

The North Atlantic Marine Mammal Commission



Sustainable use – sustainable communities



Photo: Grete Hovstrand Broda

NAMMCO

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 understanding better the role of marine mammals in this system. Through regional co-operation, the member countries of NAMMCO 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 Hovelsrud-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 as well as other governmental and non-governmental international organisations, 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. The Scientific Committee establishes its own specialist working groups, where needed, to deal with requests for advice from the NAMMCO Council. Examples are Working Groups on Fin Whales, Grey Seals, Abundance Estimates, and a series of working groups on marine-mammal fisheries interaction. Such working groups may include experts from both NAMMCO member and non-member countries.

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 located in Tromsø, Norway. 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.

Other activities of NAMMCO include:

The Committee on Hunting Methods under the Council provides technical advice on hunting methods for those species of marine mammals relevant to the member countries.

The Joint NAMMCO Control Scheme for the Hunting of Marine Mammals

NAMMCO has established an international observation scheme to provide a mechanism to monitor the conduct and regulation of marine mammal hunting activities in the member countries, thus ensuring international transparency in whaling and sealing operations in the region. A Committee under the Management Committee function as a standing review body to monitor the implementation of the Joint Control Scheme and provide recommendations for improvements.

Ad hoc working groups are also set up by the Council to deal with specific matters of mutual interest.

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.

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 international organisations, such as the Agreement on the Conservation of Small Cetaceans in the Baltic and North Seas (ASCOBANS), the Arctic Council, the International Council for the Exploration of the Sea (ICES), the International Whaling Commission (IWC), the Northwest Atlantic Fisheries Organisation (NAFO), the North Atlantic Salmon Conservation Organisation (NASCO), North East Atlantic Fisheries Organisation (NEAFC), the OSPAR Commission for the protection of the Marine Environment of the North-East Atlantic, and NAMMCO has also established contacts with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the United Nations Food and Agriculture Organisation (FAO), the World Conservation Union (IUCN).

Photo: Bjørn Krafft



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.



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 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.



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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: Tone 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 2001 – known as NASS-2001 – were co-ordinated through a planning group under the NAMMCO Scientific Committee. NASS-2001 represents an important follow-on from similar NASS carried out in the region in 1987, 1989 and 1995. With the participation of national vessels and aircraft covering as wide an area as possible, NASS-2001 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 Skoglund

NAMMCO Scientific Publications

NAMMCO has initiated a 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 2004, five volumes of NAMMCO Scientific Publications have been published:

- Vol. 1** Ringed Seals in the North Atlantic.
- Vol. 2** Minke Whales, Harp and Hooded Seals: Major Predators in the North Atlantic Ecosystem.
- Vol. 3** Sealworms in the North Atlantic: Ecology and Population Dynamics.
- Vol. 4** Belugas in the North Atlantic and the Russian Arctic.
- Vol. 5** Harbour Porpoises in the North Atlantic.

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. In 2003 NAMMCO organised a Conference that dealt with how user knowledge can best be incorporated into the management decision-making process at the national levels, in parallel with science. A number of common themes emerged at the Conference, including the need for formal involvement of users in both science and management, and the need for documenting the availability and characteristics of user knowledge. The Conference concluded with a set of recommendations that will be considered by a newly established Working Group under the NAMMCO Management Committee.



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 are an important renewable resource that can be utilised sustainably. Many coastal communities in the NAMMCO member countries rely on the food and cash income produced by harvesting marine mammals. Yet such harvesting is controversial, and subject to intense international scrutiny. While the utilisation and trade of marine mammal products vary considerably between the NAMMCO member countries, access to local and international markets for these products are a shared concern. NAMMCO provides accurate information on the status of harvested marine mammals, as well as their place in the ecosystem and in human culture and economy, to the public. NAMMCO also provides information on stock status and harvests of valuable species to organisations concerned with regulating international trade in wildlife, such as CITES. In this way, NAMMCO works to ensure that sustainable marine mammal harvesting can be continued by those communities that are dependent on it.

