



SPECIES FACT SHEET –

Sei Whale
(Balaenoptera borealis)



Photo © Caroline Weir

Measurements

Length

Newborn: 4.5-4.8 m

Full grown: 12.0-18.3 m

(females slightly larger than males)

Weight

Newborn: 780 kg

Full grown: 20,000-30,000 kg

Up to 45,000 kg

Identification

At Sea

Large slender rorqual; third longest whale. Identification at sea can be difficult. Dorsal fin is useful cue, being relatively taller than that of blue and fin whales, and distinctly recurved halfway up. Dark steely-grey back, often with grey or white round scars. Single prominent ridge occurs along the middle of the top of the head distinguishes from Bryde's whale. Downturned upper jaw. Columnar blow to 3 m high. Blow and dorsal fin often seen at the same time (unlike fin or blue whale).

On Land

Baleen plates relatively narrow, short, 300–410 on each side of upper jaw, with largest less than 80 cm long, uniformly grey-black but with fine (0.1 mm in diameter at base), almost silky, white fringes. 32-65 (average c. 50) relatively short throat pleats, ending far ahead of umbilicus.

Description

Head

The head is relatively slender with a slightly arched forehead, a downturned tip and a single prominent median ridge (Bryde's whales have three ridges), similar to that of fin whale but rounder than in blue whale. There are 30–60 throat grooves (averaging 50), all ending well before the navel. The right lower lip and mouth cavity are usually uniformly grey.

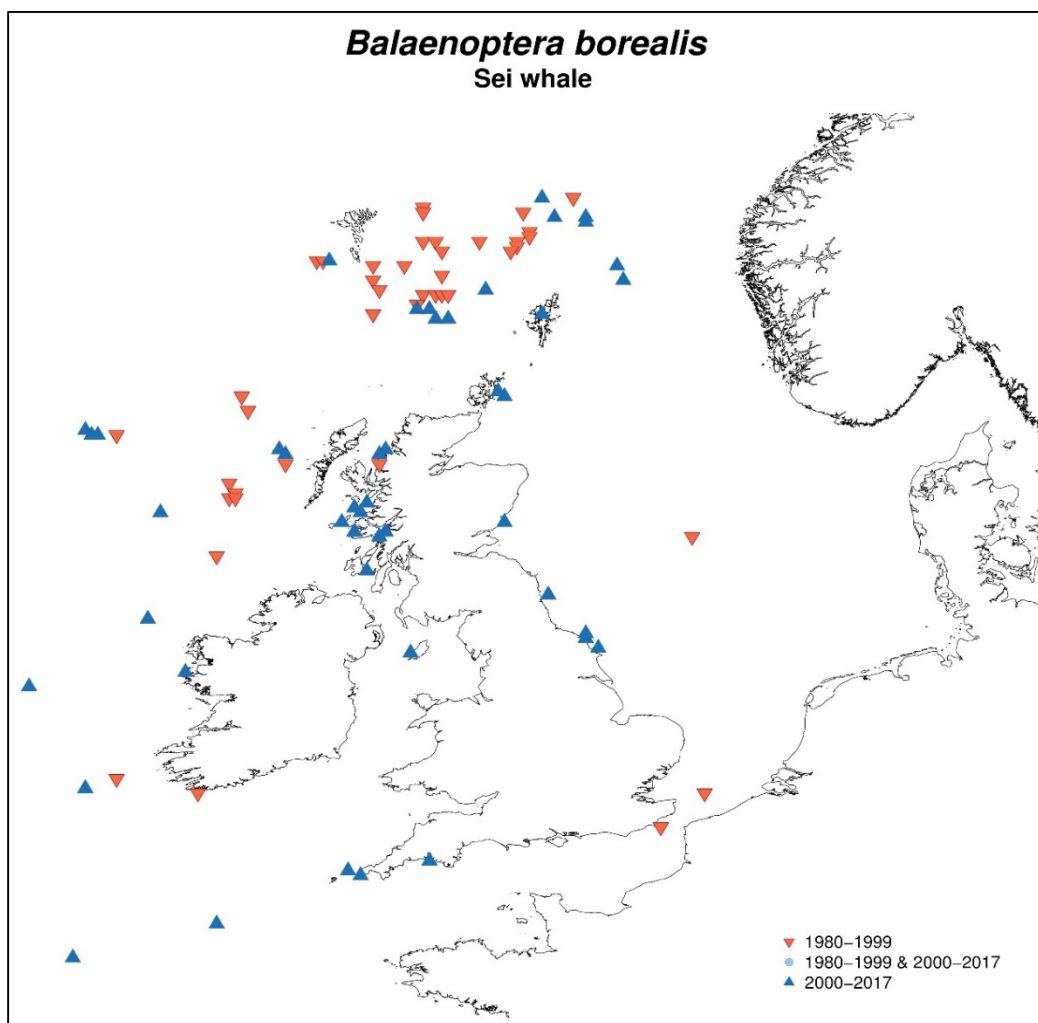
Body, Fin & Markings

The body is slender and streamlined; the head, back and flanks are usually a dark steely black, dark grey or brown colour except for a whitish area on belly. The back is often mottled with scars from lamprey or cookie-cutter shark bites. The dorsal fin is almost erect (taller than those of other large rorquals), usually 25–60 cm high, strongly re-curved and located slightly less than two-thirds along the back. It has relatively small pointed flippers, about 1/11 body length, and no white on undersides of flippers or tail flukes. The tail flukes are relatively small, broad and triangular, with a median notch. It virtually never raises its tail flukes when diving. Genetic differences exist between Northern and Southern Hemisphere forms; the southern form grows to a larger size.

