

SPECIES FACT SHEET -

Bottlenose Dolphin (Tursiops truncatus)



Photo © Pia Anderwald

©Sea Watch Foundation, 2020

Measurements

Length Weight

Newborn: c. 1.2-1.3 m Newborn: Up to 30 kg Full grown: c. 3.0-3.8 m Full grown: Up to 650 kg

Identification

At Sea

Less agile than common or striped dolphins, but often breaches and bow-rides. Overall brown or grey colouration. Absence of flank markings. Short beak, rounded head, central recurved dorsal fin. Commonly breaches and bow-rides.

On Land

General form stout. Robust pointed teeth (diameter 5-13 mm); total count: 36-54/36-54 (upper/lower jaw).

Description

Head

The rounded head has a distinct short beak that is often tipped with white on the lower jaw. The blunt bottle-nosed beak and distinct crease between beak and melon are what gives the species its name. It has a gently curved mouth-line dipping down from the tip of the beak, then up and then down again creating impression of a smile.

Body, Fin & Markings

The body is robust and torpedo-shaped. The dorsal fin is centrally placed on the back, is tall and recurved but variable in shape and can be triangular, particularly in young animals. The flippers are recurved and pointed at the tip. It has dark to light grey or brown colouration along flanks, grading to white on the belly. There is an absence of any pigmented markings. The tail stock is moderately keeled, with a deeply indented median notch to the tail fluke.

©Sea Watch Foundation, 2020 2

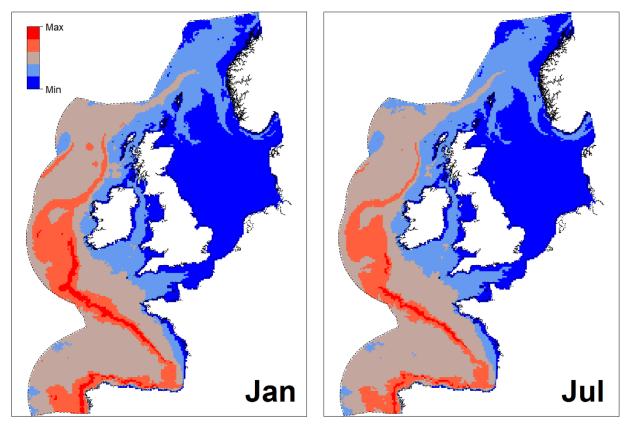
Distribution

Global Distribution

The species has a worldwide distribution in both coastal and offshore waters spanning tropical, subtropical, warm and cool temperate regions. In the western North Atlantic, the species occurs from equatorial waters north to Nova Scotia.

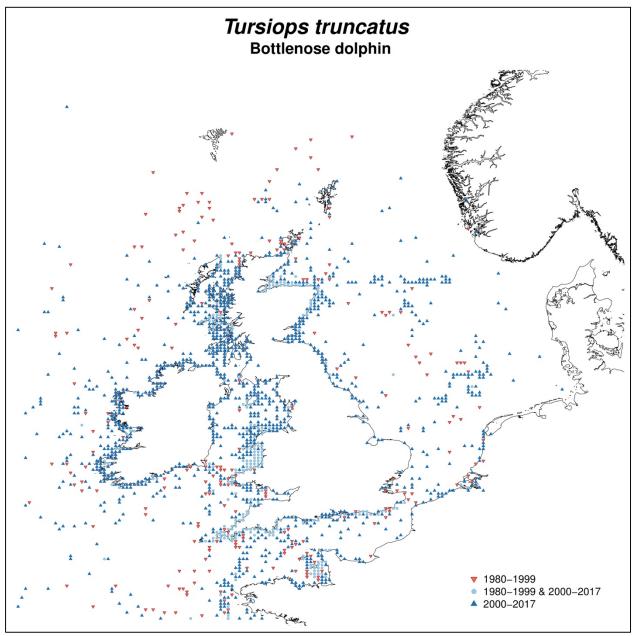
European Waters

Large offshore populations occur in the eastern North Atlantic, especially along the shelf edge, north to the Faroe Islands and occasionally to northern Norway and even Svalbard. Along the Atlantic seaboard of Europe, the species also occurs in smaller semi-resident populations near-shore off the coasts of Spain, Portugal, and north-west France, Britain and Ireland. It is common in the Mediterranean.



Overall Distribution of Offshore Bottlenose Dolphins around British Isles (Source: Waggitt et al., 2020)

©Sea Watch Foundation, 2020



Bottlenose dolphin sightings around British Isles (Source: Evans & Waggitt, 2020)

UK & Ireland

In the UK and Ireland, the species occurs around western Ireland (particularly the Shannon Estuary and Connemara), and the Hebrides (around Barra, and in the southern Inner Hebrides) in west Scotland. In the North Sea, a bottlenose dolphin population ranges out of the Moray Firth along the east coast as far south as Yorkshire. A separate population inhabits the Irish Sea particularly along coastal north and west Wales, including all of Cardigan Bay; whilst smaller numbers occur off the coasts of southern England, particularly Cornwall, Devon, and Dorset.

©Sea Watch Foundation, 2020

Abundance

In NW Europe, greatest numbers occur offshore. Wide-scale surveys in summer 2016 indicated a population of around 115,000 ranging along the edge of the continental shelf between Portugal and west Scotland.