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

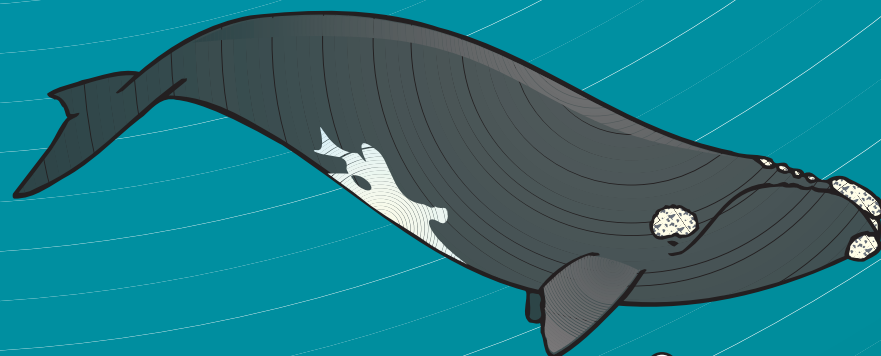
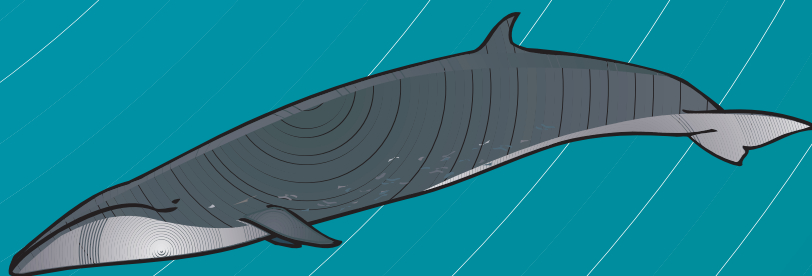
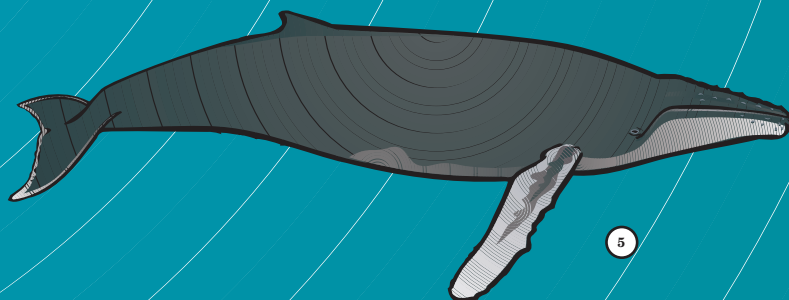
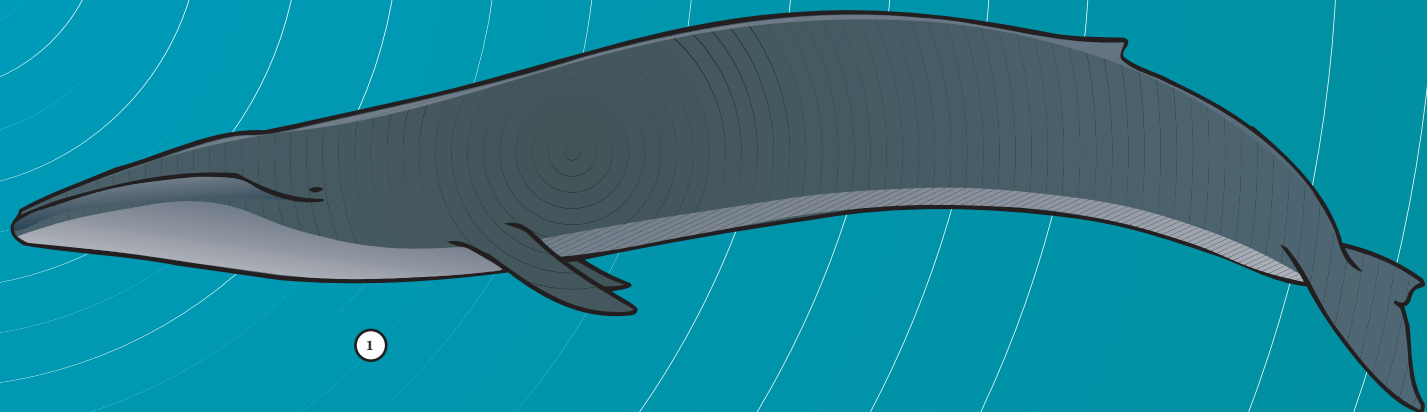
«Brættet», shown in the bottom left picture, is the local fish and meat market. This is an important part of Greenlandic towns where hunters come to sell their fresh meat and fish products.



