

THE KILLER WHALE IN UK WATERS

DESCRIPTION The killer whale or orca, *Orcinus orca*, is a very striking creature, black on the back and sides with its white belly extending as a rear pointing lobe up the flanks. It has a conspicuous white oval patch above and behind the eye, and a grey saddle on the back just behind the fin. Females are 5.5-6.5m and males are 6.7-7.0m length. The dorsal fin is very tall (up to 1.8m), triangular, and erect (sometimes tilted forwards) in the adult male. The female and immatures have a smaller, distinctly curved fin. At sea the species is easily identified by its conspicuous black & white coloration and tall dorsal fin.

DISTRIBUTION Killer whales have a worldwide distribution in temperate and subpolar seas in both hemispheres. They are widely distributed on the Atlantic seaboard of northern Europe, mainly around Iceland, the Lofoten Islands and off Andenes in Western Norway, and in Northern Scotland, but

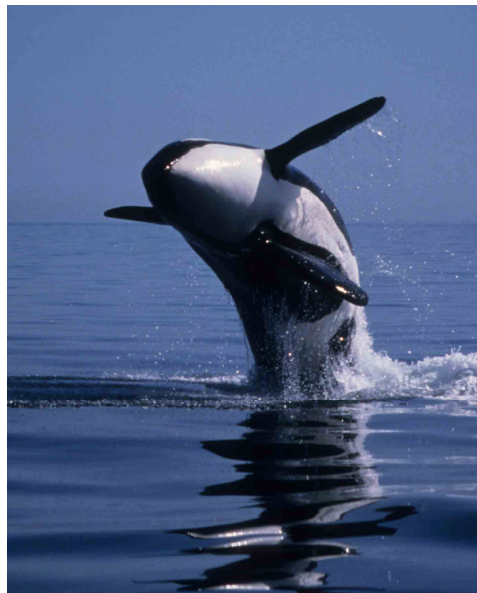


■ Regular, common or fairly common
■ Occasional
■ Casual or absent

they are occasionally seen south to the Iberian Peninsula, Azores, Madeira and rarely into the Mediterranean Sea. Around the British Isles, most sightings occur along the Atlantic seaboard and in the northern North Sea. The species occasionally enters the Irish Sea, mainly occurring off the coasts of SW Wales. It is scarce in the Channel and virtually absent from the southernmost North Sea.

Overall population estimates do not exist, but recent sightings surveys mainly from Iceland to the Faroes indicate a population in this region of somewhere between 3,500 and 12,500 individuals.

SOCIAL BEHAVIOUR Solitary killer whales may be encountered, but close-knit family groups, called pods, are typical. Pods normally contain 5 to 20 animals but occasionally two or more pods may come together temporarily forming superpods which can contain 150 or more animals. Killer whales are inquisitive and often approachable and may be seen breaching, lobtailing, flipper-slapping, and spy-hopping. Members of a pod usually stay together for life, with both sexes remaining in their natal group throughout adulthood, a social system which is seemingly unique among cetaceans. Studies in the Puget Sound-Vancouver region of the Pacific Northwest have shown that individual pods have distinct dialects, which remain consistent over time.



REPRODUCTIVE BIOLOGY Females become sexually active at an age of at least 7 years and males at an age of around 10-12 years. Mating occurs throughout the year but in the northern hemisphere they tend to give birth to a single calf from October-December. The gestation period is 13-16 months and lactation then lasts for more than 12 months.

The calf dependency period is prolonged, and calves may remain with their mothers for as long as 10 years in extreme cases. The normal calving interval is 3-3.5 years in the North Atlantic. Female killer whales live to around 90 years and males to 60 years.



DIET As well as feeding on fish (e.g. salmon, herring, cod, mackerel, etc), and squid, killer whales also feed on marine mammals (seals, sea-lions, elephant seals, dolphins & porpoises, as well as other whales), and birds. The killer whale's broad jaw, relatively few teeth, and very powerful jaw muscles almost certainly aid the retention of large prey. Its reputation for feeding on other marine mammals is, however, probably exaggerated. For most populations, the diet seems to be primarily fish such as salmon and cod, and also cephalopods like squid.

THREATS Commercial fisheries for killer whales existed between 1938 and 1981 when a total of 2,455 were taken primarily by Norway both in Norwegian coastal waters and offshore, including the seas around northern Britain. Whaling continues in some areas, for example Greenland, Lesser Antilles, Indonesia and Japan. In Greenland, killer whales are considered a pest and killing is encouraged by government policy. Reported catch estimates are considered to be serious under-estimates.

Killer whales are also captured for public display. Iceland has supplied most animals in recent years. However, following public pressure arising from the cinema film "Free Willy", one captive orca called "Keiko" was returned to Icelandic waters in summer 1998.

By-catches are another threat to killer whales, with animals caught in gill nets (e.g. in the Indian Ocean) and in mackerel purse-seine fisheries (e.g. in the eastern North Atlantic north of Shetland).

Concerns have also been expressed that toxic chemicals, accumulating in the fish prey of killer whales, will be passed to them through the food chain (high pollution levels were recently recorded in bottom dwelling fish in Puget Sound, Pacific Northwest).



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