

IASC Marine Working Group at ASSW 2024

21.03.2024. Venue: JMCC, University of Edinburgh, Scotland, UK.

1 In memory

Prior to the official opening, a tribute was devoted to Professor Andrew Stuart Brierley, who prematurely passed away in February this year.

2 Marine working group strategy document – Marine Life

Petra Heinz (Austria) presented the results from the MWG strategy workshop held in Vienna, 11-12 December identifying drivers and knowledge gaps and deriving research priorities for the high-level theme “Marine Life”. The MWG members welcomed the new strategy document. Key statements from the strategy will be fed into the ICARP IV process (see 4.4 below). Key recommendations are to be published in a review format involving IASC FOX (IASC Fellow alumni group. See 3 below) in developing a comprehensive communication strategy.

3 IASC MWG fellow and IASC FOX

Daniela Walch was welcomed as an incoming IASC Fellow-2024. The IASC fellows “FOX” alumni network reported from their inaugural online meeting of Autumn 2023. The group will hold a ICARP IV workshop and have submitted a cross-cutting project for funding through IASC. Additionally, members of the IASC FOX collaborated on a session entitled "Scientists as Ambassadors of a Changing Arctic" at ASSW 2024.

4 Reports on MWG supported activities 2023

4.1 Arctic and Subarctic Ocean Fluxes (ASOF) workshop 2023 (M.D. Perez-Hernandez)

No update.

4.2 Enabling Early Career Scientist and/or Indigenous Participation in Internationally Cross-Platformed Research Cruises (Lee Cooper, Takashi Kikuchi, Eva Silva Lopes)

Lee presented the goals of this project, including improving international participation in Arctic research cruises and providing opportunities for early career scientists and Indigenous holders to work in international settings to develop relationships to lead research and knowledge creation synergies.

4.3 Enabling Early career scientists to contribute to development of long-term observational efforts in the Arctic Ocean (Arild Sundfjord)

Arild presented the funding scheme aimed at facilitating access for early-career researchers or Indigenous Knowledge Holders, with an option to join the meetings of the Distributed Biological Observatory (DBO). All supported individuals joined the DBO meeting on the first day of the ASSW.

4.4 ICARP IV (Henrieka Detlef) at ASSW 2025 and IPY

Henrieka provided updates on the Fourth International Conference on Arctic Research Planning (ICARP IV) process and the potential contributions of the Marine Working Group (MWG) to ICARP IV. The outcomes of the ICARP IV Summit during ASSW 2025 will inform projects in preparation for the 2032/33 International Polar Year (IPY). It was noted that there is still time for involvement and shaping priorities within the research priority teams (RPTs) to ensure diverse voices are heard. The Marine Working Group is represented in almost all RPTs. MWG members present at the meeting were encouraged to utilize the kick-off workshops during ASSW 2024 to learn more about the RPTs'

work and potentially get involved. The ICARP IV Planning Retreat will be held in-person from October 21-24 in Akureyri, Iceland, for Steering Committee members. Additionally, at the early-career researcher (ECR) level, FOX has applied for funding for a workshop aimed at developing points to be incorporated into the ICARP process from the fellow level.

An online workshop to develop highlights for the ICARP IV process will be held, followed by an in-person workshop to further develop strategies. The three original workshop locations are considering hosting these now larger events.

4.5 Connecting Communities (Sophie Weeks)

Sophie from the initiative Polar Educators International presented her organization and explained how they spread polar science knowledge to school children (under 18) with the help of scientists from various backgrounds.

5 Initiatives and activities since the last MWG meeting

5.1 Decadal Collaborative Centre (DCC) (Lee Cooper)

Lee presented updates on the development of a Decadal Collaborative Centre (DCC) for the Arctic Ocean to support the implementation of the UNODOS Arctic Action Plan as well as the UN Decade of Ocean Science for Sustainable Development (2021-2030). The development is also facilitated by SCAR. The US NSF and Norwegians scientific funding organization NordForsk have signed a Memorandum of Understanding (MoU). The engagement of indigenous perspectives is encouraged, which could develop into a joint contribution to the DCC by the US and Norway.

5.2 Pan-Arctic DBO network (Arild Sundfjord, Jackie Grebmeier)

Arild provided an overview on the EU Arctic PASSION project and development of the pan-Arctic DBO network (including updates from full day DBO meeting to be held the day before the MWG meeting). Arctic PASSION has been funded by the European Commission H2020 Programme to facilitate research in the Arctic over four years.

5.3 The EU High Arctic Ocean Observation System (HiAOOS) project (Arild Sundfjord)

Ongoing efforts towards a sustained Central Arctic multipurpose mooring network for ocean observations, acoustic tomography and geo-positioning were presented. Arild presented the sensor layout for mooring in the Nansen and Amundsen Basin. HAOS and HiAATS (NSF) were introduced as collaborating projects, but the potential for further collaboration with other projects was highlighted, e.g., Arctic Mobile Observing System in Beaufort Sea (AMOS).

5.4 Connecting small scale fisheries, indigenous groups, and scientists in support of sustainable fishing and equitable blue carbon outcomes in the changing Arctic (Julia Mason)

Julia provided insights and information on a workshop on equitable and climate-informed governance approaches for emerging Arctic marine resources on March 25th. The workshop's goal was the identification of a knowledge-to-action pathway for emerging marine resource governance challenges. In particular, the workshop focused on exploring the opportunities and roadblocks for the inclusion of indigenous knowledge in the international ocean governance processes.

5.5 Ongoing projects and expedition framework for the Canadian research icebreaker CCGS Amundsen (Alexandre Forest)

Alexandre Forest, Executive Director of Amundsen Science, presented historical aspects and provided an overview of the work conducted on the research icebreaker CCGS Amundsen in the Canadian Arctic to date. He explained their current projects, such as REFUGE and ArcticCORE, and highlighted their engagement with Indigenous and Northern communities. He also introduced a novel research

funding scheme called Transforming Climate Action (TCA), which increases the available yearly ship time.

5.6 The International Synoptic Arctic Survey (SAS) Program

Jackie provided an update on the Synoptic Arctic Survey (SAS), an international program aimed at establishing the present state of the physical, carbon, and ecosystem characteristics of the pan-Arctic Ocean.

6 Next meeting

Will be held at the IASC ASSW in Bolder Colorado in April 2025.

7 Attendees

7.1 Presiding.

Chair: Heidi Kassens (Germany), Vice-Chair: Karen Frey (USA), Vice-Chair: Takashi Kikuchi (Japan)

7.2 Secretariat.

Outgoing Secretary: Laura Ghigliotti. Incoming Secretary: Neelu Singh

2023 IASC Fellow: Lisa Winberg von Friesen. 2024 IASC Fellow: Daniela M.R. Walch

7.3 Delegates.

Austria: Petra Heinz. Belgium: Bruno Delille. China: Tao Li. Denmark: Henrieke Detlef. Denmark: Dewan Ahsan. Finland: Hermanni Kaartokallio. Iceland: Anna H. Ólafsdóttir. India: Arnab Mukherjee. India: Manish Tiwari. Italy: Tommaso Tesi. Japan: M. Yamamoto-Kawai. Norway: Arild Sundfjord. Poland: Agata Zaborska. Poland: A. Beszczyńska-Moeller. Portugal: Catarina Magalhães. Republic of Korea: Jinyoung Jung. Republic of Korea: Eun Jin Yang. Sweden: Adam Ulfsbo. Switzerland: Samuel Jaccard. The Netherlands: Martine Van Den Heuvel. United Kingdom: Mark Inall. USA: Lauren Juranek.