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

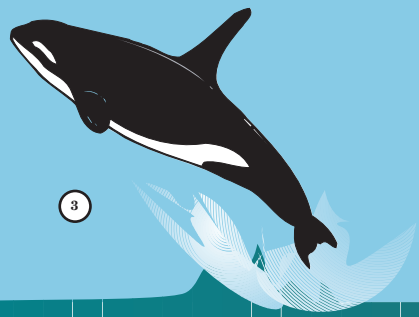


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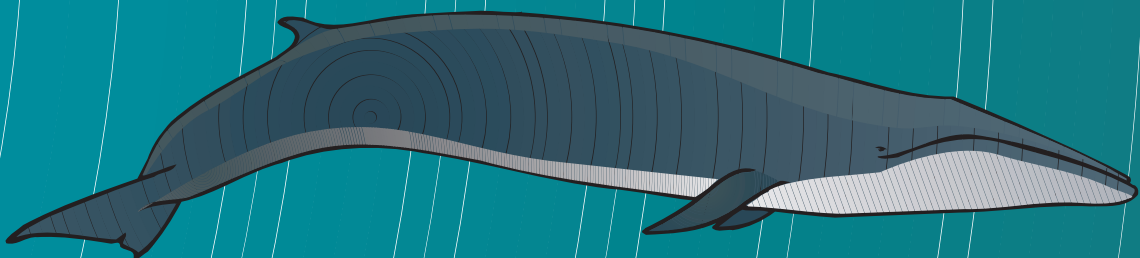


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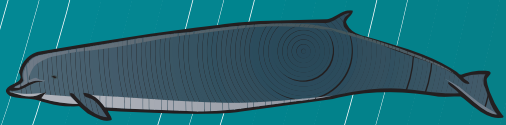
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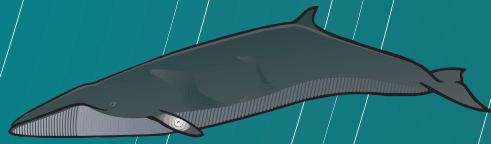
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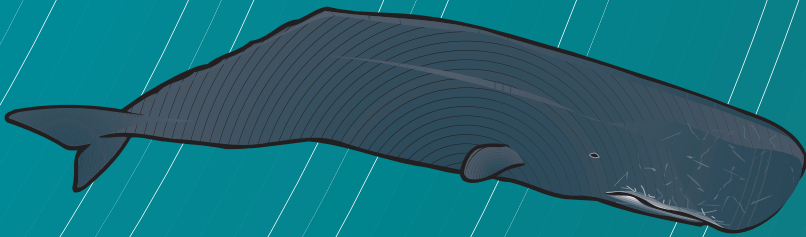
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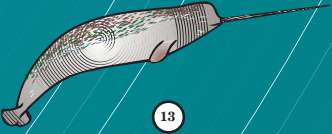
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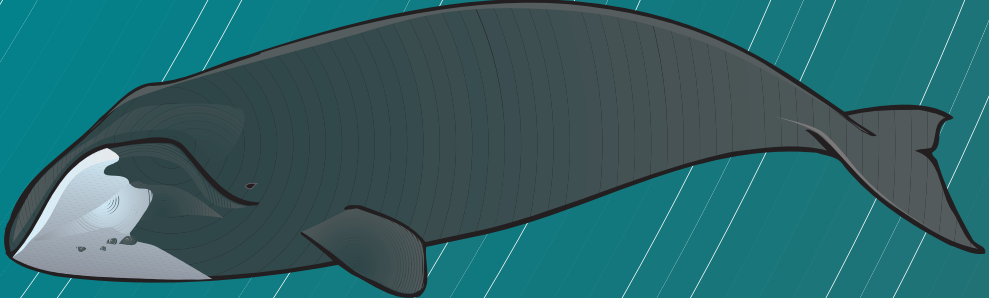
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Marine Mammals in the North Atlantic

