



SPECIES FACT SHEET –

Northern Bottlenose Whale *(Hyperoodon ampullatus)*



Photo © Saana Isojunno

Measurements

Length

Newborn: 3-3.5 m
Full grown: 7-8.6 m (female),
8-10 m (male)

Weight

Newborn: c. 300-350 kg
Full grown: Up to 7,500 kg

Identification

At Sea

Medium sized whale. The most distinctive feature is the bulbous forehead and short, dolphin-like beak. Strongly recurved dorsal fin, two-thirds along the back. Bushy blow rising to 2 m and slightly forward pointing.

On Land

Mature males have two erupted teeth at the tip of the lower jaw, absent in females and immatures. A second pair of teeth is sometimes buried in the gums behind the first, and there can be 10-20 additional vestigial teeth in the gums of both upper and lower jaws. Solid bony maxillary crests on the side of the whale's skull become larger and heavier with age.

Description

Head

It has a large bulbous forehead with a moderately long tube-like beak; the size of the head can be indicative of age and sex. Calves have a sloping rather than bulbous forehead. Males develop a large square, often overhanging, forehead that becomes whiter with age. This dense forehead may be used in male-male combat. There is a pair of forward pointing ventral throat grooves.

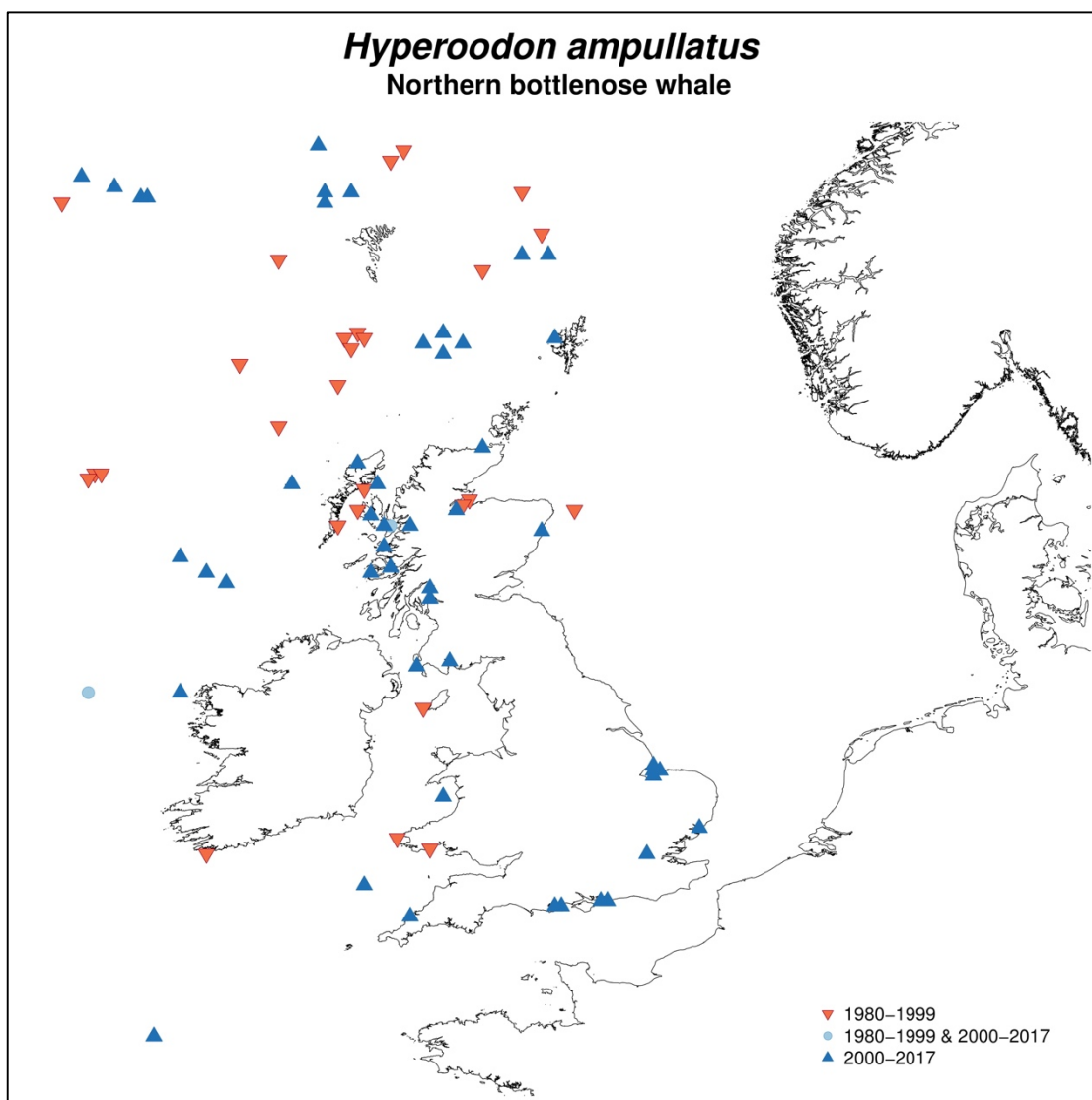
Body, Fin & Markings

It has a long body which is relatively robust and cylindrical in shape. The colouration varies between chocolate brown, grey or yellow with lighter flanks and belly. A film of diatoms may result in a brighter brownish tinge. Some individuals can be mottled with white to yellowish blotches and oval scars, which may increase with age. Older males may be very light, even white, over the head. Older females often have a white band around the neck. Calves are brownish-grey with dark eye-patches and some light colouration on the forehead. The wide-based dorsal fin is prominent, recurved and located two-thirds along the back. In older males, it is relatively tall and erect. The flippers are small and blunt at the tips. The tail flukes are broad and tapered, lacking a median notch.