Distribution

Global Distribution

It has a worldwide distribution, occurring mainly offshore in deep waters from the tropics to the polar seas of both hemispheres, with seasonal latitudinal migrations. In the central North Atlantic, summering populations are in deep waters around Iceland, with a concentration of animals observed in June just north and southwest of the Charlie Gibbs Fracture Zone (53°N) over the mid-Atlantic ridge. It is also seen regularly in small numbers in the Azores and Madeira. In the western North Atlantic, the species is reported in the summer from two main locations, Nova Scotia shelf and Labrador, and in winter, from Florida, the Gulf of Mexico and the Caribbean, although some in the latter area may actually be misidentified Bryde's whales.



Sei whale sightings around British Isles (Source: Evans & Waggitt, 2020)

European Waters

In the eastern North Atlantic, the species is thought to winter off NW Africa, Spain, Portugal, and in the Bay of Biscay, migrating north to summering grounds off Shetland, Faroes, Norway and Svalbard. In NW European shelf seas, sei whales are rarely seen, most records coming from waters 200+ m depth, such as west of Norway, and between the Faroes and Shetland.

UK & Ireland

It is uncommon in British and Irish waters, occurring mainly beyond shelf edge between Faroes and Northern Isles of Scotland, and in Rockall Trough south towards Porcupine Bight. The species occurs occasionally in coastal waters of Hebrides, off Shetland and Orkney, NE Britain, south-west of England, and western and SW Ireland. All sighting records have been between June and October, whereas in autumn–winter, they are regularly seen in the Bay of Biscay.

Abundance

There have been no abundance estimates covering the entire range of the species in the North Atlantic. The most recent estimate published has been from the NASS survey in June and July 2015 when 3,767 sei whales were counted in the waters of the central North Atlantic, mainly west and SW of Iceland. To the south-east, the CODA survey in July 2007 along the edge of the continental shelf detected sei whales in only one of the four survey blocks, off northwestern Spain, where 366 animals were estimated. However, most sei whales appear to be further west in the central North Atlantic between the Azores and Iceland, and the overall North Atlantic population may be around 10,000 animals.

Range & Habitat

The sei whale can be found in all ocean basins, favouring pelagic, temperate deep waters, 500–3000 m depth, often around frontal systems. The species appears to have a more offshore distribution than fin whales or other balaenopterids, although their distribution and movements can vary greatly between years, thought to be in response to changes in oceanographic conditions.

Diet

The fine baleen structure of the sei whales allows them to skim the surface waters for patches of their preferred copepod prey. As a result, feeding animals may be visible between dives just under the surface. They also feed on euphausiids, shoals of fish (e.g. sardine, anchovy), and squid if they are encountered. Occasionally they may lunge feed.

Behaviour

A relatively non-social species, it is usually seen singly or in pairs; otherwise in groups of up to 5. There are occasional larger aggregations, up to 30, generally associated with feeding. Sei whales dive more by sinking than an arched dive, and usually not very deeply. Sometimes they breach clear of water. They are very fast swimmers (possibly fastest of all rorquals), attaining 55 km/h, though they usually travel at 3.6–30 km/h. They have an annual cycle of migration between tropical and subtropical breeding grounds and subpolar feeding grounds.

Life History

The age at sexual maturity is 5.6–11.7 years (females) and 7– 11.7 years (males), although in places this has declined from 10–11 years to 6–8 years, following exploitation. The gestation period is 10.5–13 months, and weaning of the calf is thought to occur after 6-9 months. The calving interval is thought to be 2–3 years. Longevity is about 65 years. Annual adult mortality is 9–10% in the exploited Icelandic population. Calving occurs in midwinter in low latitudes.

Conservation Threats

Heavy exploitation wherever it was common, particularly 1955–1975, probably led to widespread depletion of populations. The species has had total commercial protection since 1986, but there is recent scientific take off Iceland, and limited subsistence whaling off Greenland. Threats include vessel strikes and entanglement in fishing gear although probably not severe, given their offshore distribution. No information exists on pollutant levels. Underwater noise disturbance from vessels and industrial activities may be potentially damaging in more heavily used areas, and seismic surveys for oil and gas exploration along Atlantic Frontier could also be potential problems. The recent mass mortality of sei whales in Chile thought to be caused by poisoning from algal blooms. The species is legally protected in European, British and Irish waters.

IUCN status: Endangered.

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