

PROPOSAL REVIEW

Project Number: 2-14-08

Applicant: Mitch Campbell

Title: Estimating Breeding Female Abundance Within the Qamanirjuaq Mainland Migratory Barren-ground Caribou Subpopulation, June 2014

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

Rank: 3 / 18

Total Score 85.37 / 100
(no deductions)

Scoring Breakdown: NWMB Priority: 17.50 / 17.50
Regional Priority: 7.50 / 7.50
Quality: 32.50 / 35.00
Consultation: 13.50 / 15
Funding: 14.37 / 25

Project Summary:

The proposed study intends to produce a current estimate of the number of breeding females in the Qamanirjuaq herd of barren-ground caribou and extrapolate to a whole-herd estimate. These estimates will be based on: 1) an estimation of the number of breeding cows on the calving ground; 2) a determination of the trend in the number of breeding females on the calving ground since 2008; 3) an estimate of the ratio of breeding females to the total number of females at peak of calving as an indicator of pregnancy rates; 4) a fall composition study; and 5) a delineation of the spatial extent of the annual calving ground.

Project Contributions:

Requested from NWMB	\$ 75,000	14%
Other Contributions	<u>\$478,020</u>	<u>86%</u>
Total	\$553,020	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: #1 Kivalliq – Caribou population assessments

Project design:

Reconnaissance, photographic, and composition surveys will be conducted in June 2014. Results of reconnaissance surveys will be used to define areas of the calving grounds with high, medium, and low densities of breeding females. This will inform flying (sampling) effort during the abundance surveys. Visual surveys for abundance will employ four independent, dedicated observers and two data recorders. Photographic surveys will only be flown over areas identified as having high densities of breeding females (relative densities exceeding 25 caribou/km²). All other areas will be covered using visual survey techniques. To extrapolate to a whole-herd abundance estimate, a fall composition survey will be flown between October 15th and November 1st. Two

different statistical methods will be used to estimate the trend in the number of breeding females and total herd size.

Application of results:

Project results will be documented in a Government of Nunavut – Department of Environment file report and applied to conservation and management initiatives to address land-use and sustainable caribou populations. Information provided by this study will support integrated sustainable harvest management of the Qamanirjuaq caribou herd (including commercial, outfitting, resident, and aboriginal harvests). Results will also provide information with which to access and manage land use activities to mitigate the potential negative effects of industrial and commercial activities.

Community involvement / consultation:

Included with the proposal is a letter of support from the Kivalliq Wildlife Board, satisfying consultation requirements identified in the NWRT Policy. There will be community participation during the surveys, followed by community consultations within all Nunavut communities known to harvest Qamanirjuaq caribou. A summary report will also be provided to all Kivalliq communities.

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
Karla Letto, Wildlife Management Biologist, NWMB