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 Caribbean; 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*)

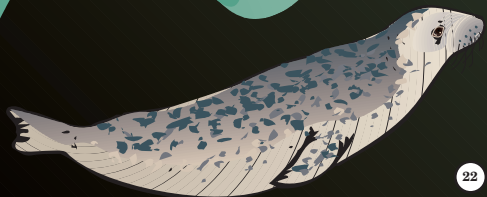
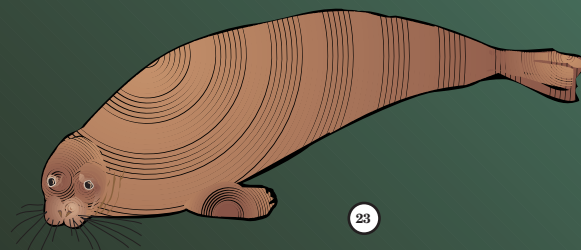
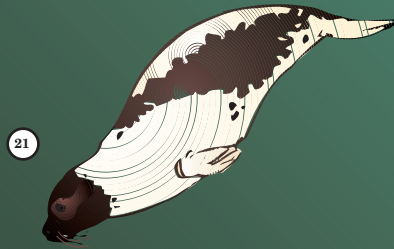
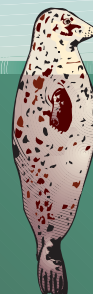
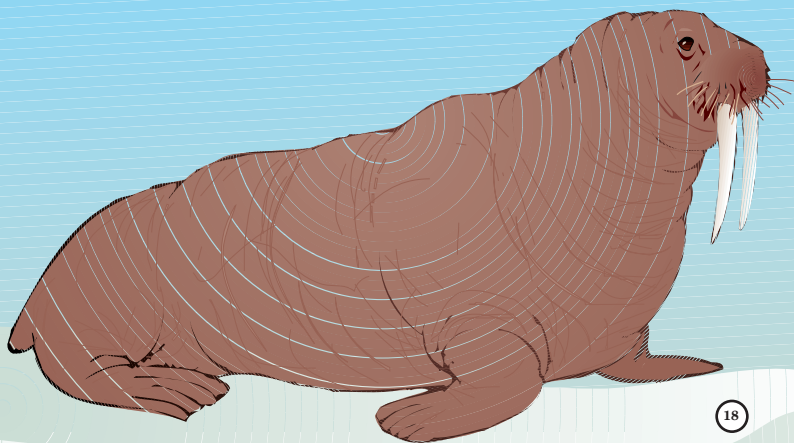
Distribution: Baltic Sea, Northwest Atlantic and East Atlantic.

