

# CBMP Marine Annual Meeting: Summary

8 October and 12 October

Arctic Biodiversity Congress

Rovaniemi, Finland

## **Participants (some participants were unable to attend both days):**

John Bengtson, NOAA Alaska Fisheries Science Center (co-chair)  
Peter Boveng, NOAA Alaska Fisheries Science Center  
Tom Christensen, Arctic Research Centre, Aarhus University  
Catherine Coon, Bureau of Ocean Energy Management (BOEM)  
Geneviève Desportes, North Atlantic Marine Mammal Commission  
Alain Dupuis, Fisheries and Oceans Canada (co-chair)  
Steve Ferguson, Fisheries and Oceans Canada  
Sierra Fletcher, Nuka Research and Planning Group  
Gudmundur Gudmundsson, Icelandic Institute of Natural History  
Rikke Guldborg Hansen, Greenland Institute of Natural Resources (GINR)  
Edda Johannesen, Institute of Marine Research  
Lis Lindal Jorgensen, Institute of Marine Research  
Kit M Kovacs, Norwegian Polar Institute  
Melanie Lancaster, WWF Arctic  
Sara Longan, North Slope Science Initiative  
Connie Lovejoy, University Laval, Quebec, Canada  
Rosa Meehan, ArcticTurn Consulting  
Polina Pestina, All-Russian Research Institute for Nature Protection  
Eirik Pettersen, Norwegian Environment Agency  
Michel Poulin, Canadian Museum of Nature  
Mia Rönkä, University of Turku  
Jason Stow, Fisheries and Oceans Canada  
Hallvard Strøm, Norwegian Polar Institute  
Fernando Ugarte, Greenland Institute of Natural Resources (GINR)  
Dag Vongraven, Norwegian Polar Institute  
Cecile von Quillfeldt, Norwegian Polar Institute

## **Meeting objectives:**

- 1) To provide updates on CBMP marine work/meetings (steering group and expert networks) and CAFF board meetings.
- 2) To provide update on SAMBR implementation by countries and by expert networks and to discuss next steps.
- 3) To discuss the options/activities for the next CBMP-Marine annual meeting in 2019, e.g., discuss idea of workshop and independent review.
- 4) To begin drafting or process for drafting the CBMP Marine Annual Report 2018 and Work Plan 2019.

## **Summary notes:**

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**Objective 1:**

To provide updates on CBMP marine work/meetings (steering group and expert networks) and CAFF board meetings.

**Key discussion points on Objective 1:**

**Summarized outcomes from the CBMP-Marine SG meeting in May 2018**

The previous meeting of the CBMP-Marine Steering Group (MSG) was in Ottawa on May 1-3, 2018. Key outcomes from that meeting were:

- Identifying linkages between the CBMP Strategic Plan and the MSG
- MSG members agreed to discuss SAMBR next steps with their respective CAFF Board members and speaking points were developed to support this
- Possible linkages to other Arctic Council projects were identified; strategically it is important to make CBMP-Marine's work useful to other activities
- Arctic Biodiversity Congress sessions finalized
- SG Workplan finalized and guidance to ENs on Workplan completion were prepared

**Update on CAFF / CBMP – 2018**

Tom C. provided an update on each of the other CBMP networks:

- Freshwater: SAFBR is being reviewed by the CAFF BOD. This is a shorter report than the SAMBR, and will have an accompanying special issue in *Freshwater Biology*. Completion is planned for 2019.
- Terrestrial: STArT report is underway now, with completion planned in May 2019. They are also doing a special issue of *Ambio* with 10 of 13 articles drafted to date (including one on tundra breeding seabirds).
- Coastal: Held a workshop in Anchorage with Indigenous Knowledge holders. FEC's developed through this process. Their monitoring and implementation plan will be submitted to the Board for its next meeting. Tom C. will share it with the Marine co-chairs or MSG for review and comments.

A CAFF Board meeting was held in Alaska in September 2018. The annual workplan for the marine group was submitted and is being reviewed at the CAFF Board meeting in Rovaniemi. At the September CAFF Board meeting in Alaska, Rosa Meehan presented her work to assess the level of familiarity and use of SAMBR in the U.S. The CAFF BOD produced a memo to the MSG identifying actions taken on SAMBR in different countries.

