

SUBMISSION TO THE
NUNAVUT WILDLIFE MANAGEMENT BOARD
June 2026

For

Information: **X**

Decision:

Issue: Fisheries and Oceans Canada's Community-Based Marine Mammal Hunt Sampling Program

Background information:

- Fisheries and Oceans Canada (DFO) has organized a collaborative community-based hunt sampling program throughout Nunavut communities since the 1980s.
- With support and help from Hunters and Trappers Organizations (HTOs) and local hunters, walrus, seal, and whale tissue and organ samples are collected from subsistence hunts.
- These tissues support various stock assessment and ecological studies, including genetics analysis of skin, age estimation from counting growth layers in teeth, diet studies (stable isotopes analysis of skin and muscle and fatty acid analysis of blubber), and contaminants studies (e.g., liver, blubber).
- In addition to DFO, researchers from other government departments, universities, and other research institutes can also access samples if they receive approval of the communities who supplied the samples which are reviewed by the Sample Governance Committee.
- Each year, DFO prepares sample kits for each community that include labelled bags for each tissue, data sheets, and measuring tapes (Appendix I).
- Hunters are paid \$150-240 for each returned sample kit, depending on the species. HTOs receive an administration fee of 25% for each returned kit.
- DFO also accepts samples from fish and invertebrates for use in diet and ecosystem-based studies. Sometimes, specific projects require different samples that are not typically included in the kits (e.g., walrus tusks). Extra money on top of the sample kit fee is paid to hunters for these samples.
- Samples are inventoried and stored frozen at DFO's Freshwater Institute and at CenterPort Cold Storage in Winnipeg, Manitoba.

Program summary 2024-25 (most recent year completed)

- A total of 272 sample kits were returned.
- Sample kits were returned from 12 participating communities throughout Nunavut, although the numbers of kits varied greatly by community (Appendix II).

- Sample kits of seven species were returned: beluga (56), narwhal (17), walrus (25), bearded seal (9), harbour seal (1), harp seal (10), and ringed seal (154). Ringed seal kits were returned from almost all of the 12 communities (Appendix II).
- A number of scientific studies that were supported by the sampling program were published in 2024-2025 (Appendix III). These studies help answer stock assessment and community-driven questions regarding Arctic marine mammals.
- These summaries have been included in a brochure to distribute among the communities.

Prepared by:

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Date:

9 April 2026

APPENDIX I

Whale Sample Kit Datasheet

ARPG-xx-1 _____

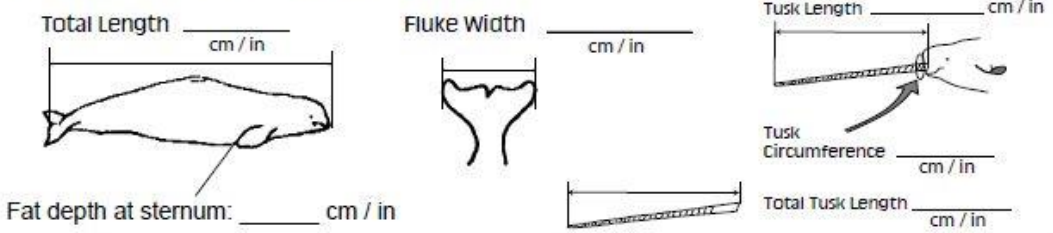
Hunters Name (optional): _____ *Community: _____

*** Date Killed:** _____
day / month / year

Kill Location: _____
*GPS Location: _____ N
_____ W

* Whale Type: Beluga Narwhal Other _____
* Sex: Male Female
**(These must be completed for payment)*

Part A: Measurements (measure in a straight line)



Put the following samples in the labelled bags or vials.

Part B: Ageing Structure Lower Jaw and / or embedded tusk (bag) Eye ball(s) (bag)

