

The North Atlantic Marine Mammal Commission



Sustainable use - sustainable communities



Photo: Grete Hove Sand-Bjorck

NAMMCO

The North Atlantic Marine Mammal Commission – is an international body for co-operation on conservation, management and study of marine mammals in the North Atlantic. The NAMMCO Agreement focuses on contemporary approaches to the study of the marine ecosystem as a whole, and to better understand the role of marine mammals in this system. Through regional co-operation, the NAMMCO-member countries aim to strengthen and further develop effective conservation and management measures for marine mammals. Such measures are based on the best available scientific evidence, and taking into account both the complexity and vulnerability of the marine ecosystem, and the rights and needs of coastal communities to make a sustainable living from what the sea can provide. NAMMCO provides a mechanism for co-operation on conservation and management for all species of cetaceans (whales) and pinnipeds (seals and walruses) in the region, many of which have not before been covered by such an international agreement.

The Agreement to establish NAMMCO was signed in Nuuk, Greenland on 9 April 1992 by the current members of the Commission - the Faroe Islands, Greenland, Iceland and Norway. NAMMCO had its beginnings in an earlier international conference on marine mammals, first held in Reykjavik in 1988 and also attended by Canada, Japan and Russia. At the 1990 meeting of the conference in Tromsø, a memorandum of understanding was signed by the four Nordic North Atlantic countries to establish an informal North Atlantic Committee for Co-operation on Research on Marine Mammals (NAC). The Parties to NAC agreed to work towards the development of mechanisms to ensure the conservation and management of marine mammals. From this process evolved NAMMCO.

Marine mammals are an important part of the household economy for many Greenlanders. Seals are used for food and clothing, and the skins can be sold for cash. The harvest of marine mammals is also an important part of the cultural tradition of Greenlanders and other peoples of the North Atlantic.



Photo: Grete Hovestrand-Broda

The North Atlantic Marine Mammal Commission is made up of four major elements:

1. The Council is the highest authority of the Commission. Member countries meet annually to exchange information, discuss matters of mutual interest and make decisions related to the aims of the organisation. Observers from the Governments of Canada, Denmark, Japan, Russia and St. Lucia also regularly attend council meetings.

2. The Scientific Committee is responsible for providing the scientific advice, in response to requests from the NAMMCO Council, which forms the basis for conservation and management decisions.

3. Management Committees, whether species-specific or general, propose measures for conservation and management and make recommendations to the Council concerning scientific research.

4. The Secretariat, which serves the Council and its Committees in their general work and meetings, is hosted by Norway at the University of Tromsø. The Secretariat also compiles data on species relevant to the specific conservation and management interests of the organisation, and provides information for the general public on the work of NAMMCO.

In addition to these fundamental elements, ad hoc working groups are also set up by the Council to deal with specific matters of mutual interest, such as the exchange of technical advice on hunting methods and the development of a reciprocal observer scheme for coastal whaling and sealing.

The Scientific Committee establishes its own specialist working groups, where appropriate, to deal with requests for advice from the NAMMCO Council. Such working groups may include experts from both NAMMCO member and non-member countries.

The NAMMCO Fund provides financial support for projects, which contribute to the knowledge and understanding of marine mammal conservation and sustainable use of marine mammal resources. The Fund is operated by a Board consisting of a representative from each NAMMCO member country, and is administered by the Secretariat. The Fund has provided funding for projects including the production of films, books, posters and brochures, and the holding of symposia and meetings.



Co-operation



International law and agreements have recognised that marine mammals may migrate over vast distances, and that states should therefore co-operate on their conservation and management through the appropriate international organisations. Concerns for the continued viability of marine mammal resources, coupled with past examples of unsustainable exploitation, have led us to recognise that we share a responsibility to maintain the health and biological diversity of these species and their environment, whether they are confined to the coastal waters of one nation, or range through the waters of several.

The NAMMCO Agreement has its basis in widely recognised principles of international law and conservation. This is in particular reflected in the 1982 United Nations Convention on the Law of the Sea (UNCLOS), and the international principles and plans for future environmental management which were agreed upon in the Rio Declaration and Agenda 21 at the 1992 United Nations Conference on Environment and Development. In accordance with UNCLOS, NAMMCO ensures regional co-operation in an area where ecosystems and resources cross the boundaries of several states and the high seas.