Relevant Arctic Council activities were highlighted: 1) Updating the Arctic Indicator Report on protected areas; 2) PAME underwater noise report forthcoming – may be of particular interest to Marine Mammal EN; 3) PAME Arctic Invasive Alien Species work; 4) Ecosystem Approach to Management

### CBMP Strategic Plan

The CBMP Strategic Plan is intended to guide the next phase of the CBMP as the SABR reports are completed or approaching completion. The CAFF BOD approved the current plan last year. Some suggested actions:

- Map CBMP activities against national and international reporting requirements (e.g., EU water monitoring requirements) to align CBMP with ongoing activities
- Facilitate cooperation with other Arctic Council groups
- Align CBMP activities with Arctic Biodiversity Assessment implementation
- Explore options for incorporating Indigenous Knowledge in the future
- Promote value of CBMP participation to the scientific community
- Increase access to and awareness of the Arctic Biodiversity Data Service
- Continue to identify and support Expert Network members
- Complete the development of and next phase of marine monitoring plan implementation

### Updates from each Expert Network

Expert Networks provided short updates on their activities and on relevant information:

- Sea ice biota: The EN completed an early draft of an ice amphipod synthesis paper, which expanded on SAMBR to include some environmental drivers. An ice meiofauna synthesis paper was published and presented at conferences. Michel Poulin also described the Canadian Museum of Nature's National biodiversity cryobank. Additionally, it was mentioned that relevant data may also be collected as part of the Multidisciplinary drifting Observatory for the Study of Arctic Climate (MOSAiC), a project led by the Alfred Wegener Institute planned for 2019 and 2020.
- Plankton: The EN did not have changes to report since the Annual Report was submitted to the CAFF board this Fall. In Canada, plankton data mostly derives from Laval University and partners that have been sampling in the Canadian Arctic in part as a result of partnerships with ArcticNet. Samples are also going to be submitted to the Canadian Museum of Nature's cryobank. Monitoring near Svalbard in Norway that contributed to SAMBR is still underway. Monitoring in Greenland needs to be incorporated. A note that the Canadian High Arctic Research Station (CHARS) will soon be available for international scientists. The Arctic Marine Biodiversity Observation Network (AMBON) in the US Arctic waters of the Chukchi Sea also includes plankton sampling.
- Benthos: The EN engaged partners from observer countries (Germany and Poland). Despite continued lack of consistency and methodological standardization, data have been compiled to show >4000 benthic species in the Arctic (90% of Arctic animal species). Arthropods dominate the composition of benthic species. The Atlantic Arctic is currently under the most pressure from oil and gas activity and fishing. A 2017 workshop was used to explore how data on benthos could be collected as part of fish assessment surveys (using by-catch). The focus of this work will be on macro- and mega-fauna. As a note, MOSAiC provides an opportunity for work in the Central Arctic Ocean but there are also other planned activities

to be aware of such as the proposed Modular Arctic Research Vessel (MARVEL) drifting-ice vessel (partially supported by the Netherlands).

- Fishes: The EN published an atlas and identification guide for Marine Fishes of the Arctic Region ([Volume 1](#) and [Volume 2](#)). Canada and the US have also recently developed Arctic fish atlases. Participation in the Fish Expert Network has been low overall; some speculate that this is due to workload issues and the need for countries to participate in various international science projects/efforts requiring Arctic fish experts (e.g., ongoing science work related to the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean). NOAA Fisheries is trying to identify a fish expert for the US; BOEM in the US may also be able to provide someone.
- Marine mammals: Assessment of narwhal and beluga status completed, with tables updated on populations/stocks and abundance. A workshop was held in Alaska. The group has developed a template for a web-based database that will be provided to the CAFF Secretariat so that stock status can be updated immediately when new information becomes available. A manuscript has been developed on ring seal ecotypes that should be ready for submission late in 2018; this work is based on a circumpolar compilation of ringed seal morphometric data.
- Seabirds: Planning an annual online information system for seabird monitoring data in between 5-year SAMBR cycles. This will be a “traffic light” system to indicate declining, stable, or increasing population trends and breeding success. The workplan was accepted by the CAFF Board. The focus is on SAMBR target species – including black-legged kittiwakes and murre.

