpback whales are also seen off the Oregon coast, but are easily distinguished from gray whales

WHALE WATCHING TIPS

- Start in the morning, when the sun is behind you.
- Locate whale spouts with your naked eye first, then get a closer look with a pair of binoculars.
- Gray whale migration usually peaks off the Oregon Coast for southbound animals in December and northbound whales in March. Oregon State Parks stations trained volunteers at 24 sites along the coast for a week during holiday breaks in each of these time periods to help you spot, identify and learn about whales. This "Whale Watching Spoken Here" program began in 1978 and attracts nearly 1 million visitors each year. Binoculars are provided at most locations.

FUN FACTS

Favorite Food: Zooplankton and tiny crustaceans living in sand or mud

- Some whalers used to call gray whales "devilfish" because of how fiercely they defended themselves and their calves from predators like humans and orcas.
- Gray whale calves weigh about 2,000 pounds at birth.
- Some gray whales are especially friendly and curious, and will come within arms-reach of whale watching boats.
- They make a variety of sounds including moans, growls, rumbles, and short knocking sounds.
- The Pacific Coast Feeding Group of gray whales numbers about 240 animals which mostly stay in the waters off California, Oregon, Washington, British Columbia, and SE Alaska to feed during the summer.
- Most west coast gray whales make round trip migrations of nearly 10,000 miles from feed grounds in Alaska to warm, predator-free bays in Baja, one of the longest migrations of any mammal.



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RANGE AND DISTRIBUTION

In Oregon: From mid-December to mid-January, find a good lookout point anywhere along the Oregon coast to witness around 26,000 gray whales migrating south to the warm waters of Baja California. From late March to June, the whales can be seen again on their journey north towards Alaska. From June to mid-November, whale watchers can still see individuals from a small population of about 240 gray whales called the Pacific Coast Feeding Group that often feed along the Oregon coast and don't make the full migration from Alaska to Baja.

Everywhere Else: Gray whales occur in the eastern and western North Pacific Ocean. Gray whales in the eastern North Pacific spend their summers in the Bering and Chukchi Seas around Alaska, migrate along the Pacific coast of North America, and winter near the coast of Baja California. There are four warm-water lagoons in this region that become critical nurseries for gray whale mothers: Laguna San Ignacio, Bahia Magdalena, Laguna Ojo de Liebre, and Guerrero Negro.

The small western North Pacific population spends summer and fall along the coast of Russia near Sakhalin Island and Kamchatka. Some whales from this population migrate along North America to the same lagoons in Mexico in winter as the eastern population, while others may migrate to Japan and along the coast of Asia down to the southern tip of South Korea, the coast of China, and winter in the South China Sea, but current records of gray whales off Asia in these waters are rare.

LIFE HISTORY AND ECOLOGY

Most gray whales mate during the fall migration, giving birth to a single calf every other year in late January. Gray whale calves are *precocial*, meaning that they are already so developed that they can instantly swim on their own when they are born. Calving grounds are usually in warm, shallow lagoons that are very salty. Females must store massive reserves of fat during the summer, which they rely on to fuel their migrations and provide energy for milk production. Calves weigh roughly as much as a small car when they are born and quadruple their birth weight while feeding on fat rich mother's milk during the first 6 months of their lives.

Gray whales in the eastern North Pacific feed in shallow arctic waters in the Bering and Chukchi Seas around Alaska during the summer, and migrate along the Pacific coast of North America several thousand miles to their winter calving grounds in the warm waters near Baja California during the fall.

The western Pacific population of gray whales are not as well understood as their eastern counterparts, but about 30 whales from this population are known to visit the eastern North Pacific and overlap with the eastern Pacific population of gray whales.

Known predators of gray whales include killer whales, large sharks, and humans.



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DIET AND FORAGING

Gray whales specialize in bottom feeding, eating primarily amphipod crustaceans, worms, and bivalves like clams. They find shallow waters with soft ocean floors, then suck up sediments and all that lives in it with their mouths. They then use their tongue like a plunger to push all of the mud and sand out through the baleen plates in their mouth, trapping all of the invertebrates in the process. The whales then scrape off all of the prey on their baleen plates with their long tongues and eat them. But gray whales are opportunistic feeders and also eat swarms of zooplankton such as mysid shrimp and small schooling fish in the water above the bottom. They have also been known to scrape crustaceans off of kelp plants to feed. Gray whales commonly feed in very shallow waters. Sometimes they can be seen feeding just outside the surf zone feeding!

HABITAT CHARACTERISTICS

Shallow coastal waters with sandy or muddy bottoms or kelp beds and the edges of rocky reefs with ample amounts of invertebrates.

CONSERVATION AND MANAGEMENT

Historic conservation trends: As recently as the 1700s, there existed a third population of gray whales in the North Atlantic Ocean. The exact reasons why this population became extirpated (extinct in the area) are not completely understood. If it depended on shallow breeding lagoons like its counterparts in the Pacific Ocean, then its numbers were likely already dwindling due to the disappearance of suitable habitat, and whaling hastened the population's decline to extinction.

Both the eastern and western North Pacific populations of gray whales were depleted by whaling. The eastern Pacific population of gray whales was removed from the federal Endangered Species List in 1994, but remains on the endangered species list in the state of Oregon. The western Pacific population is listed as endangered. Entanglement in fishing gear and ship strikes can both cause significant injury and mortality to gray whales.

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