NAMMCO has co-operative arrangements or exchanges information with a number of relevant international organisations. Of particular importance is the International Council for the Exploration of the Sea (ICES). Others include the International Whaling Commission (IWC), the Northwest Atlantic Fisheries Organisation (NAFO), and the Agreement on the Conservation of Small Cetaceans in the Baltic and North Seas (ASCOBANS). NAMMCO has also established contacts with the United Nations Food and Agriculture Organisation (FAO), the World Conservation Union (IUCN), and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).



Grundarfjord in western Iceland is a typical North Atlantic community that is highly reliant on harvesting natural resources of the sea. The goal of harvest management is to ensure long-term sustainability of both resources and communities.

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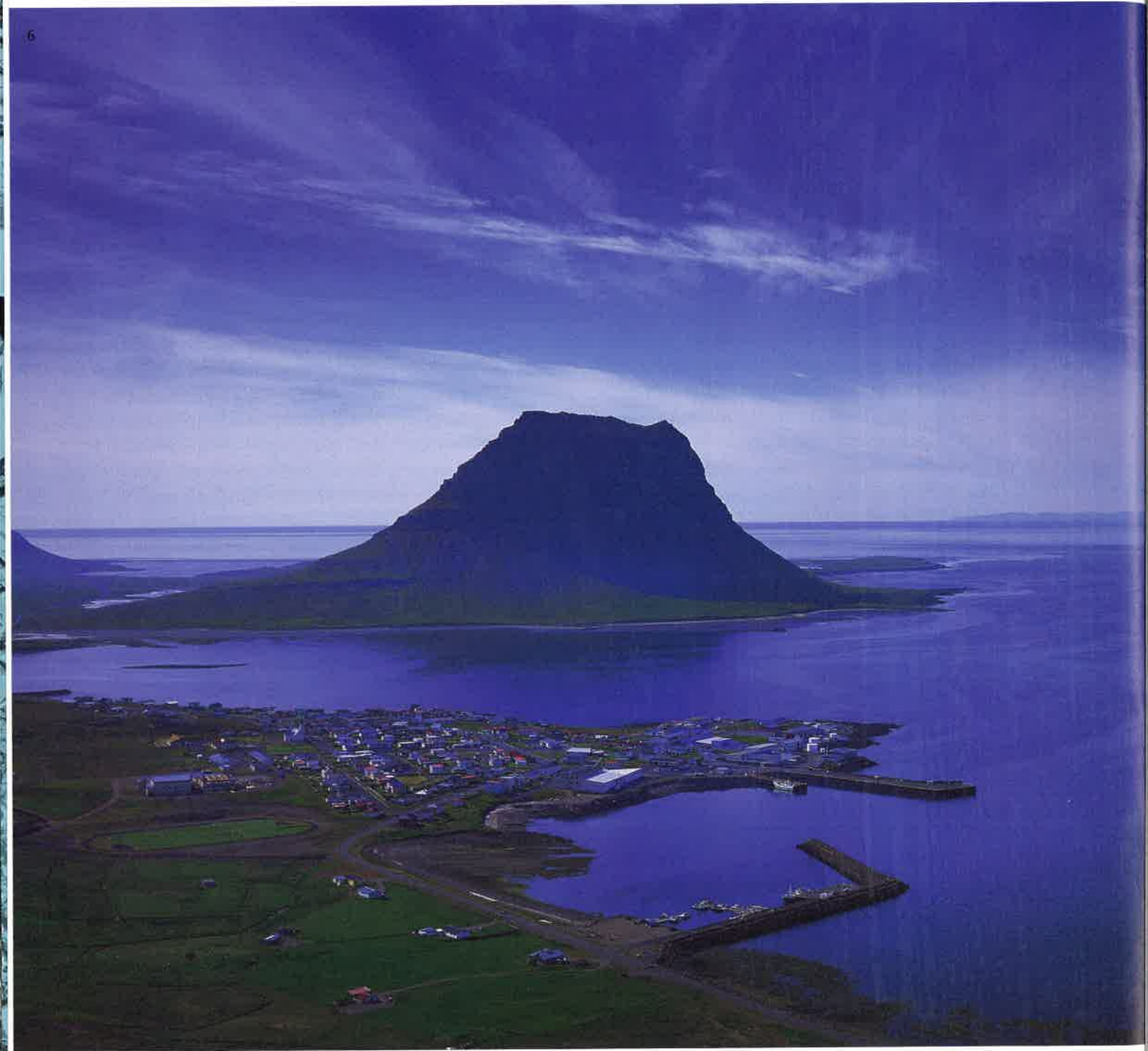


Photo: Ragnar Th. Sigurðsson

Conservation and Management

Whales, seals and other marine mammals have long been a significant part of the life and culture of coastal people all over the globe. The human relationship with these animals differs greatly from country to country and from culture to culture, as indeed does the human/nature relationship in general.

