

Chairs' Statement: 5th Meeting of Scientific Experts on Fish Stocks of the Central Arctic Ocean
Ottawa, Canada
October 24-26, 2017

Scientific experts on fish stocks in the Central Arctic Ocean (CAO) met from October 24-26, 2017, in Ottawa, Canada to develop the scientific program supporting diplomatic negotiations on preventing unregulated commercial fishing in the High Seas portion of the CAO. The diplomatic negotiations are building on the [2015 Oslo Declaration](#) in which the five nations with waters adjacent to the High Seas portion of the CAO agreed to interim measures for the prevention of unregulated commercial fishing in the High Seas.

At the direction of the negotiating parties, and building on the outcomes of four previous meetings of Scientific Experts on Fish Stocks of the Central Arctic Ocean (FiSCAO), participants at this 5th FiSCAO meeting were tasked with addressing four [Terms of Reference](#) (ToR), summarized below:

ToR 1. Design a 1-3 year long mapping program.

ToR 2. Design a monitoring program.

ToR 3. Identify human, financial, vessel/equipment resources needed for mapping and monitoring.

ToR 4. Develop data collection, sharing, and hosting protocols that outline the details of what and how data shall be collected, shared, and hosted for consideration by the Parties.

In total, 24 participants attended the 5th FiSCAO, with representation from 7 of the 10 negotiating parties including the Kingdom of Norway, the United States of America (USA), Canada, the People's Republic of China, the Republic of Korea, Iceland and the European Union, and representatives from the International Council for the Exploration of the Sea (ICES), the North Pacific Marine Science Organization (PICES) and the Arctic Council's Protection of the Arctic Marine Environment (PAME) and Conservation of Arctic Flora and Fauna (CAFF) working groups.

Participants worked with the understanding that "mapping" refers to initial data collection and analysis in the High Seas CAO to create a snapshot of the diversity, distributions and relative abundances of fishes and invertebrates, and their supporting or reliant ecosystem components (e.g., habitats and food web) whereas "monitoring" involves data collection to assess temporal variability in species abundances and supporting ecosystem components over time.

Key summary points

- With respect to the design of a mapping program (ToR 1), participants agreed that:
 - filling knowledge gaps in the understanding of fish distribution in key areas in the High Seas CAO is the highest priority and the mapping program should begin as soon as possible; and
 - existing planned surveys are very limited and new resources will be required to implement the mapping program.

- With respect to the design of a monitoring program (ToR 2), participants:

- developed an inventory of existing monitoring programs critically important to detect potential changes in the High Seas CAO;
 - identified areas in which reliable monitoring would need to be implemented; and
 - agreed that further research would be required to operationalize scientifically sound monitoring indicators.
- With respect to resources needed to implement the mapping and monitoring programs (ToR 3), participants noted that:
 - a coordinating body will be required in the future to effectively implement and oversee the mapping and monitoring programs and to carry out analyses of resulting data and reporting;
 - mapping of fish species in the High Seas CAO requires dedicated resources (either new or reallocation of existing resources), including vessels, personnel and sampling equipment;
 - vessels of opportunity could be used for some mapping and monitoring; these opportunities will also require some new resources; and
 - data management will require some personnel and infrastructure investments.
- With respect to data sharing and management (ToR 4), participants:
 - developed a draft data sharing policy as the foundation for a future data sharing protocol, including the technical specifications for data sharing;
 - identified that the development of a data sharing protocol will require negotiation and legal review among the parties, and that this protocol would need to be operational before the mapping program starts; and
 - recommended that a data management/sharing pilot study be undertaken using the FiSCAO fish location database initially developed for the 4th FiSCAO and noted the expression of interest from groups at the meeting (e.g. USA, ICES, PICES) in exploring such a pilot study.
- With respect to the consideration of Indigenous and Local Knowledge, especially regarding ToR 1 and ToR 2 which make explicit reference to Indigenous and Local Knowledge, participants:
 - recognized that Indigenous and Local Knowledge is an important source of information but also noted that invited experts and Indigenous and Local Knowledge holders were not available to participate in the meeting;
 - emphasized the importance of involving Indigenous and Local Knowledge holders in elaboration of the joint program of scientific research and monitoring; and
 - invited the ICC to submit comments that may be appended to the full meeting report if ICC so chooses.

A full meeting report describing the discussions and conclusions with respect to each of the terms of reference is in development and will be made available, along with the agenda, terms of reference and presentations from the 5th FiSCAO, on the [meeting website](#).