

Harbor Seal



Phoca vitulina

Photo by Melisa Pinnow

Physical Description:

Harbor seals are the most commonly seen pinniped in the Salish Sea. Males and females range from 4 to 6 feet in length and they can weigh up to 300 pounds. Their coats are spotted and range in color from silver grey to black. As with all phocids, or eared seals, they have beaded whiskers, no external ear flaps, and short flippers covered in fur.

Natural History:

Species Subtypes:

There are five subspecies of harbor seals that are found in different geographical regions. These consist of the Eastern Pacific, Western Pacific, Eastern Atlantic, Western Atlantic, and Ungava (eastern Canada) seal populations.

Reproduction:

Harbor seals are sexually mature at 3 to 7 years old. Adult females usually mate each year and give birth to a single pup. In Washington and British Columbia, pupping takes place at various times during the summer. On the outer coast, pupping season is generally from mid-April to July, in Puget Sound from late July to September, and around the San Juan and Gulf Islands from June to August. Shortly after weaning her pup, a female will mate again, then undergo a 'delayed implantation' whereby the fertilized egg remains dormant for a time. This allows female pinnipeds to breed at regular yearly intervals, as well as give birth and wean their pups during the more favorable times of the year.

Life Cycle:

Pups weigh around 20 pounds at birth and are born with a spotted coat. Occasionally premature pups are born with a soft white 'lanugo' coat that is usually shed in utero. They nurse on milk that is 50% fat and are weaned at about 4 weeks of age. Average life span is 20 to 30 years.

Range:

Worldwide, harbor seals are found north of the equator off North America, Europe and Asia. Pacific harbor seals range from Alaska to Baja California, Mexico.

Diet:

Harbor seals eat many species of fish including gadids, herring, smelt, sand lance, anchovy, dogfish, hake, and salmon, as well as some crustaceans, octopus, and squid. Studies have shown that in the Salish Sea harbor seals primarily feed within the water column rather than on the bottom. Overall, sensitive species like rockfish and lingcod do not appear to be a significant portion of harbor seal diet, but during the winter when other prey species are not as abundant they may be feeding on these bottom fish.

Behavior:

Harbor seals are quite social and frequently haul out in rookeries. They have also been known to engage in play behavior with one another. They spend about half their time on land, generally coinciding with low tide. When in the water, they can dive up to 600 feet or more and hold their breath for 20 to 25 minutes, although those are extreme. They generally perform much shorter shallower dives.

Status:

The worldwide population is estimated to be between 300,000 and 600,000 individuals. The overall trend in numbers is unknown. While most stocks appear to be stable or increasing, the Gulf of Alaska stock appears to be declining and the Ungava population is listed as endangered (there is only around 100 individuals in this population). The inland Washington harbor seal stock is estimated to be currently over 12,000 (recovered from a low of 2,000 in the 1970s), while the Strait of Georgia sustains approximately 39,000 harbor seals. Combining those figures, the total population of harbor seals in the Salish Sea is over 50,000. Harbor seals are protected by the United States' Marine Mammal Protection Act and by Canada's Fisheries Act.

Threats:**Historical:**

Earlier bounty hunting and the killing of harbor seals for their pelts decimated some populations. The Lake Ontario and Faroe populations were completely exterminated in the 1800s. The Marine Mammal Protection Act's moratorium has now limited the taking of harbor seals to subsistence hunting by Alaska natives.

Current:

Harbor seals are sensitive to many of the man-made contaminants in our oceans, including PCBs, DDTs, Dioxins, organochlorine pesticides, and heavy metals. These toxins suppress the immune and reproductive systems of the seals. In many areas, harbor seals are indicator species for the levels of contaminants in the ecosystem. Harbor seals are also susceptible to many infectious diseases such as Distemper virus, influenza virus, brucellosis and leptospirosis.

Other threats include predation by transient killer whales and fisheries bycatch, especially nets. In populated areas like the Salish Sea, human disturbance can be a huge problem. Boats and kayaks getting too close to haul-outs can cause resting seals to become alarmed and return to the water, as well as potentially causing a separation between moms and pups which may lead to the death of the pup. Also, the recovery of harbor seals has spurred an increase in salmon consumption by them which has led to conflict with people and an increase in harbor seals being illegally shot in the

Salish Sea. For these reasons it is important that everyone follows a few general guidelines when in the presence of harbor seals.

- Never let dogs run unleashed on a beach where harbor seals are hauled out
- While boating or kayaking, maintain your distance and follow local laws and guidelines when in the vicinity of harbor seal haul-out spots.
- If you see a harbor seal pup on a beach, do not interfere! Keep your distance, give the mother a chance to return and find her pup, and report the sighting to your local Marine Mammal Stranding Network so they can continue to monitor it.

Fun Facts:

- Harbor seals can sleep underwater.
- A seal's nostrils are normally in the closed position because they spend so much time underwater. In order to breathe at the surface they must actually push their nostrils open.
- The whiskers of seals can detect pressure changes in the water, helping them locate and track their prey.
- There is a subspecies of the harbor seal, called the (Ungava) seal, that lives exclusively in freshwater lakes in northern Quebec.
- Mother harbor seals can use their sense of smell to locate their pups.
- Adult harbor seals in the Salish Sea have learned to distinguish between resident fish-eating orcas and transient marine mammal-eating ones.

Sources:

Whales and other Marine Mammals of Washington and Oregon. Tamera Eder.

Diet of harbor seals in the San Juan Island Archipelago, Monique Lance et al.

Seal Conservation Society - www.pinnipeds.org

Sea Doc Society - www.seadocsociety.org

Seal Sitters - www.sealsitters.org

www.marinebio.org

IUCN Red List - www.iucnredlist.org

<https://www.eopugetsound.org/terms/404>

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