

## PROPOSAL REVIEW

**Project Number:** 2-14-11

**Applicant:** Lisa-Marie Leclerc

**Title:** Muskox (*Ovibus moschatus*) population boundary delimitation and estimate number on Victoria Island, NU

**Funding Requested:** Single Year Funding - \$75,000 for 2014-2015

**Rank:** 18 / 18

**Total Score** 66.69 / 100  
(no deductions)

**Scoring Breakdown:** NWMB Priority: 17.50 / 17.50  
Regional Priority: 6.50 / 7.50  
Quality: 21.00 / 35.00  
Consultation: 13.50 / 15  
Funding: 8.19 / 25

### Project Summary:

This project aims to address concerns and requests of Inuit hunters and conduct population research on current muskox zones by: 1) using genetic analyses to set the population boundaries of muskox of Victoria Island; and 2) estimating the number of animals present for each muskox population determined on Victoria Island.

### Project Contributions:

Requested from NWMB	\$75,000	45%
Other Contributions	<u>\$90,000</u>	<u>55%</u>
Total	\$165,000	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 Kitkimeot – Population research on current muskox zones.

### Project design:

In spring of 2014, muskox fecal samples will be collected from Cambridge Bay hunters during the subsistence harvest. A computer program will be used to cluster similar genetic profiles of muskox, using samples from 2014 and previously collected samples from 2013. Based on the population boundaries identified by this genetic analysis, aerial surveys will be flown across all of Victoria Island to assess muskox populations. Surveys will take place between the end of July to the end of August 2014. Expected muskox distribution patterns will be obtained from past surveys, hunter observations, and Inuit Qaujimaqatuqangit, and will be used to determine survey effort. Observers will record the number of animals seen, their distance from the transect line, and classifications of adults and calves. This information will be used to calculate density estimates and adult to calf ratios.

Application of results:

Results of this project will provide information on muskox population and distribution and will be applied to re-evaluation of existing quotas set by the Cambridge Bay Hunters and Trappers Organization. Results will also aid in the development of a West Muskox Management Plan developed by the Government of Nunavut, Nunavut Tunngavik Inc., and Hunters and Trappers Organizations.

Community involvement / consultation:

The Project Leader has provided a letter of support for the project from the Cambridge Bay Hunters and Trappers Organization. The proposal indicates that community consultation will continue throughout the project to allow input and insight. This project will also employ community members as observers for the aerial survey. Findings will be presented to the community in-person and a summary of the study will be posted on the news board at the Coop and the Northern.

As per the NWRT policy, if the project is funded by the NWRT the project is required to: (1) provide a letter of support from all affected communities by June 30<sup>th</sup>, 2014; **OR** (2) provide a letter of support from a majority of the affected communities by June 30<sup>th</sup>, 2014 and provide evidence that the research has done a “conscientious” job of consulting; **OR** (3) provide the required information to demonstrate that “conscientious” consultation has been conducted by June 30<sup>th</sup>, 2014.

**Recommendations:** If this project is funded, the following conditions should apply:

1. Funding should be conditional on other funding, as identified in the proposal, being approved. This should be confirmed in writing; and
2. Funding should be conditional on meeting the consultation requirements identified as per the NWRT policy.

**Prepared By:** Danica Crystal, Wildlife Management Biologist, NWMB

**Consultations:** Peter Kydd, Wildlife Management Biologist, NWMB