

SUBMISSION TO THE NUNAVUT WILDLIFE MANAGEMENT BOARD
August 2023

FOR

Information: X

Decision:

Recommendation:

Issue: Proposed multi-species marine mammal fall survey in Ungava Bay and Hudson Strait

Project Leaders: Caroline Sauvé and Arnaud Mosnier (Fisheries and Oceans Canada, Quebec)
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Funding sources: DFO Science, Marine Conservation Target project (Québec Region)

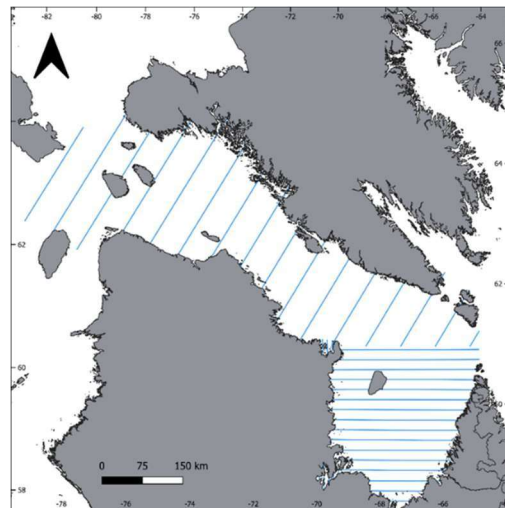
Project rationale: The Marine Conservation Target program within Fisheries and Oceans Canada (DFO) gathers data on biodiversity and species distribution in Canadian waters, particularly to fill in gaps where necessary. Knowledge of the occurrence and distribution of several marine mammal species in Hudson Strait and Ungava Bay in autumn is very limited, especially in offshore waters where no Inuit observational data is available.

In spring 2023, DFO Science (Québec Region) visited several Hudson Strait communities in Nunavik and learned from the Local Nunavimmi Umajulivijiit Katujiqatigininga (LNUKs) and hunters that marine mammals were present in their area and suggested that DFO should consider surveying there. Feedback from other communities across Nunavik indicated their interest in surveys conducted outside of the summer period.

To fill this information gap, DFO Science (Québec Region) is considering a multi-species aerial survey between late October and early December 2023 in Hudson Strait and Ungava Bay. This would be a systematic line transect aerial survey involving two aircraft, to account for limited daylight hours. DFO has offered to train two Inuit who would participate as marine mammal observers, one for each aircraft. The data from this survey would be analyzed as soon as possible and the results (species distribution maps) shared with the communities

Time period: October 20 to December 1, 2023.

Location: This project would take place in the Nunavik and Nunavut Marine Regions over Ungava Bay and Hudson Strait (see map attached). The entire survey will be conducted above the sea and long-distance displacements above land may occasionally be undertaken to shorten the travel distance. No low altitude flights susceptible to disturb Inuit activities will be flown.



Objectives: To collect information on marine mammal distribution, abundance and diversity at the time when many marine mammal species migrate. Our survey may help identify important migration areas for different species.

Survey methods: The proposed survey involves two small aircraft (e.g., Cessna 337 or Partenavia P68C), and an estimated total flight time of 82 hours (41 hours/plane), corresponding to 5 flying days in Ungava Bay and 4 flying days in Hudson Strait. A systematic visual line transect design is proposed, with survey lines flown at a target altitude of 800 to 1000 feet and a target airspeed of 100 knots. Survey observers will record all marine mammal sightings on transects. No circling back is planned, i.e., when animals are observed, the aircrafts will not deviate from their trajectory.

A training period will be offered at the beginning and during the survey. Local Inuit that wish to participate as marine mammal observers will be invited to attend the training sessions before joining the survey team. All marine mammal observations will be recorded, including large whales, beluga, narwhals, seals, walruses, and dolphins.

Community consultation plan:

This project description and a feedback form will be shared with the Regional Nunavimmi Umajulirijit Katuqiatigininga (RNUK), LNUKs from the Ungava Bay and Hudson Strait areas, the Nunavut Marine Region Wildlife Board (NMRWB), the NWMB, the Kimmirut and Kinngait HTOs, and the Qikiqtaaluk Wildlife Board. The DFO Science (Québec region) team traveled through all Hudson Strait and Ungava Bay communities between May and June 2023 to discuss marine mammal research with LNUKs, Uumajuit wardens, and community members. Although this proposed survey project was not presented at that time, many communities expressed an interest in having marine mammal surveys conducted in the Hudson Strait area, and during periods outside of the usual stock evaluation surveys conducted by DFO.. A permit application will be submitted to the Nunavik Marine Region Planning Commission, as well as to the Nunavut Impact Review Board.

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