In modern times, the extent and effects of human exploitation of wildlife – including marine wildlife – has become an increasing focus of concern. A wide range of initiatives has been taken on both national and international levels to conserve the natural environment and biological diversity for the benefit of both present and future generations. The goal – in today's conservation terms – is to ensure that ecosystems can, in the long-term, sustain continued direct and indirect human impacts on their biological processes.

Marine mammals fulfil a wide range of economic, cultural and social needs for coastal communities in the North Atlantic and elsewhere. If the livelihoods provided by these resources are to be maintained on a sustainable basis, it is essential to make management decisions based on sound science. It is also important to enhance our understanding of the interrelations between marine mammals and other components of the marine ecosystem, and to ensure that the impacts of human activities, whether at sea or from land, are not detrimental to the continued viability of marine mammals and their habitats.

Within NAMMCO, member governments seek advice on the best approaches to conservation in the context of Management Committees, whose role is to make recommendations to the Council concerning scientific research, and to propose to its members specific management measures. Such measures generally pertain to a single stock or species. Member countries seeking management advice through NAMMCO have the advantages of international scientific expertise through the Scientific Committee, and the accumulated experience of other member countries in the sustainable management of marine resources.



Photo: Dorete Bloch

An Example of International Management in Action

Long-finned Pilot Whale (*Globicephala melas*)

The Scientific Committee utilised data from a 1996 ICES Study Group on Long-finned Pilot Whales and the NASS-89 survey in addressing a request from the NAMMCO Council to analyse the effects of the drive hunt in the Faroe Islands on North Atlantic pilot whales. A particular focus was whether the numbers taken are consistent with sustainable utilisation. Using these results, the Scientific Committee concluded that historic and present catches in the Faroe Islands have had a negligible effect on the long-term trends in the pilot whale stock. Based on this advice, the Management Committee in turn concluded that the drive hunt of pilot whales in the Faroe Islands is sustainable.

The Norwegian minke whale hunt provides opportunities for scientists to collect samples for research on genetics, contaminants, reproductive rates, feeding and other aspects of minke whale ecology.



Photo: Tore Haug

8 Research

Our knowledge of marine mammals and their environment has been greatly enhanced through modern science in recent decades. As human populations continue to exert increasing pressure on the world's living resources to meet their needs, new approaches to the study of the marine ecosystem and the relationships between the different species in their environment are needed.

The Scientific Committee, the central element in the structure and work of NAMMCO, is made up of scientific experts appointed by each member country. It meets regularly to deal with requests made by the Council for advice on both general and specific matters, using, to the extent possible, existing scientific information on the marine mammal species in question and drawing on relevant external expertise.

The Scientific Committee provides advice to the Council in several areas, including:

Status and sustainable harvest of marine mammal stocks

- What is the distribution of the stock?
- How many are there?
- At what rate do they reproduce and die?
- How many animals can sustainably be taken from the stock?

Interactions of marine mammals with other marine species

- What and how much do they eat?
- Do fisheries have an impact on marine mammals?
- Do marine mammals have an impact on commercially important fish stocks?

Effects of pollution

- Do pollutants affect the health of marine mammals?
- What are the health consequences of contaminated marine mammals to the people who consume them?

Required research

- What research is needed for effective management?

NASS - North Atlantic Sightings Survey for cetaceans

The joint North Atlantic cetacean sighting surveys in the summer of 1995 – known as NASS-95 – were co-ordinated through a planning group under the NAMMCO Scientific Committee. NASS-95 represents an important follow-on from similar NASS surveys carried out in the region in 1987 and 1989. With the participation of national vessels and aircraft covering as wide an area as possible, NASS-95 was designed to provide updated data for use in the continued monitoring and assessment of the distribution and abundance of whale stocks and species in the North Atlantic. NAMMCO will continue to play a role in the co-ordination of large-scale sightings surveys throughout the North Atlantic, so that long-term trends in distribution and abundance can be monitored.