### **Objective 2:**

*To provide an update on SAMBR implementation by countries and by expert networks and to discuss next steps.*

### **Key discussion points on Objective 2:**

#### **SAMBR Implementation**

- National efforts: e.g., for Canada, it was suggested that the SAMBR summary report could be translated into Inuktitut and shared/communicated with Inuit partners
- Link with PAME: CBMP-Marine could provide input into the development of the proposed PAME projects. This included the potential PAME project to develop report cards or fact-sheets. It was not clear the status of this work but Lis Lindal offered that she is involved on benthos work.
- Continued effort to identify and engage information users: Rosa discussed the importance of sharing CBMP-Marine work in various venues, e.g., a previous presentation on CBMP-Marine at the Alaska Marine Science Symposium, etc.
- Presentations: Delivered at the World Congress on Marine Biodiversity in Canada in May 2018 and at the POLAR2018 conference in Davos in June 2018 among others.

- Media products and communications: Kari provided examples of efforts to promote SAMBR, Melanie Lancaster (WWF) provided examples of how CBMP information could potentially be shared via various channels
- Useful for background information: SAMBR provides useful background and overview information about Arctic biodiversity various organizations and groups, e.g., WWF gave example that their organization does not conduct research but relies on these kinds of information sources for some of their work
- Engagement with Indigenous peoples: There is recognition that this needs to be improved; this could be done through improving the linkage with CBMP-Coastal (which has a stronger element of community-based monitoring and the incorporation of Indigenous knowledge). As noted above re: Canada, translation of materials could be important in some regions.

**Objective 3:**

*To discuss the options/activities for the next CBMP-Marine annual meeting in 2019, e.g., discuss idea of workshop and independent review.*

**Key discussion points on Objective 3:**

Introduction/background: At the CBMP-Marine Steering Group meeting in May 2018 in Ottawa, discussions took place on next steps following the completion of SAMBR. It was suggested that now may be the time to consider the next phase of the implementation of the monitoring plan and to review and refine the monitoring plan accordingly. As a result, a scoping workshop was proposed for 2019. The Steering group discussed plans to have preliminary discussions with the CAFF Board and with the ENs at the annual meeting to seek support for a scoping workshop for the Fall of 2019

The Arctic Marine Biodiversity Monitoring Plan (2011) is an adaptive monitoring program and the implementation schedule recommends a program review/independent review every 5 years. In the Monitoring Plan, potential goals of a review are suggested in various contexts but include: to refine/modify the monitoring approach based on analysis; to establish links between changes in Arctic biodiversity and human activities and; to work towards integrating marine biodiversity monitoring networks originating from non-Arctic countries.

A scoping workshop would also address several goals and objectives of the CBMP Strategic Plan (e.g., the goal to ensure the CBMP is relevant to Arctic States and information users; the objective to develop the next phase of the Marine Plan implementation; etc.).

**Independent Review of Monitoring Plan**

No decision was made regarding an independent review of the monitoring plan at this time. Organizations that can produce robust independent reviews were briefly discussed. Funding would be required to have an independent review conducted. It was highlighted that the SAMBR itself contains recommendations and this involved authors outside of CBMP-Marine. There are also “lessons learned” documentation that has been produced after the completion of the SAMBR that may be useful for a review of the monitoring plan.

If a review is going to be conducted, it is important that the resources are in place to follow through on the results/recommendations. It is also necessary to define a clear scope for the review – e.g., the science of the monitoring effort, use of the information generated from monitoring, etc.

### **Scoping Workshop/Annual Meeting – Fall 2019**

For the development of the Arctic Marine Biodiversity Monitoring Plan (2011), two scoping workshops were held in 2009. At the CBMP-Marine Steering group meeting in Ottawa in May 2018, it was recommended that the group consider organizing a scoping workshop in 2019 to review and update the Monitoring Plan, given changes since 2009. The CAFF Board indicated support for this at their September meeting.

