

# species factsheet

## | species introduction |

#### Common name: Harbour seal

Scientific name: Phoca vitulina

The harbour seal (*Phoca vitulina*), one of the best known seals of the world, is part of the 'true seal' family, Phocidae. Characteristics for the harbour seal; when it is hauled out it adopts the 'head-up-tail-up' posture. They also move around on land by undulating on their



belly. Harbour seals have a perfect camouflage while swimming. Their colour is blue/dark grey with darker spots when seen from the top, which makes it hard to spot them from above. They have a white belly, which makes them hard to spot from below. Often females are lighter in colour then males. The snout of the seal is short and concave with 'V' shaped nostrils. The head is small and has a round top.

They share a common ancestor with dogs and

bears. The harbour seal has large eyes to see in deep, dark water and long necks to catch fish quickly while swimming. Harbour seals can live equally well in fresh or saltwater. They spend their life in an area of approximately 50km from their haul out site and stay out for several days. Harbour seals typically dive for 3 minutes at a time, but can stay under as long as 30 minutes and dive to a depth of 183m. A record dive to a depth of 427m has been recorded. Harbour seals use the oxygen in their blood and muscle to sustain their dives. When diving their heart beat slows down. Seals can exchange 90% of the air in their lungs, whereas humans can only exchange 20%. Harbour seals have more than twice the blood volume when compared to humans and it can also carry more oxygen.

# | status in the wild |

Over the past 30 years different populations have shown different trends. Some populations are stable, some populations are decreasing and some are increasing. Worldwide the harbour seal population is estimated at about 500,000 individuals. On the IUCN Red List the harbour seal is classified as Least Concern (LC). There has been an increase of the overall population of the harbour seal since 1970.

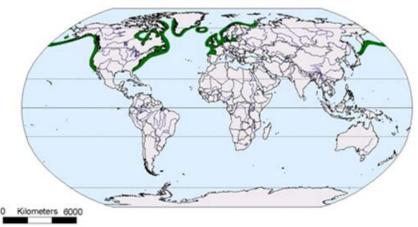
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#### | species reproduction |

The mating system is promiscuous, or weakly polygynous, with males defending underwater calling sites. Harbour seal males become sexually mature at the age of 4 to 5. Females become sexually mature by the age of 3 to 4. Gestation lasts 10.5 to 11 months including a 2 to 2.5 month delayed implantation. Females come into oestrus a month after giving birth. Mating usually takes place in the water. Birth is on shore. Harbour seal pups are usually born in the same period between February and June. Newborns have a weight of 8 to 12kg and are weaned and independent after 4 to 6 weeks. Females nurse their pups once or twice a day during this period with milk containing 50% fat, resulting in rapid growth. At birth pups can already swim and occasionally use their mothers back when tired. An adult female will normally give birth every year and may live for 25 to 30 years.

## | species habitat |

The species range is north of the equator and they are found in both the Pacific and Atlantic oceans. The species is widespread and is found in coastal waters from polar to temperate regions, mostly found in coastal regions and estuarine waters. In general harbour seals are non-migratory. Harbour seals favour near-shore coastal waters and are often found on sandy beaches, rocky islands, mudflats, bays and estuaries. Harbour seals do, if possible, prefer sheltered waters. Rocky shores and beaches are a perfect spot to haul out. They prefer spots and sites where there is protection from land predators, strong wind and waves. Harbour seals also prefer a close-by food resource and the possibility to directly access deep water to aid escapes from danger.



Harbour seal distribution (Groms, 2009)

## | species food |

Harbour seals are fish consuming carnivores. There are regional variations in diets, in general the harbour seals keep their foraging effort low by just eating what is easy to catch and abundant. Fish are mostly eaten by adults who consume them whole and generally head first. Preferred fish species are medium sized fish such as cod, hake, mackerel and herring. Harbour seals also eat octopus, squid and crustaceans such as crabs and shrimps. Pups who are newly weaned have not developed their diving abilities and so they primarily eat crustaceans which are easier to catch. Harbour seals with an average weight of 100kg eat about 5 to 7kg of food per day.

#### | threats |

Historically, humans have been the biggest threat, next to natural predation. They have hunted the harbour seal in great numbers for their skin and meat. Since the Seal Conservation Act of 1970 came into effect, the seals have been protected from shooting during the breeding season in the USA. The major threat is incidental capture in fishing nets of all types. Other threats are ship strikes, oil spill exposure, chemical contaminants, power plant intakes and harassment by humans while hauled out on land.

## | conservation |

There are different ways in which the harbour seal is conserved in the wild. Due to the Marine Mammal Protection Act's moratorium on taking marine animals hunting has been limited to natives of Alaska who use them for subsistence and handicraft purposes. Bounty hunting of marine mammals, including harbour seals, no longer occurs. The National Marine Fisheries Service and the Alaska Native Harbor Seal Commission signed a co-agreement to promote the health of the species. The culture of the natives is protected, scientific research has been promoted to facilitate management decisions, management conflicts have been identified and information is provided to the public to promote sustainable use, management and conservation of the harbour seal. In the UK a number of sites which are known for pupping and hauling out are suggested candidates for Special Areas of Conservation. By making breeding sites restricted areas this will help reduce disturbance. The Joint Nature Conservation Committee, an advisory body of the UK government, has produced guidance notes on monitoring techniques for the harbour seal. In the Waddensea (The Netherlands, Germany, Denmark), Swedish Baltic, the Irish Republic and the UK, hunting of harbour seals is prohibited.

## | find out more |

- http://www.nmfs.noaa.gov/pr/species/mammals/pinnipeds/harborseal.htm
- http://www.marinemammalcenter.org/education/marine-mammalinformation/pinnipeds/pacific-harbor-seal/
- http://www.iucnredlist.org/details/17013/0
- http://www.alaska.org/advice/harbor-seal
- http://www.arkive.org/common-seal/phoca-vitulina/
- http://www.seadocsociety.org/harbor-seal-facts
- http://www.palomar.edu/oceanography/harbor\_seals/facts.htm#XII. REPRODUCTION
- Picture (Groms, 2009) http://www.groms.de/Species\_HTMLs/Pvitulin.html
- http://animaldiversity.ummz.umich.edu/accounts/Phoca\_vitulina/))

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