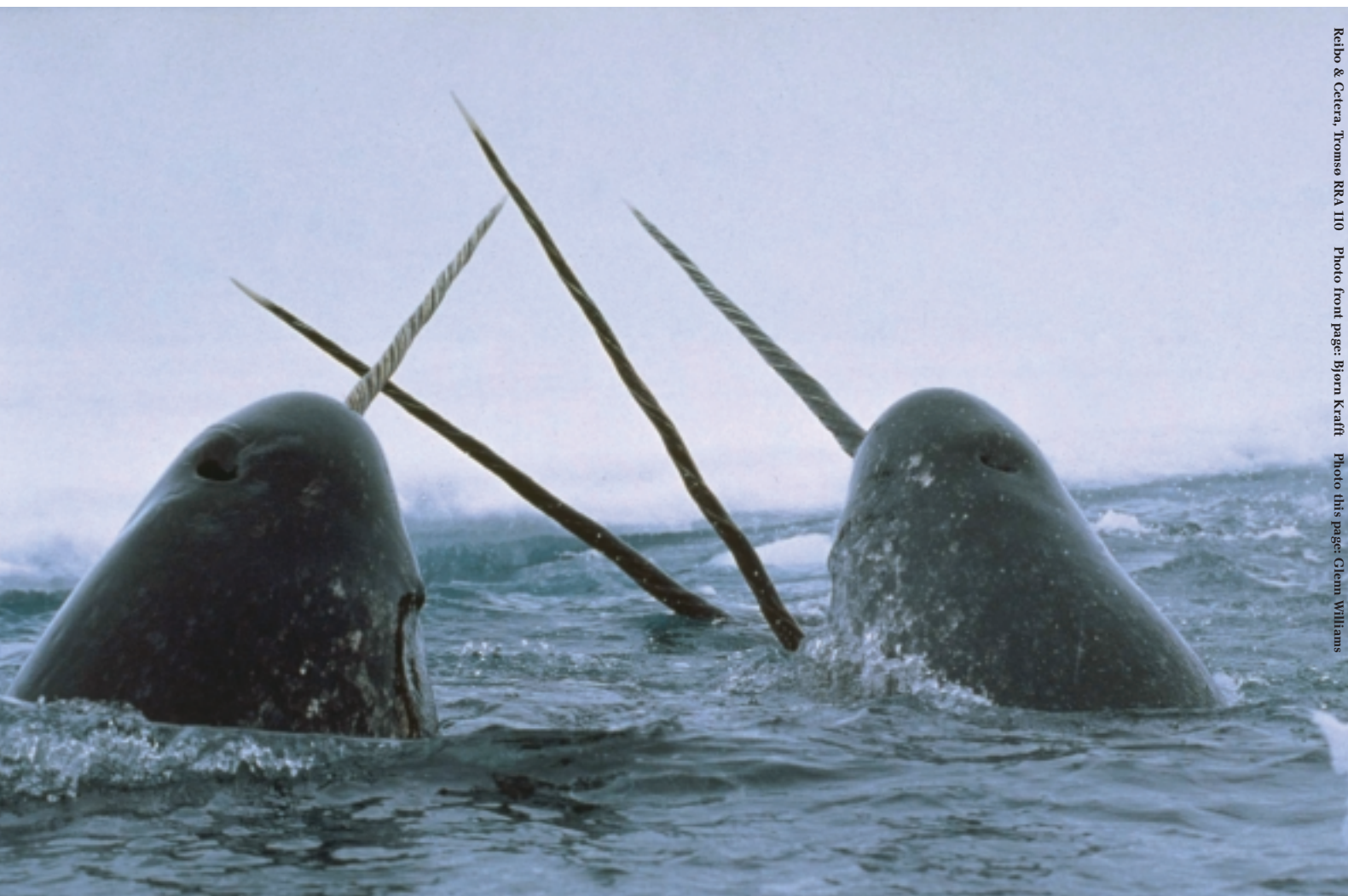
23. Bearded seal (*Erignathus barbatus*)

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.





Reibo & Celera, Tromsø RKA 110 Photo front page: Bjørn Krafft Photo this page: Glenn Williams

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