The purpose and approach to this workshop was discussed at the CBMP-Marine annual meeting on both Monday, October 8 and Friday, October 12, 2018. This included a presentation and discussion on the scoping method used in 2009 to develop the Monitoring Plan including how the drivers, FECs and the indicators were developed and selected. Other potential scoping methods were also introduced. The ENs were also given feedback forms to provide input on what a scoping workshop should include and what aspects warrant review. The ENs' developed feedback in breakout groups and the detailed information provided will help to inform the development of the workshop.

Discussions over the 2-day meeting suggested that the CBMP-Marine also needs to consider potential new information drivers/user needs in order to answer what science needs to be undertaken and to refine the Monitoring Plan using an appropriate scoping method. It was also discussed that other linkages with other groups should be considered such as the Arctic Monitoring and Assessment Program (AMAP) and the Protection of the Arctic Marine Environment (PAME).

At the conclusion of Day 2 of the CBMP-Marine Annual meeting, Friday 12 October, the following was agreed as a way forward (with refinement needed) with the intent that a Planning Committee will be formed to refine and implement the plan.

It was proposed that the annual meeting/workshop will be 3 days in length. This would allow:

- 1 day dedicated to MSG and EN meetings to address regular CBMP-Marine business
- 2 days for a scoping workshop

The overarching goal and draft objectives of the scoping workshop were shared, reviewed, and edited by the group. The drafted goal and objectives were:

- Goal: To develop the next phase of the CBMP-Marine (next 5 years)
- Objectives:
  - 1) To review information users outside of CAFF and relationships and their needs/questions
  - 2) To identify interactions with CBMP Coastal, other Arctic Council work groups, others
  - 3) To refine/adjust monitoring plan

- a) Based on analysis from 1) and 2)
- b) Based on SAMBR advice and lessons learned
- c) Based on SAMBR implementation in countries (e.g., results from a planned US workshop 2019)
- 4) Effective ways to deliver information to users, etc. (e.g., communication products, etc., media products)

Proposed next steps for planning the workshop:

- Planning committee meetings begin November 2018, members of the Steering Group will be invited to participate
- Need for identifying information users and surveying prior to the workshop – i.e., user needs assessment. (Rosa mentioned recent efforts to survey potential users in the US, offered to share the questions/information/approach used to have these discussions).
- User information could be gathered through some other planned activities by countries such as the US effort to bring experts together in early 2019 to discuss SAMBR implementation
- Draft agenda will be circulated for input during development
- Invitations will be sent to participants by March/April 2019 for the workshop in Fall 2019

**Objective 4:**

*To begin drafting or to design the process for drafting the CBMP Marine Annual Report 2018 and Work Plan 2019.*

**Key discussion points on Objective 4:**

Several of the ENs only had one representative at the CBMP-Marine Annual Meeting. For that reason, limited time was scheduled for ENs to breakout and work on their upcoming Work Plans and Annual Reports. In plenary, it was discussed that the co-chairs will be following up with an email to EN leads with further instructions on development of the Work Plan and Annual Report. It was discussed that we need to be in a position to submit a finalized version to the CAFF Board 30 days in advance of their biannual meeting scheduled in early February 2019.

Discussion during the EN updates highlighted a need for the SG to provide ENs with clarity regarding what products should be included in the publication section of the annual report (e.g., providing a distinction between CBMP outputs and supporting work.) This will be included in the emailed instructions to EN leads.

**Overall Next Steps**

- Work plans 2019 and Annual Report 2018
  - Discussed that we need to develop work plan/annual report 30 days before CAFF bi-annual meeting in February
  - Further instructions will be sent out to ENs to complete a draft by end of November

## *CBMP-Marine 2018 Annual Meeting Summary*

- The work plan will be an update of the one recently completed for 2018 (with scoping workshop included)
- Scoping workshop 2019
  - Planning committee will convene in November
- CBMP-Marine Annual Meeting 2018
  - Meeting notes will be produced and distributed to participants, EN leads