



THE BOTTLENOSE DOLPHIN IN UK WATERS



DESCRIPTION The bottlenose dolphin *Tursiops truncatus*, a large stocky dolphin around 2.5 - 3.0 metres in length and weighing 200-275 kg, is perhaps the most familiar of all the dolphins one is likely to see. It is easily distinguished from the harbour porpoise, the latter being smaller (a little over 1 metre long), with a small triangular dorsal fin compared with the large sickle-shaped fin of the bottlenose dolphin. Unlike dolphins, which may leap right out of the water, the porpoise rarely shows any more than a back and fin. The bottlenose dolphin is often seen near the coast - in bays and around harbours, although herds can also be seen far offshore, often accompanying much larger pilot whales. When individuals - usually males - become separated from the social group, they may seek contact with humans, and two recent examples have occurred in Amble, Northumberland, and Dingle, Co. Kerry.

STATUS AND DISTRIBUTION In Europe, the species is found mainly along Atlantic coasts - along the west coast of Ireland, parts of Normandy and Brittany, and the Spanish and Portuguese coasts. Nowhere in Europe is it common, but several sheltered bays and estuaries possess herds that are more or less resident. The species was once frequently encountered in the summer months along the south coast of England and the coast of Holland, but now it is rare in both regions, although small numbers occur off the south-west coast of Cornwall, and during spring and summer off the Dorset coast east to Sussex and Kent.



Regular, common or fairly common
 Occasional
 Casual or absent

Over much of the central and northern North Sea, bottlenose dolphins appear to have been uncommon at least for the last hundred years, the exceptions being the Moray and Cromarty Firths, where a resident community numbering around 130 animals may be found. There is some recent evidence that reproduction of this population has been insufficient to balance mortality. Reasons for this are unclear but higher numbers using the Firths have been correlated with years of strong salmon runs, which in turn has been linked to longer term North Atlantic Climatic Oscillations. From the 1990s, a portion of the Moray Firth population has been visiting the Aberdeen coast particularly in the first half of the year, extending south to St Andrews Bay and the Firth of Forth from May to September. This means that although a Special Area of Conservation has been established for the species in the inner Moray Firth, a large portion of the range of this east Scottish population is currently unprotected.

Over on the west coast of Scotland, small groups of bottlenose dolphins each numbering no more than 30 animals inhabit particular localities in the Hebrides - Barra Sound, in the vicinity of Mull, Coll and Tiree, around Islay and between Arisaig and Skye. It is possible that the source of these little populations is the Atlantic region west of the Outer Hebrides where bottlenose dolphins can be seen often in the company of long-finned pilot whales. Elsewhere in the Atlantic, off the west coast of Ireland, bottlenose dolphins can be seen in relatively large numbers, with groups remaining through the year in the Shannon Estuary, Clew Bay and Galway Bay.

The first UK Special Area of Conservation for bottlenose dolphins was set up in Cardigan Bay off the west coast of Wales where the species has been resident over many years. Within the SAC and environs, about 215 individuals have been estimated to occur during summer using photo-identification methods, although it is not yet known what proportion are resident, and it is believed that in spring and autumn, animals from elsewhere migrate into the region.



SOCIAL BEHAVIOUR The bottlenose dolphin is a social animal, usually living in herds of between half a dozen and 25 individuals, although sometimes these may aggregate together to form herds numbering up to a thousand animals. The smaller herds appear to be rather like an extended family, with individuals remaining together over a number of years. Sometimes members split off and form small sub-groups, particularly if they are of the same sex or broadly the same age. These may, however, return at intervals to the core group. Family groups seem to be based upon females with their calves, and these latter can remain with their mothers for three, four, or even up to ten years, before going their own way. Males may join the group for short periods, or live in separate bachelor herds.

REPRODUCTIVE BIOLOGY In Britain, a single calf about a metre in length is born sometime during the summer months, usually between March and September, mating having taken place twelve months before. The calf is nursed immediately by the mother, who may be assisted by other females. If necessary, they will help the calf up to the surface for its first breath and the mother may also be assisted if she is weak. The calf is suckled for around 18-20 months, so its mother usually cannot breed again for two or three years and sometimes as much as six years can elapse between calves. It is a long time before a young bottlenose dolphin reaches sexual maturity - between 8 and 15 years for males and 5-13 for females. However, both sexes can live for more than 25 years, and females have been known to live over 50 years, so she may give birth to several young in her lifetime. In dolphinarium, the lifespan of bottlenose dolphins is usually much lower.



DIET Although the bottlenose dolphin takes a wide variety of schooling fish including herring, mackerel, cod, bass, salmon, and sea trout, in many parts of its range around the world coastal populations are thought to favour bottom-living fish such as mullet, moray eels and flounder.

THREATS Bottlenose dolphins face a number of modern threats. Favoured sheltered bays and estuaries with an abundance of fish, they are vulnerable to inputs of pollutants; vessel collisions and sound disturbance from large numbers of pleasure craft; and accidental capture in fishing nets, particularly coastal set nets for salmon.

FURTHER READING

- Evans, P.G.H., Anderwald, P., and Baines, M.E. 2003. *UK Cetacean Status Review*. Report to English Nature & Countryside Council for Wales. 160pp.
- Leatherwood, S. and Reeves, R.R. (Eds) 1990. *The Bottlenose Dolphin*. Academic Press, San Diego. 653pp.
- Reid, J., Evans, P.G.H. and Northridge, S.P. 2003. *Cetacean Distribution Atlas*. Joint Nature Conservation Committee, Peterborough. 68pp.
- Thompson, P. and Wilson, B. 1994. *Bottlenose Dolphins*. Colin Baxter Photography, Grantown-on-Spey. 72pp.
- Wells, R.S. and Scott, M.D. 1999. Bottlenose Dolphin. Pp. 137-182. In: *Handbook of Marine Mammals. Volume 6: The Second Book of Dolphins and the Porpoises* (Eds. S.H. Ridgway and R. Harrison). Academic Press, San Diego. 486pp.