Photo: Bjørn Tore Forberg



Photo: Bjørn Tore Forberg



Photo: Per Erik Martensson



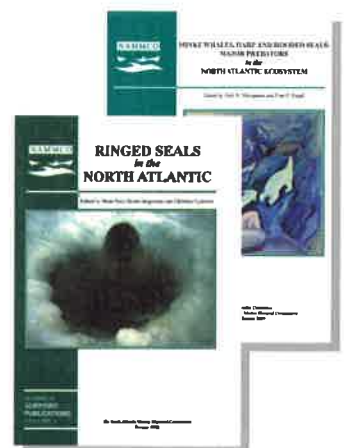
Photo: Knut Sloglund

NAMMCO Scientific Publications

NAMMCO has initiated a new scientific journal, NAMMCO Scientific Publications. The purpose of the NAMMCO Scientific Publications series is to make available, subject to formal peer review, scientific papers that have contributed to the work carried out by the NAMMCO Scientific Committee. NAMMCO Scientific Publications are thematic in nature, with each volume containing invited papers addressing a particular topic. As of 2000, two volumes of NAMMCO Scientific Publications have been published: *Vol. 1 Ringed Seals in the North Atlantic*; and *Vol. 2 Minke Whales, Harp and Hooded Seals: Major Predators in the North Atlantic Ecosystem*.

Users' Knowledge

NAMMCO Council has recognised that marine mammal users, particularly hunters, have a wealth of experience and first-hand knowledge about the distribution, abundance, biology and behaviour of marine mammals, and that the use of this knowledge can only increase the effectiveness of marine mammal management. NAMMCO has therefore established a process wherein both marine mammal users and the Scientific Committee contribute to the production of Status Reports for marine mammal species in the North Atlantic. These reports, to be updated regularly, will form an important basis for the provision of management advice by NAMMCO.



Utilisation of Marine Mammal Products



Photo: Eivind Davis

Sealskin is used by well known fashion designers to create extraordinary fine fur fashion, as shown in pictures to the left.

Marine mammals represent an important renewable resource that based on sound science can be utilised sustainably. Many coastal communities in the NAMMCO member countries rely on the food and cash income produced from marine mammals. Healthy maintenance of these communities necessitates a steady cash flow that ideally comes from local renewable resources such as marine mammals. While the utilisation and trade of marine mammal products vary considerably between the NAMMCO member countries, access to local or international markets for these products is a shared concern. It is recognised by the NAMMCO Council that NAMMCO can play an important role in enhancing the utilisation of marine mammal products and in developing further both the marine mammal products and the market for these products.

The picture on the right is from a Norwegian brochure that promotes whale meat as gourmet food, with qualities of the finest cut of beef. The brochure contains a number of delicious recipes.



Photo: Ragnar Th. Sigurðsson

«Brættet», shown in the bottom left picture, is the local fish and meat market. This is an important part of Greenlandic towns where hunters come to sell their fresh meat and fish products.

