

Marine Life in Whatcom County

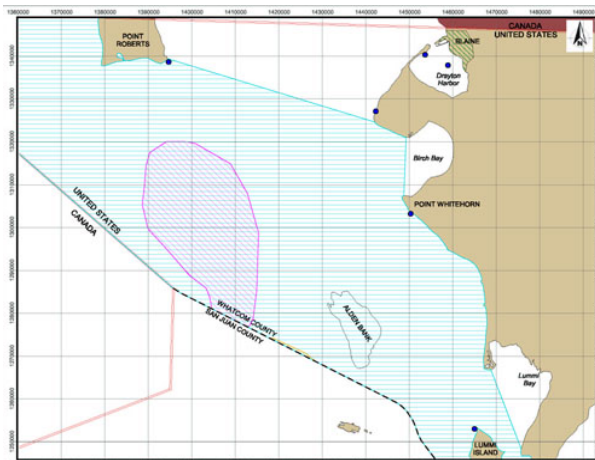
∞ Mammal Series ∞

Orca or Killer Whale (*Orcinus orca*)

Description: Orcas, also known as killer whales, are one of the most recognizable animals of the Pacific Northwest. All orcas have similar black and white coloring. Orcas can be distinguished from one another by the unique gray saddle pattern behind their dorsal fin, and by the markings on their dorsal fins and tail flukes. Dorsal fins are curved in females and immature males, and become straight and triangular, reaching a height of up to 6 feet, in mature males. Males grow to a length of 30 feet and can weigh over 8 tons. Females grow to 24 feet long and usually weigh over 4 tons. Juveniles have the same coloration as adults.



Note the gray saddles behind the dorsal fins.
Photo: <http://www.orcahome.de/orcapici.htm>



In the map of northern Whatcom County above, orca whale territory is indicated in purple. This Anchor Environmental map illustrates PSEP data.

Distribution: After humans, the orca whale is the most widely distributed mammal. They live in all the world's oceans, and concentrate in deep coastal waters that provide a steady food source. There are two resident communities in the Pacific Northwest. Southern Residents forage and travel in the inland waters from Puget Sound up to Georgia Strait. Northern Residents live further up the British Columbia coast, around the northern end of Vancouver Island, and up into South East Alaska. Locally, the Southern Resident orcas are seen between Lummi Island and Point Roberts. In addition to the resident orcas, there are transient and offshore communities that frequent the waters surrounding the Pacific Northwest.

Reproduction: Orcas begin reproducing in their mid-teens. Females have a gestation period of 17 months. They give birth to a single calf that is usually about 7 feet long and weighs 400 pounds. Orcas will give birth at 4-6 year intervals having a total of 4-6 calves throughout their lifetime. Resident calves stay with their mothers in the same pod for the rest of their life. There are three pods (J, K, and L) with a total of 90 members in the Southern Resident Pacific Northwest community. Pods are extended families that range in size from a few to 50 members. Whales always stay within their pod; they move, hunt and play as a group. Each pod can communicate over several miles with its own "dialect" of calls, shrieks, and whistles. A few times during the summer and early fall, all the pods in the Southern Resident community come together to form a "superpod". In addition to

socializing, one main function of the superpod is reproduction. Adults mate with adults from other pods. This ensures genetic diversity and protects against inbreeding.

Ecology: Scientists have described three population categories of orcas —residents, transients and offshores. Residents hunt in large groups, eat fish, and have a total range of about 500 miles. Transients eat marine mammals (such as seals, sea lions, dolphins, and whales), travel in smaller groups, and have a range of about 900 miles. The offshore orcas are usually found 10 to 30 miles off the coast from California to Alaska and tend to travel in groups of 30 or more. Very little is known about offshores, except that they possibly eat schooling fish.

Orcas engage in a variety of behaviors, such as breaching and spyhopping. A whale is considered breaching if 2/3 of its body is out of the water. This activity is often seen during times of socializing and foraging. When spyhopping, an orca raises its head vertically out of the water. Orca whales have excellent eyesight and it is believed that spyhopping is a way for them to look at their surroundings.

On average, females live 50 years and have been known to live up to 80 or 90 years. Males have a much higher mortality rate and usually live 30 years with a maximum lifespan of 50 to 60 years.



Orca whale breaching.

Photo: <http://www.orcahome.de/orcapici.htm>



Orca whale spyhopping.

Photo: <http://www.orcahome.de/orcapici.htm>

Current Status

From an estimated high of 120 residents in 1960, the Puget Sound population of orcas was hurt in 1960s and 1970s, when many juveniles were captured for use in live displays in oceanariums. The southern resident population slowly recovered and hit a recent population high of 97 residents in 1996. However, the population quickly declined to a low point of 78 in 2001 and was due to a variety of factors:

- Decline of salmon stocks—a main food source
- Bioaccumulation of toxins in their blubber
- Pressures of the whale-watching industry

The decline of the Southern Resident orca population in the late 1990's prompted public, state, and federal action. In April 2004, Washington's Fish and Wildlife Commission listed the Southern Resident orcas, along with transients and offshores, as endangered species. The Southern Resident community has recently been listed as "endangered" under the Endangered Species Act. As of late summer, 2005, there are 90 orcas in the Southern Resident community.

Sources:

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NOAA's National Marine Fisheries Service
<http://www.nwr.noaa.gov/Marine-Mammals/Whales-Dolphins-Porpoise-Killer-Whales/ESA-Status/Index.cfm>

Vancouver Aquarium and Marine Science Centre
<http://www.vanaqua.org/education/aquafacts/>

Washington Department of Fish and Wildlife
<http://wdfw.wa.gov/wlm/diversity/soc/status/orca/index.htm>

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