Distribution

Global Distribution

Northern bottlenose whales are found only in the North Atlantic Ocean from 30°N to close to the ice edge but mainly in cold temperate, subarctic and Arctic waters. The main range is from Baffin Island and west Greenland south to New England in the west, and from Svalbard to the southern tip of the Iberian Peninsula in the east, including around the Azores, although it occurs casually in the Caribbean in the west and the Canaries in the east. In the western North Atlantic, regions of concentration include the Scotian Shelf, in the Davis Strait off Labrador, and in southern Baffin Bay.



Northern Bottlenose Whale Sightings around British Isles (source: Evans & Waggitt, 2020)

European Waters

In the central and eastern North Atlantic, the main regions of concentration, identified from former whaling activities, appear to be in the Greenland Sea east of Greenland and north of Iceland, around the Faroe Islands, in the Barents Sea around Jan Mayen and southwest of Svalbard, and in Norway off Andenes and Møre.

UK & Ireland

Most sightings have occurred in waters >1,000 m depth north and west of the British Isles, such as the Faroe-Shetland Channel and Rockall Trough, whilst the species has been detected acoustically in small numbers west of Ireland, particularly on the southern edge of the Rockall Trough. Most sightings in northern Britain are in August whilst acoustic detections west of Ireland are concentrated between July and September. Further south in the southern Bay of Biscay, sightings are largely between June and August.

Abundance

There have been too few sightings during the wide-scale survey in summer 2016 for an overall population estimate. Surveys further north between Iceland and Norway including the Faroe Islands have yielded varying estimates, but somewhere in the region of 28,000 animals in 1995 and 2001.

Habitat

Northern bottlenose whales are primarily found in waters >500 m depth, with a preference for deep continental slope waters and submarine canyons of 800-1,800 m depth.

Diet

High degree of feeding specialisation, predominantly eating *Gonatus* squid with fish and invertebrates occasionally also consumed. Foraging largely near the sea floor.

Behaviour

They form small groups of typically between 4 and 10 individuals but can be up to 20; groups may be segregated by age and sex. Associations with other individuals appear to be brief but male-male bonds are often formed and can last for years. Occasional aggressive male-male conflict (e.g. head butting) has been observed. They are curious animals that often approach vessels. Northern bottlenose whales display caring behaviour which makes them more vulnerable to hunting. They typically dive to depths of >800 m (maximum dive >1,400 m), approximately every 80 mins, with dive durations usually less than 10 mins but they can be up to 70 mins.

Life History

Age at sexual maturity is 7-9 years for males and 8-13 years for females. The calving interval is 2-3 years after a gestation period of 12 months. Calving peaks in spring to early summer (April-June). Lactation period is estimated to be at least 1 year. The oldest individual recorded was 37 years old.

Conservation Threats

Northern bottlenose whales were previously hunted for oil and animal food, as far back as the 16th century, but the largest numbers were taken between the 1850s and 1970s, with >80,000 killed. However, since 1920, annual catches (primarily by Norwegian whalers) have significantly reduced. Whaling caused population declines with some populations still recovering. Presently, the most significant threats faced are entanglement in fishing gear, contaminants, and disturbance from underwater noise (including mid-frequency sonar). The species is legally protected in European, British and Irish waters.

IUCN status: Data Deficient.

References

- Evans, P.G.H. (2020) Northern bottlenose whale *Hyperoodon ampullatus*. Pp. 118-121. In: *European Whales, Dolphins and Porpoises*. Marine Mammal Conservation in Practice. Academic Press, London & San Diego. 306pp.
- Evans, P.G.H. and Waggitt, J.J. (2020) Northern bottlenose whale *Hyperoodon ampullatus*. Pp. 148-149. In: *Atlas of the Mammals of Great Britain and Northern Ireland* (D. Crawley, F. Coomber, L. Kubasiewicz, C. Harrower, P. Evans, J. Waggitt, B. Smith, and F. Mathews, Eds). Published for The Mammal Society by Pelagic Publishing, Exeter. 205pp.
- Hooker, S., Gowans, S., and Evans, P.G.H. (2008) Northern bottlenose whale *Hyperoodon ampullatus*. Pp. 685-690. In: *Mammals of the British Isles*. (Eds. S. Harris and D.W. Yalden). Handbook. 4th Edition. The Mammal Society, Southampton. 800pp.
- Jefferson, T.A., Webber, M.A., and Pitman, R.L. (2015) Northern bottlenose whale *Hyperoodon ampullatus* Pp. 114-118. In: *Marine Mammals of the World*. A Comprehensive Guide to their Identification. Academic Press, London & San Diego. 608pp.
- Moors-Murphy, H.B. (2018) Bottlenose Whales *Hyperoodon ampullatus* and *H. planifrons*. Pp. 130-132. In: *Encyclopedia of Marine Mammals* (B. Würsig, J.G.M. Thewissen, and K.M. Kovacs, Eds). Academic Press, London & San Diego. 1,157pp.