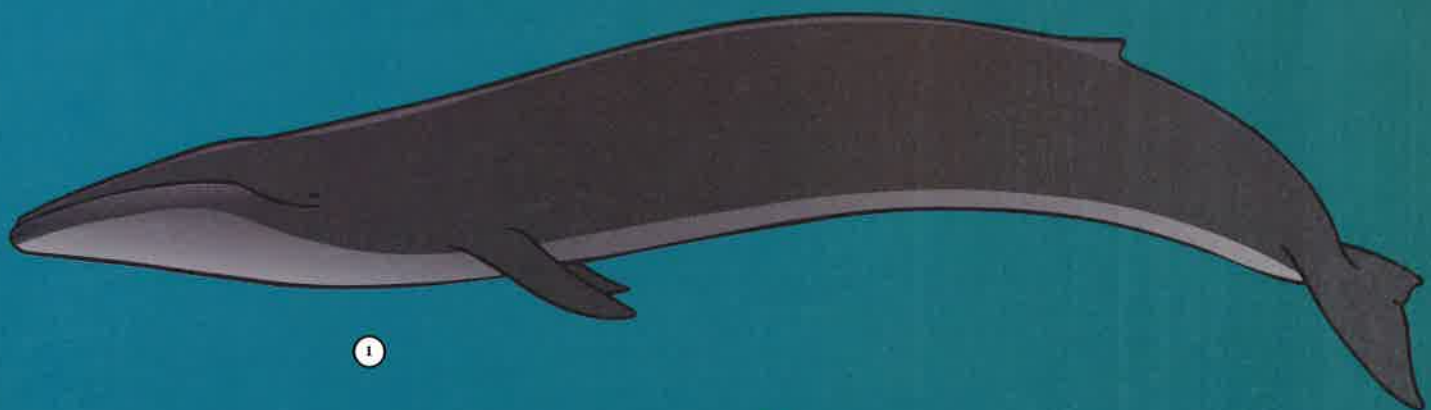


There are a number of other cetacean species not illustrated here, most of which have a more southerly distribution in the North Atlantic.



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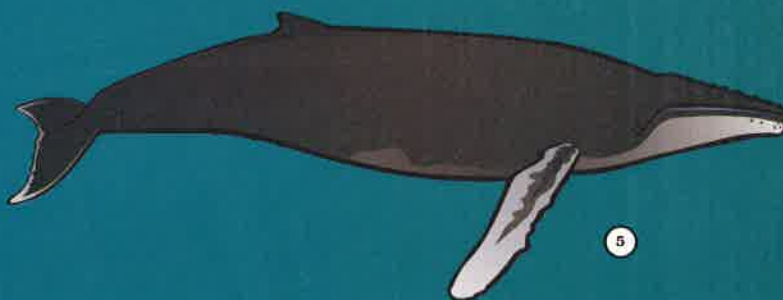
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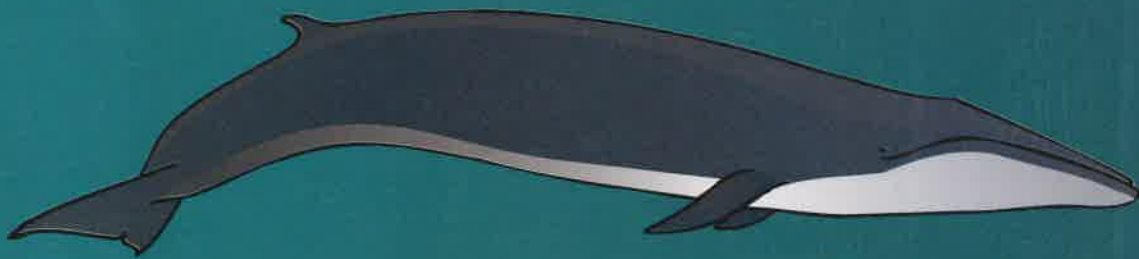
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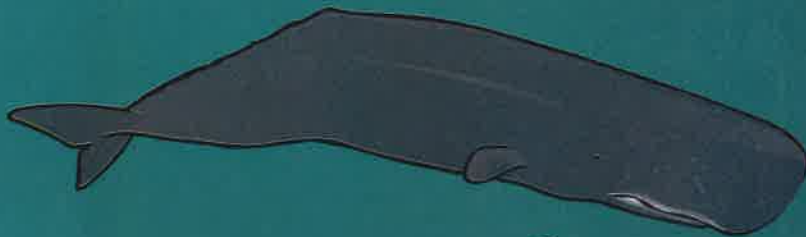
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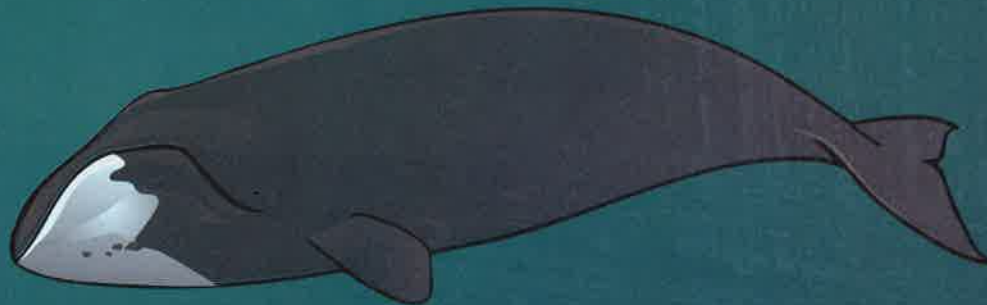
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Marine Mammals in the North Atlantic

Cetaceans

1. Blue whale (*Balaenoptera musculus*)

Distribution: Across the North Atlantic in subtropical to subarctic waters.