The near-shore Moray Firth semi-resident population is estimated to be c. 200 animals. The semi-resident population inhabiting Cardigan Bay and other regions of the Irish Sea is estimated at 200-300 individuals.

Habitat

Its inshore distribution includes estuaries and harbours with brief forays into fresh water. Areas of strong tidal currents and steep bottom relief are particularly favoured. Little is known about the ecology of offshore animals, although they often associate with long-finned pilot whales. Offshore populations appear to favour the continental shelf edge.

Diet

A variety of fish and squid form a large portion of their diet. They are considered selectively opportunistic. In British waters, prey includes gadoids (cod, saithe, whiting, haddock), salmon, sprat, sand eels, pout, flatfish, and cephalopods. Across a population, bottlenose dolphins may appear to be generalists with regards to prey, but individuals within a population may show some degree of specialisation.

Behaviour

Most often found in small schools (2-50). In coastal areas, schools have a fission-fusion structure in which small social units will fuse to form larger social aggregations. Small social units can comprise male-male alliances, mother-calf groups or a mixture of males, females, calves and adults. Cooperation between individuals is common and includes babysitting and coordinated hunting. Relationships between individuals is complex, suggesting a high degree of individual recognition with long-term memory of previous encounters. Generally slow swimmers. Will frequently approach boats to ride bow waves. Variety of surface behaviours including breaches, tail-slapping, side-rolls, and a variety of exhalations such as rapid loud exhalations and blowing raspberries. The functions of these behaviours are poorly understood.

©Sea Watch Foundation, 2020 5

Life History

Mating systems are unclear. Age at sexual maturity is 9-15 years for males and 5-13 years for females. The average calving interval is 4 years; however, this can range from 2-10 years. The gestation period is about 12 months. Weaning occurs 18-24 months after birth. There is an extended season for births with a peak between May and November in British waters. The lifespan is 40-45 years for males and 50 years for females. Survival rates are 96-99% for adults and 75-90% for juveniles.

Conservation Threats

The main threats to bottlenose dolphins in northern Europe are probably high contaminant loads, underwater noise disturbance, and potential vessel strikes particularly from high-speed recreational craft. Further south around the Iberian Peninsula, entanglement in fishing gear may be an issue of concern. They are legally protected in European, British and Irish waters.

IUCN status: Least Concern.

References

Arso Civil, M., Quick, N.J., Cheney, B., Pirotta, E., Thompson, P.M., and Hammond, P.S. (2019) Changing distribution of the east coast of Scotland bottlenose dolphin population and the challenges of area-based management. *Aquatic Conservation*, 29: 178-196.

Cheney, B.J., Thompson, P.M., Ingram, S.N., Hammond, P.S., Stevick, P.T., Durban, J.W., Culloch, R.M., Elwen, S.H., Mandleberg, L., Janik, V.M., Quick, N.J., Islas-Villanueva, V., Robinson, K.P., Costa, M., Eisfeld, S.M., Walters, A., Philips, C., Weir, C.R., Evans, P.G.H., Anderwald, P., Reid, R.J., Reid, J.B., and Wilson, B. (2013) Integrating multiple data sources to assess the distribution and abundance of bottlenose dolphins (*Tursiops truncatus*) in Scottish waters. *Mammal Review*, 43: 71-88.

Evans, P.G.H. (2020) Common bottlenose dolphin. Pp. 79-85. 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) Bottlenose Dolphin *Tursiops truncatus*. Pp. 178-179. 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.

Jefferson, T.A. Webber, M.A., and Pitman, R.L. (2015) Common Bottlenose Dolphin *Tursiops truncatus* Pp. 237-242. In: *Marine Mammals of the World*. A Comprehensive Guide to their Identification. Academic Press, London & San Diego. 608pp.

Lohrengel, K., Evans, P.G.H., Lindenbaum, C., Morris, C., and Stringell, T. (2017) *Bottlenose dolphin and harbour porpoise monitoring in Cardigan Bay and Pen Llŷn a'r Sarnau Special Areas of Conservation, 2014-16.* NRW Evidence Report No: 191, 1-154.

Reid, J.B., Evans, P.G.H. and Northridge, S.P. (2003) Atlas of Cetacean Distribution in North-west European Waters. Joint Nature Conservation Committee, Peterborough. 76pp.

Waggitt, J.J., Evans, P.G.H., Andrade, J., Banks, A.N, Boisseau, O., Bolton, M., Bradbury, G., et al. (2020) Distribution maps of cetacean and seabird populations in the North-East Atlantic. *Journal of Applied Ecology*, 57: 253-269. DOI: 10.1111/1365-2664.13525.

Wells, R.S. and Scott, M.D. (2018) Bottlenose dolphin, *Tursiops truncatus*, Common bottlenose dolphin. Pp. 118-125. In: *Encyclopaedia of Marine Mammals* (B. Würsig, J.G.M. Thewissen, and K.M. Kovacs, Eds). Academic Press, London & San Diego. 1,157pp.

Wilson, B. (2008) Bottlenose Dolphin *Tursiops truncatus*. Pp. 709-715. In: *Mammals of the British Isles*. (Eds. S. Harris and D.W. Yalden). Handbook. 4th Edition. The Mammal Society, Southampton. 800pp.

©Sea Watch Foundation, 2020 6