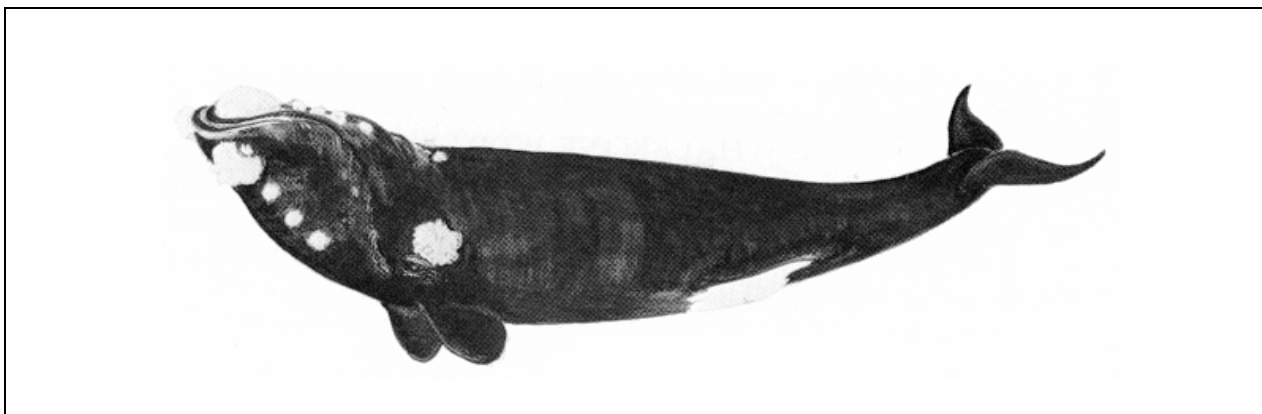


Nomination

Eubalaena glacialis, Northern Right whale



Geographical extent

OSPAR Region; All

Biogeographic zones: 1,2,3

Region & Biogeographic zones specified for decline and/or threat: as above

The North Atlantic population of this species is usually divided into an eastern and western stock although photo-identification and preliminary genetics data from recent work suggests that there may be links between animals found in the western and eastern Atlantic (Knowlton *et al.*, 1992; Evans, 2000).

In the OSPAR Maritime Area there have been sightings of the northern right whale on or near continental shelf edges off the Iberian Peninsula, the Irish Sea, west of Scotland and Ireland, in Norway and south of Iceland (Evans, 2000). The whales use northern feeding grounds in the spring then move to temperate waters in autumn and winter. Historically the main calving grounds included the Bay of Biscay and there were feeding areas in Scandinavian waters (Collet, 1909; Thompson, 1928; Fairley, 1981).

Application of the Texel-Faial criteria

E.glacialis was nominated for inclusion by one Contracting Party citing regional importance, rarity, decline and sensitivity, with information also provided on threat.

Regional importance

The historic distribution of the eastern stock of *E.glacialis* included areas both inside and outside

the OSPAR Maritime Area. Given the current endangered status of this species the remaining whales within the OSPAR Area are of regional importance.

Decline

Tens of thousands of northern right whales were caught in earlier centuries (mostly before 1800) but historic records are not complete enough for pre-whaling population numbers to be estimated accurately. The current size of the North Eastern Atlantic population is unknown but it is estimated to be no more than the low tens of individuals (Brownell, *et al.* 1986; Kraus *et al.*, in Evans, 2000). The species was believed to be near extinction in the late 1980's, with possibly only a few individuals remaining, and there is no evidence of recovery (Klinowska, 1991).

Sensitivity

Many populations of *E.glacialis* occurred in coastal waters of temperate regions and appeared to depend on inshore areas for reproductive activities. This species may therefore be more vulnerable to the detrimental effects of human activity than many other cetaceans (Klinowska, 1991).

Cetaceans use sound to provide information about the physical environment, to communicate between individuals and for the detection of potential prey. Baleen whales, such as the northern right whale emit low frequency sound that can travel hundreds of kilometres. This makes them sensitive to acoustic disturbance from military activities such as naval sonars (particularly low frequency acoustics), as well as other sources such as seismic exploration. The whales will be particularly vulnerable if the zone

of influence coincides with migration and breeding areas (Evans, 2000).

Threat

The northern right whale has been hunted in the North Atlantic since the 10-11th centuries. The population has been severely depleted as a result and it is now probably the most endangered of the large whale species (Klinowska, 1991). The main current threats are from entanglement in fishing gear, ship strikes and pollution (bioaccumulation of heavy metals and organochlorines, oil pollution, and radioactivity) and acoustic disturbance.

Relevant additional considerations

Sufficiency of data

Most of the historic data on northern right whales comes from whaling records. Sightings schemes are a more recent source of information but it is difficult to determine population size from these data as the animals are so rare.

Changes in relation to natural variability

The large numbers of northern right whales that were fished during earlier centuries will have masked any changes in the population caused by natural variability. With such a small number remaining, natural variability may however become a major contributory factor in its local extinction.

Expert judgement

Historic records show that tens of thousands of whales were caught when it was the target of whaling during earlier centuries leading to the historic decline in this species. It is also clear that it remains vulnerable today, and that there is a threat of it becoming extinct in the OSPAR Maritime Area.

ICES Evaluation

The species occurs in all regions of the OSPAR area, but in Region II is peripheral to the range of the species. The ICES Advisory Committee on Ecosystems (ICES, 2003) concluded that there is good evidence of decline but there little evidence of direct threats currently, owing to the extremely low populations size.

Threat and link to human activities

Cross-reference to checklist of human activities in OSPAR MPA Guidelines

Relevant human activity: Shipping & navigation, military activity, research; fishing, hunting, harvesting; *Category of effect of human activity:*

Physical – noise disturbance. Biological – removal of target species, removal of non-target species, physical damage to species.

Whaling, and therefore human activity, is known to have caused the significant decline of the northern right whale. Current threats from ship collisions, marine pollution, water quality (through bioaccumulation), acoustic disturbance, and entanglement in fishing gear are also linked to human activities.

Management considerations

The population was severely depleted before it was given protection by the International Whaling Commission (IWC). The ban needs to remain in place and management measures need to be geared towards enabling the recovery of the population. OSPAR does not deal with whaling issues directly but can communicate an opinion on it to the IWC and members of the North Atlantic Marine Mammal Commission (NAMMCO).

The IUCN have classified the northern right whale as an endangered species (IUCN, 2002).

Further information

Nominated by:
UK

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Useful References:

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