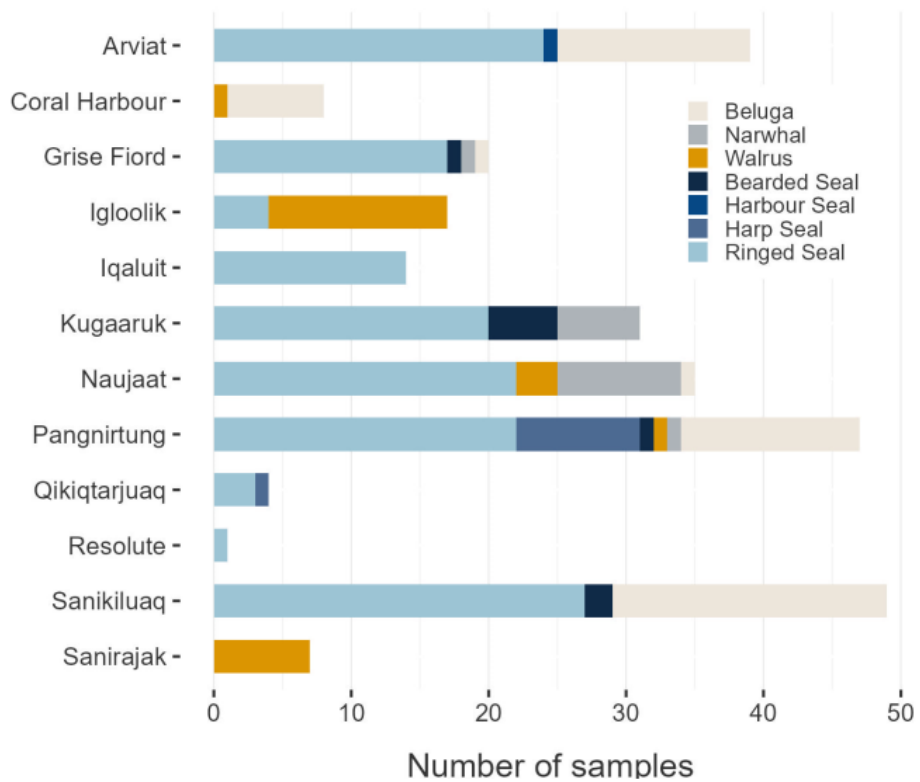
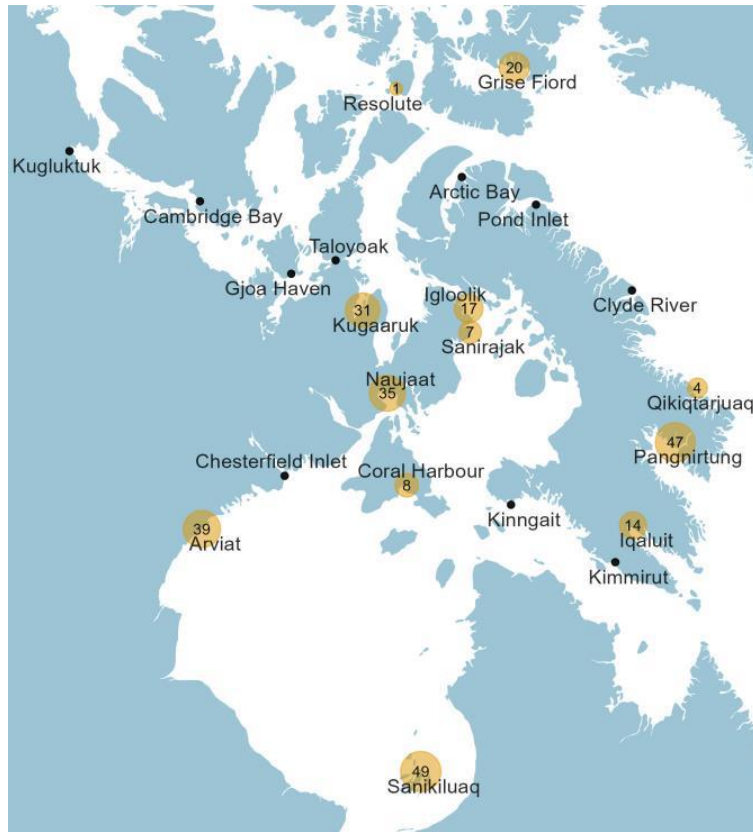
Part C: Tissue Samples (Cut fist-sized pieces of tissue and put in the labelled plastic bags.)
 Muktuk and Blubber (bag) Muscle / Meat (bag) Liver (bag)

Part D: Other Samples *(Keep all samples frozen)*
 Ovaries (bag)

Other Comments: _____

Datasheet and samples must be returned for payment.

APPENDIX II



APPENDIX III

Belanger, A.M., Roth, J.D., Ferguson, S.H., Friesen, O., and Watt, C.A. (2025). Seasonal flexibility in feeding behavior of Hudson Bay beluga whales: insights from blubber lipid analysis. *Canadian Journal of Zoology*. <https://doi.org/10.1139/cjz-2024-0114>.

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Laing, R.J., J-P.W. Desforges, K. Strong, D. Armstrong, F. Wang, S.H. Ferguson, D.J. Yurkowski. 2025. Spatiotemporal variation in foraging ecology and mercury concentrations in ringed seals and bearded seals across a latitudinal gradient in the eastern Canadian Arctic. *Environmental Research* 285:122437

Lopes, X., M., M. Bérubé, K. M. Kovacs, R. Dietz, S. H. Ferguson, M. P. Heide-Jørgensen, C. Lydersen, P. J. Palsbøll. 2025. Population structure and divergence time among East Greenland and West Greenland/Eastern Canadian Arctic narwhals, *Monodon monoceros*. *Polar Biology*, 48(4), pp.1-13. <https://doi.org/10.1007/s00300-025-03417-2>

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