2. Fin whale (*Balaenoptera physalus*)

Distribution: Across the North Atlantic. Most common in the East Greenland – Iceland – Jan Mayen area and west of the Iberian Peninsula during summer.

3. Killer whale (*Orcinus orca*)

Distribution: Across the North Atlantic both in coastal and oceanic waters.

4. Bottlenose dolphin (*Tursiops truncatus*)

Distribution: Across the North Atlantic in tropic to temperate waters.

5. Humpback whale (*Megaptera novaeangliae*)

Distribution: Breeds in the Carribean; feeding aggregations in Gulf of Maine, Newfoundland, West Greenland, Denmark Strait, Icelandic waters and Barents Sea.

6. Northern bottlenose whale

(*Hyperoodon ampullatus*)

Distribution: Across the North Atlantic with concentrations west and east of Iceland and west of the Faroe Islands.

7. Harbour porpoise (*Phocoena phocoena*)

Distribution: Temperate and subarctic waters of the North Atlantic.

8. Atlantic white-sided dolphin

(*Lagenorhynchus acutus*)

Distribution: Temperate and subarctic waters of the North Atlantic.

9. Sei whale (*Balaenoptera borealis*)

Distribution: Temperate and subarctic regions in the North Atlantic.

10. Sperm whale (*Physeter macrocephalus*)

Distribution: Across the North Atlantic in tropical to subarctic waters.

11. Minke whale (*Balaenoptera acutorostrata*)

Distribution: Across the North Atlantic in tropical to Arctic waters. Most common in coastal and shelf areas in temperate to Arctic waters.

12. Long-finned pilot whale

(*Globicephala melas*)

Distribution: Temperate and subarctic waters of the North Atlantic.

13. Narwhal (*Monodon monoceros*)

Distribution: Arctic waters of the North Atlantic.

14. Right whale (*Eubalaena glacialis*)

Distribution: Northwest Atlantic.

15. Beluga (*Delphinapterus leucas*)

Distribution: Arctic and northern subarctic waters in the North Atlantic, especially in the Davis Strait - Baffin Bay area.

16. White-beaked dolphin

(*Lagenorhynchus albirostris*)

Distribution: Cold temperate and subarctic waters of the North Atlantic.

17. Bowhead whale (*Balaena mysticetus*)

Distribution: Davis Strait, Hudson Bay, Svalbard/Northern Barents Sea.

Pinnipeds

18. Atlantic walrus

(*Odobenus rosmarus rosmarus*)

Distribution: In the Arctic from Bathurst Island (Canada) to the Kara Sea (Russia). Confined to coastal waters.

19. Harbour seal (*Phoca vitulina vitulina* and *Phoca vitulina concolor*)

Distribution: Coasts of Europe and North America in subarctic and temperate waters.

20. Hooded seal (*Cystophora cristata*)

Distribution: Arctic and northern subarctic waters of the North Atlantic north of Newfoundland – Iceland – the Faroe Islands – Norway, west of Bear Island – Spitsbergen.

21. Harp seal (*Phoca groenlandica*)

Distribution: Arctic and northern subarctic waters across the North Atlantic north of Newfoundland – Iceland – North Norway – Russia.

22. Grey seal (*Halichoerus grypus*)

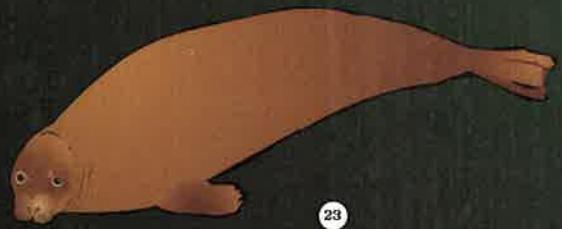
Distribution: Baltic Sea, Northwest Atlantic and East Atlantic.

23. Bearded seal (*Erignathus barbatus*)

Distribution: Arctic waters across the North Atlantic north of northern Newfoundland/Labrador – South Greenland – North Iceland – Spitsbergen – Barents Sea.

24. Ringed seal (*Phoca hispida*)

Distribution: Arctic coasts of North America, Greenland, Northern Europe and Russia; the Baltic Sea.



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