

Workshop Objectives

The Arctic Council states have agreed to develop an integrated, pan-Arctic and cost-effective marine biodiversity monitoring plan that improves our ability to detect trends and identify the mechanisms driving those trends.

The Marine Expert Monitoring Group (MEMG)'s goal is to promote, facilitate, coordinate and harmonize marine biodiversity monitoring activities among circumpolar countries, and to improve ongoing communication amongst and between scientists, community experts, managers and disciplines both inside and outside the Arctic.

Specifically, the MEMG's objectives are:

- to develop a multi-disciplinary, integrated, pan-Arctic long-term marine biodiversity monitoring plan that:
 - responds to identified science questions and user needs;
 - identifies an essential set of indicators for marine ecosystems that are suited for measurement and implementation on a circumpolar level;
 - makes use of existing monitoring capacity and information (both scientific, community-based and Traditional Knowledge);
 - identifies key abiotic parameters relevant to marine biodiversity that need ongoing monitoring;
 - addresses current gaps in coverage (both elemental, spatial and temporal); and,
 - identifies a core set of standardized protocols to be implemented across the Arctic.
- to facilitate implementation of the long-term monitoring plan.

In the Short-Term, the intention is to develop a small, tightly focused Plan constructed of existing and ongoing activities. The Plan will contain a limited number of key parameters and/or indicators that can provide meaningful information about Arctic marine biodiversity and contribute to pan-Arctic objectives.

At this three-day workshop, participants will discuss and develop the core of an Integrated pan-Arctic Marine Biodiversity Monitoring Plan.

In particular, participants will agree on:

- a small number of key indicators and/or parameters to measure within each focal marine ecosystem (see definitions below), including which are common across the three ecosystems, and which are unique to a particular ecosystem
- the spatial resolution and frequency of these measurements (sampling scheme)

The following questions should be considered during the second workshop:

- What datasets and ongoing projects/activities are the most relevant according to the questions (evaluation criteria)?
- What organizations and networks are responsible for these monitoring datasets and activities, and which organizations are the main users of the monitoring information?
- What organizational structure (e.g., network, or network of networks) will be necessary to organise the relevant monitoring programs and activities to form and implement an integrated Arctic marine biodiversity monitoring plan?
- What data management considerations need to be addressed for the monitoring plan to be successful?
- What resources will be required to develop and implement the monitoring plan, recognizing that some elements may be dependent on the continuation of programs that are the responsibility of single countries?
- What critical gaps remain, and what approaches should be considered to fill these?

In keeping with the ethos of the Circumpolar Biodiversity Monitoring Program (CBMP), the scope and breadth of the pan-Arctic Monitoring Plan will be kept focussed and narrow. It will start from existing monitoring capacity and a small suite of targeted indicators and parameters representing key trophic levels and critical ecological processes and fluxes.

While the main focus will be on existing activities, we will remain open regarding a) low-cost high priority add-ons, and b) additional ideal high-priority add-ons (a more extensive list).