# CETACEANS OF EAST SCOTLAND

This region includes nearshore (within 60 km of the coast) and offshore waters from Eyemouth on the Scottish Borders to Cape Wrath in Highland Region. The cetacean fauna (whale, dolphins and porpoises) of this region is moderately rich. From East Lothian to Angus, six species (a little over 21% of the 28 total UK species) are recorded regularly. Further north, in waters off the Grampian coast and Highland coasts, eight cetacean species (just under 29% of the 28 UK species) have been recorded regularly since 1980.

Much of the northernmost North Sea reaches depths of 100-200 m, becoming shallower (generally 20-100 m) around the Northern Isles (Orkney & Shetland), the Moray Firth, and Grampian coast. Currents passing through the sounds and around headlands tend to bring in prey for marine mammals and birds, providing suitable conditions for feeding. Several of those areas are favoured by cetaceans such as harbour porpoise, bottlenose and white-beaked dolphin, and minke whale, and by seabirds such as razorbill, guillemot and puffin.

The Morey Firth is of national importance for its bottlenose dolphin population of between 1-200 individuals. The only other resident coastal population of this species known for Britain occurs in Cardigan Bay, West Wales, although there are sizeable populations around Ireland and small numbers off South-west England.

The harbour porpoise and bottlenose dolphin are listed in Annex II of Council Directive 92/43 EEC of 21st May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora, as species whose conservation requires the designation of Special Areas of Conservation.

## CETACEAN SPECIES REGULARLY SIGHTED IN THE REGION

**Minke whale**
*Balaenoptera acutorostrata*

Recorded in small numbers offshore in the northern North Sea, coming closer to the coast off north Scotland and into the Moray Firth, particularly between July and October. Further south in the region, the species is recorded in small numbers in the Firth of Forth (e.g. from Isle of May) and offshore, between June and September.

**Harbour porpoise**
*Phocoena phocoena*

Fairly common in nearshore waters throughout the region especially between Cape Wrath and Faraid Head in the Highlands, with peak numbers between July and February. Also common in the Pentland Firth and nearshore waters around Dunnet Head and Duncansby Head (Highland Region) between July and October. Further south, it occurs in small numbers in nearshore waters along the coasts of Tayside and east Lothian, and in the Firth of Forth, with most sightings between July and September.

**Bottlenose Dolphin**
*Tursiops truncatus*

Common in nearshore waters of the Moray Firth, particularly at the entrances to Cromarty Firth (around North & South Sutors), Inverness Firth (Chanonry Point & Fort George), and Beauly Firth (North & South Kessock) in Highland Region. Occurs in all months of the year, but peak numbers July to October. Off the Grampian coast, sightings occur in the vicinity of Findhorn Bay, Burghead, Lossiemouth and Portnockie (Moray). Further south, it is recorded regularly between Aberdeen and St Cyrus, and from St Andrews Bay.

**White-beaked dolphin**
*Lagenorhynchus albirostris*

The commonest dolphin off the north coast of Scotland, and offshore in the northern North Sea. Peak numbers and frequency of sightings occur between June and September (particularly August). Further to the south of the region it occurs mainly offshore but can e seen off the Aberdeen coast. Most sightings are between June and September.

**Atlantic White-sided dolphin**
*Lagenorhynchus acutus*

Deep water species recorded mainly more than 10 km from the coast, and only rarely in nearshore waters, generally in the north of the region between July and September.

**Risso's dolphin**
*Grampus griseus*

Widely distributed, usually in groups of 5-20 individuals. Recorded annually, mainly off the north Caithness coast and in the Pentland Firth, between April and September (mainly after July)

**Long-finned pilot whale**
*Globicephala melas*

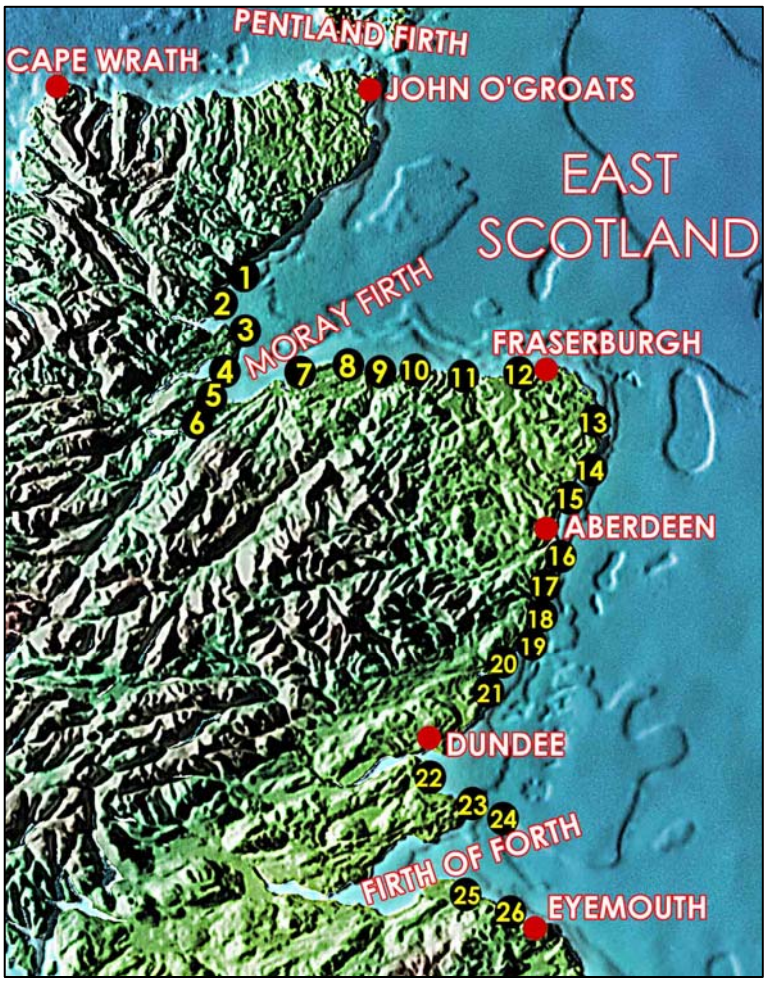
Common and widely distributed offshore in the northern North Sea throughout the year, occasionally coming into coastal waters. Most frequently observed between June and January.

