

PROPOSAL REVIEW

Project Number: 215-15-01

Applicant: David Lee (Nunavut Tunngavik Inc.)

Title: Walrus Biopsy Sampling – South East Baffin

Funding Requested: \$29,000¹

Total Score 80.33 /100
(0 points deducted)

Scoring Breakdown: NWMB Priority: 7.5 / 7.5
Regional Priority: 14.5/17.5
Quality: 32.00 / 35.00
Consultation: 13.50 / 15
Funding: 12.83 / 25

Project Summary: This project will investigate different methods of biopsy sampling of Atlantic walrus to determine best techniques and practices. Biopsy sampling can be used to produce population estimates through genetic mark recapture, a method that is currently being applied to bowhead whales and polar bears in Nunavut.

Project Contributions:

Requested from NWMB	\$29,000	50%
Other Contributions	<u>\$29,000</u>	<u>50%</u>
Total	\$58,000	100%

NWMB Staff Evaluation:

NWMB Priority: #1 - Contributes to the establishment, modification or removal of levels of Total Allowable Harvest (S 5.6.16 to S 5.6.18) for stocks or populations where there is believed to be a conservation concern or that are priority species for harvest by Inuit.

Regional Priority: # 2 Qikiqtaaluk – Increase involvement of local Inuit and Inuit Qaujimagatuqangit in population surveys

Project design: Beginning in July 2015, three methods of collecting biopsy samples from Atlantic walrus in Frobisher Bay will be tested: 1) biopsy tips attached to bolts fired from a crossbow; 2) a dart gun that shoots biopsy darts; and 3) biopsy tips attached to a long metal pole (similar to a traditional harpoon). Sampling will be done while walruses are hauled out on ice pans or land haul-outs as well as when they are swimming. All samples will be analysed to produce a unique marker for each animal and will be added to Fisheries and Oceans Canada's database. Samples will contribute to a genetic mark recapture estimate of stock size for the Hudson Bay-Davis Strait stock of Atlantic walrus.

Application of results: There is currently no estimate of the size of the Hudson Bay-Davis Strait stock of Atlantic Walrus. Results of this project will contribute to producing an estimate and will also help develop more effective research methods for determining stock size of Atlantic walrus.

¹ The Board has already approved two NWSF projects totaling \$26,922, leaving **\$73,078** for additional projects.

Community involvement / consultation: The applicant has met with and obtained a letter of support from the Amaruq Hunters and Trappers Organization. The project will employ and train two community representatives for a total of 40 person days. The proposal also indicates that consultations will take place upon completion of the research and a report will be provided to the Amaruq Hunters and Trappers Organization.

Prepared By: Danica Crystal, Wildlife Management Biologist, NWMB
Consultations: Sarah Spencer, Wildlife Management Biologist, NWMB

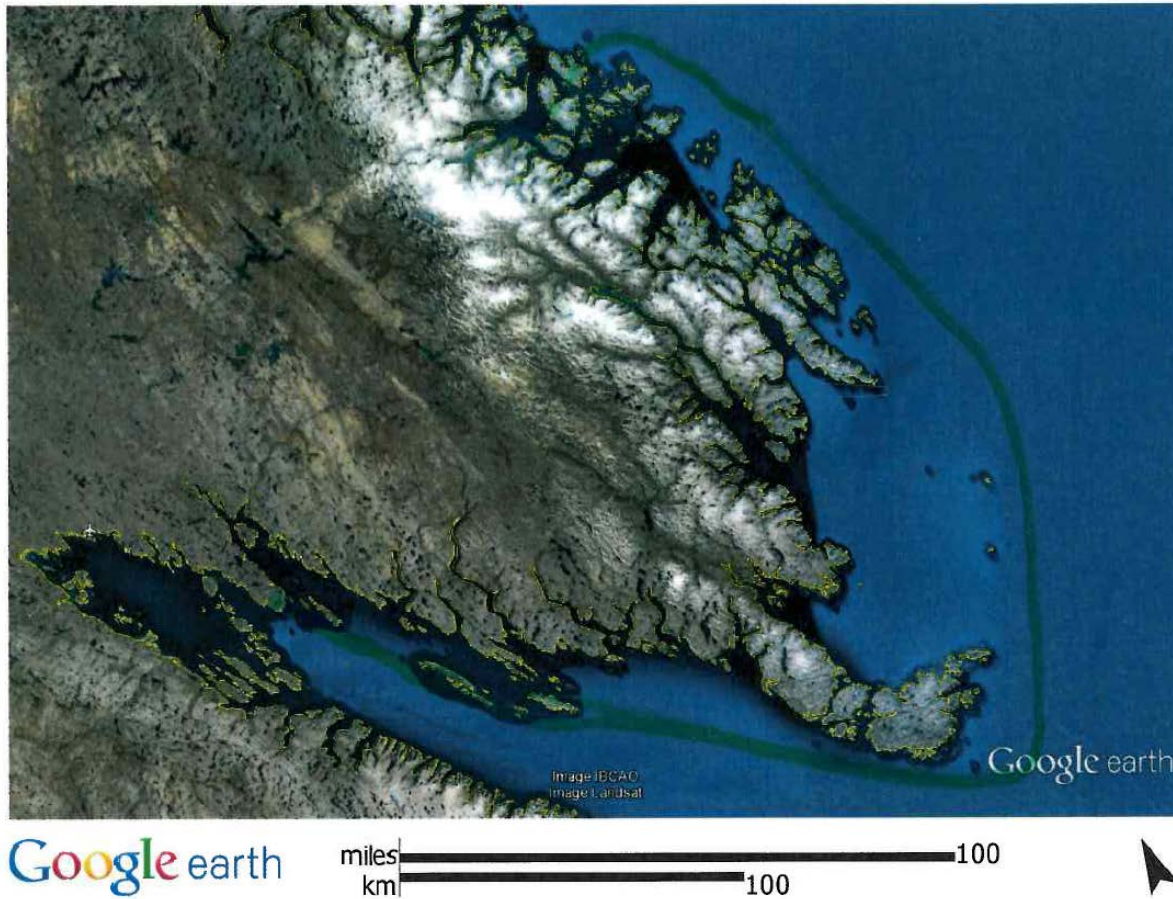


Figure 1. Map of proposed study area for walrus biopsy sampling.