The **Arctic Marine Biodiversity Monitoring Plan** (CBMP-Marine Plan) is the first of four pan-Arctic, long-term, integrated biodiversity monitoring plans produced by the Conservation of Arctic Flora and Fauna (CAFF)’s Circumpolar Biodiversity Monitoring Program. Approved by the Arctic Council in 2011, the Marine Plan integrates existing circumpolar monitoring datasets and models to improve the detection and understanding of changes in Arctic marine biodiversity, and informs policy and management responses to these changes.

Development of the plan was co-led by Norway and the United States and was the result of extensive discussions and consultations involving experts from Arctic coastal nations, Permanent Participants and other Arctic Council working groups. The plan identifies eight Arctic Marine Areas (AMAs) and Focal Ecosystem Components (FECs) to monitor at various trophic levels using specific methodologies, parameters, indicators and sampling designs drawn from existing monitoring capacity (programs), best practices and data.

The CBMP-Marine Plan is designed to provide comprehensive and timely circumpolar information on Arctic marine biodiversity to decision makers. Its implementation is currently co-led by Greenland and Norway.

### Top CBMP Marine Priorities in 2013

- Continue collecting, discovering, rescuing, aggregating and integrating existing Arctic marine biodiversity datasets to establish baselines; and contribute to the **Arctic Biodiversity Data Service**
- Continue to identify and begin reporting on the best indicators of change building on existing monitoring and observation programs
- Continue to explore ways to utilize Traditional Ecological Knowledge
- Encourage participating states to follow up on the CBMP Marine plan by contributing to the monitoring of the plan’s focal ecosystem components, indicators, and the analyzing of existing datasets
- Continue to contribute to international and national initiatives, e.g., the annual NOAA Arctic Report Card, Convention on Biological Diversity, Global Biodiversity Outlook, Group on Earth Observations Biodiversity Observing Network, and others.
- Improve and stabilize funding for full participation by all Arctic Council coastal states and Permanent Participants
- Promote the relevance and importance of the CBMP-Marine Plan

### Links with National Priorities

Greenland/Denmark has committed to secure the Arctic biodiversity via the [Denmark, Greenland and the Faroe Islands: Kingdom of Denmark Strategy for the Arctic 2011-2020](https://www.caaff.org/report/strategy-for-the-arctic-2011-2020/).

The **Greenland Institute of Natural Resources** (GINR) is the centre for biological research and monitoring in Greenland. GINR is working closely together with [Danish Centre for Environment and Energy, Aarhus University](https://www.dce.aau.dk/) (DCE). Its primary objective is to provide the Government of Greenland with scientific advice for the sustainable use of the living resources, as well as the safeguarding of the country’s environment and biological diversity. As such, GINR represents Greenland in the CBMP Marine.

GINR has monitoring programs for fish stocks, crustaceans, mammals and birds that are important for the Greenland society. The data on marine mammals and marine birds are available to the CBMP Marine through the [CAFF CBird group](https://www.caaff.org/cbsd/cbird/) and the [Marine mammal expert network](https://www.caaff.org/ntf/marine-mammals/). Data from the fisheries monitoring surveys are still to be incorporated in the CBMP Marine.

The Greenland Climate Research Centre (GCRC) at GINR runs two marine ecosystem monitoring programs, one in a high Arctic system and one in a low Arctic system. Data from these two monitoring programs is being incorporated into the CBMP Marine through the expert networks on [Sea Ice Biota](https://www.caaff.org/ntf/sea-ice-biota/), [Plankton](https://www.caaff.org/ntf/plankton/) and [Benthos](https://www.caaff.org/ntf/benthos/).

[www.caff.is/marine](https://www.caff.is/marine)
Benthos
The available data from benthic projects in Greenland has been included in the Benthos in Arctic Report Card. Work continues on collecting benthos data from Greenland collected by research groups outside of GINR. No benthic monitoring has been established so far and existing data are based on research projects.
Contact: Martin Blicher

Plankton
Plankton is part of ongoing monitoring at a high Arctic (annual sampling since 2002) and a low Arctic (monthly since 2005) location. A selected data set has been submitted to be part of a pan-Arctic study being prepared by the Plankton Expert Network group. Publication of ongoing time series on plankton community structure and seasonal dynamics are being prepared by GINR researchers, these data sets are planned to be included in CBMP Marine in the future.
Contact: Kristine Arendt

Sea Ice
Information on previous sea ice studies in Greenland has been included in CBMP Marine efforts to compile a pan-Arctic data set. Sea Ice Biota is not part of ongoing monitoring programs in Greenland and existing data is based on research projects.
Contact: Thomas Juul-Pedersen

Fish
GINR carries out annual fisheries surveys in West and East Greenland, focusing mainly on commercially important species: shrimp, cod, Greenland halibut and snow crab. Data on other species is collected but not analyzed, unless it is part of specific research projects. GINR has at present limited resources to participate actively in the Fish Expert Network.
Contact: Helle Siegstad

Seabird
GINR has existing monitoring programs on breeding colonies for the most important seabird species in the subsistence hunting in Greenland (thick-billed murre, eider duck and black-legged kittiwake). Data from the monitoring programs including data from other species are collected in a national Seabird Colony Database. GINR is an active member of the CAFF CBird group and data from the Seabird Colony Database is part of the Seabird Information System under development by the CBird group.
Contact: Flemming Ravn Merkel

Marine Mammals
In 2013, Greenland was lead of the Marine Mammal Expert Network (MMEN). A five-year work plan was been established. The work in 2013 focused in compiling past abundance estimates and testing a web based database created by the data team under the CAFF-secretariat. In 2014-15 the MMEN will establish a harvest database and during 2015 – 2016 the focus will shift to incorporating data on body condition and health.
Contact: Fernando Ugarte

Phytoplankton sampling along the East Coast of Greenland. Photo: Thomas Juul-Pedersen

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