**Killer whale**
*Orcinus orca*

Recorded annually in the northern North Sea, mainly between June and September, and occasionally in the Firth of Forth between March and June. Killer whales may come close to the coast anywhere in the region, often in response to aggregations of breeding seals upon which the species sometimes feeds. Often occurs offshore particularly in winter months.

**Other cetacean species recorded in the region include:** Humpback whale *Megaptera novaeangliae*, Sperm whale *Physeter macrocephalus*, Beluga *Delphinapterus leucas*, Northern bottlenose whale *Hyperoodon ampullatus*, Sowerby's beaked whale *Mesoplodon bidens*, Short-beaked common dolphin *Delphinus delphis*, Striped dolphin *Stenella coeruleoalba*, False killer whale *Pseudorca crassidens*, and Risso's dolphin *Grampus griseus*.

## *REGIONAL MAP*




**Sightings hotspots:**

1) Brora (Highland)
2) Golspie (Highland)
3) Tarbat Ness (Highland)
4) Sutors of Cromarty (Highland)
5) Chanonry Point (Highland)
6) North Kessock (Highland)
7) Burghead (Moray)
8) Lossiemouth (Moray)
9) Findochty (Moray)
10) Cullen Bay (Moray)
11) Troup Head (Aberdeenshire)
12) Kinnaird Head (Aberdeenshire)
13) Peterhead (Aberdeenshire)
14) Bullers of Buchan (Aberdeenshire)
15) Collieston (Aberdeenshire)
16) Torry Battery (Aberdeenshire)
17) Souter Head (Aberdeenshire)
18) Cove (Aberdeenshire)
19) Portlethen (Aberdeenshire)
20) Downies (Aberdeenshire)
21) Stonehaven (Aberdeenshire)
22) St Andrews (Fife)
23) Fife Ness (Fife)
24) Isle of May
25) North Berwick (East Lothian)
26) St Abbs Head (Scottish Borders)

Sutors of Cromarty

Troup Head (Aberdeenshire)

Torry Battery, Aberdeen

North of Stonehaven (Aberdeenshire)

## *THREATS TO CETACEANS*

Cetaceans in the region face three major potential pressures from human activities: conflicts with fisheries (either by competition for a common food resource, or accidental capture in fishing gear), habitat degradation (mainly by pollution), and disturbance (from underwater sounds).

The main fishing ports in the region are Peterhead, Fraserburgh and Aberdeen (Aberdeenshire), but other ports include Macduff, Burghead (Moray), Scrabster and Wick (Highland Region). There have been reports from the region of small cetaceans (mainly harbour porpoises, but also white-beaked and Atlantic white-sided dolphins) being killed accidentally in fishing gear. Set net fisheries for salmon exist all around the Moray Firth and Grampian coasts, and these are reported to capture both harbour porpoises and bottlenose dolphins occasionally. Gill netting, pair-trawling, and seining all take place in the region, and result in a cetacean bycatch, although details of numbers taken do not exist.

Contaminant levels in cetaceans from the region are relatively low. Mean total PCB (25 congeners) levels of 24 harbour porpoises sampled from eastern Scotland (Berwick-upon-Tweed (Northumberland) to Strathy Point, Caithness (Highland Region) from 1988-92 amounted to 4 ppm. On the other hand, possible causative agents of skin lesions present on individuals from the Moray Firth bottlenose dolphin population are untreated sewage, pathogens, and toxic compounds.

Finally, recreational activities (speedboats, jet skis, etc.) in the vicinity of localities such as Fortrose and Inverness, the inner Firth of Forth and Firth of Tay can pose threats of direct physical damage from collisions as well as disturbance from the high frequency (>1 kHz) noise generated by these vessels. Negative responses (vessel avoidance and increased dive times) by both bottlenose dolphins and harbour porpoises to such sounds have been reported. Other underwater sounds from seismic activities (as part of oil and gas exploration in the North Sea) involve lower frequencies, and therefore are most likely to affect baleen whales which communicate primarily at these frequencies (20-500 Hz), although it is possible that porpoises and dolphins are also affected, perhaps indirectly by changing the distribution of their fish prey.