

PROPOSAL REVIEW

Project Number: 2-15-04

Applicant: Markus Dyck

Title: Gulf of Boothia Polar Bear Mark-Recapture

Funding Requested: Single Year Funding- \$75,000 for 2015-2016

Rank: 1 / 18

Total Score 94 /100
(no deductions)

Scoring Breakdown: NWMB Priority: 17.50 / 17.50
Regional Priority: 5.50/ 7.50
Quality: 31.00 / 35.00
Consultation: 15.00 / 15
Funding: 25.00 / 25

Project Summary:

The primary objectives of this project are to: 1) estimate the current size and composition of the Gulf of Boothia polar bear subpopulation; 2) compare a new estimate of abundance with the previously derived data in order to gain insight into population trend and status in Gulf of Botthia; 3) estimate survival and reproduction rates so that population viability analysis can be performed; 4) evaluate polar bear distribution with respect to environmental variables such as ice conditions and food availability; 5) demonstrate that gentic mark recapture methods are a less invasive method for population monitoring; and 6) Inkraese public participation and provide training to designated personell from hunters and trappers organization

Project Contributions:

Requested from NWMB	\$ 75,000	14%
Other Contributions	<u>\$475,00</u>	<u>86%</u>
Total	\$550,00	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: #3 Kivalliq- Polar Bear: establish the distribution, abundance and key habitats

Project design:

Biopsy darting will be carried out between late April and mid-June during 2015-2017. The darts are dsigned to fall to the ground after impact and can be retrieved without handling the bear. Bear will be located using a helicopter. Once bear are located a small sample of tissue, mostly skin will be taken using the biopsy dart. Information will also be collected on location, behavior, body condition, age/sex and group size.

Application of results:

Project results will be documented in a Government of Nunavut file report and used in future total allowable harvest decisions and management planning. Information on polar bear distribution during the spring can provide insight into habitat use. Information on polar bear distribution and habitat use during the spring may be used to mitigate risks to public safety and reduce human-bear conflicts.

Community involvement / consultation:

The Project Leader conducted consultations with affected HTO Boards in February 2013. The proposal indicates plans for in community consultations during the fieldwork in the Spring of 2015, 2016 and 2017. In-community reporting of results will occur in the Fall of 2018.

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 30th, 2015; **OR** (2) provide a letter of support from a majority of the affected communities by June 30th, 2015 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 30th, 2015.

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.

Consultations:

Prepared By: Sarah Spencer, Wildlife Management Biologist

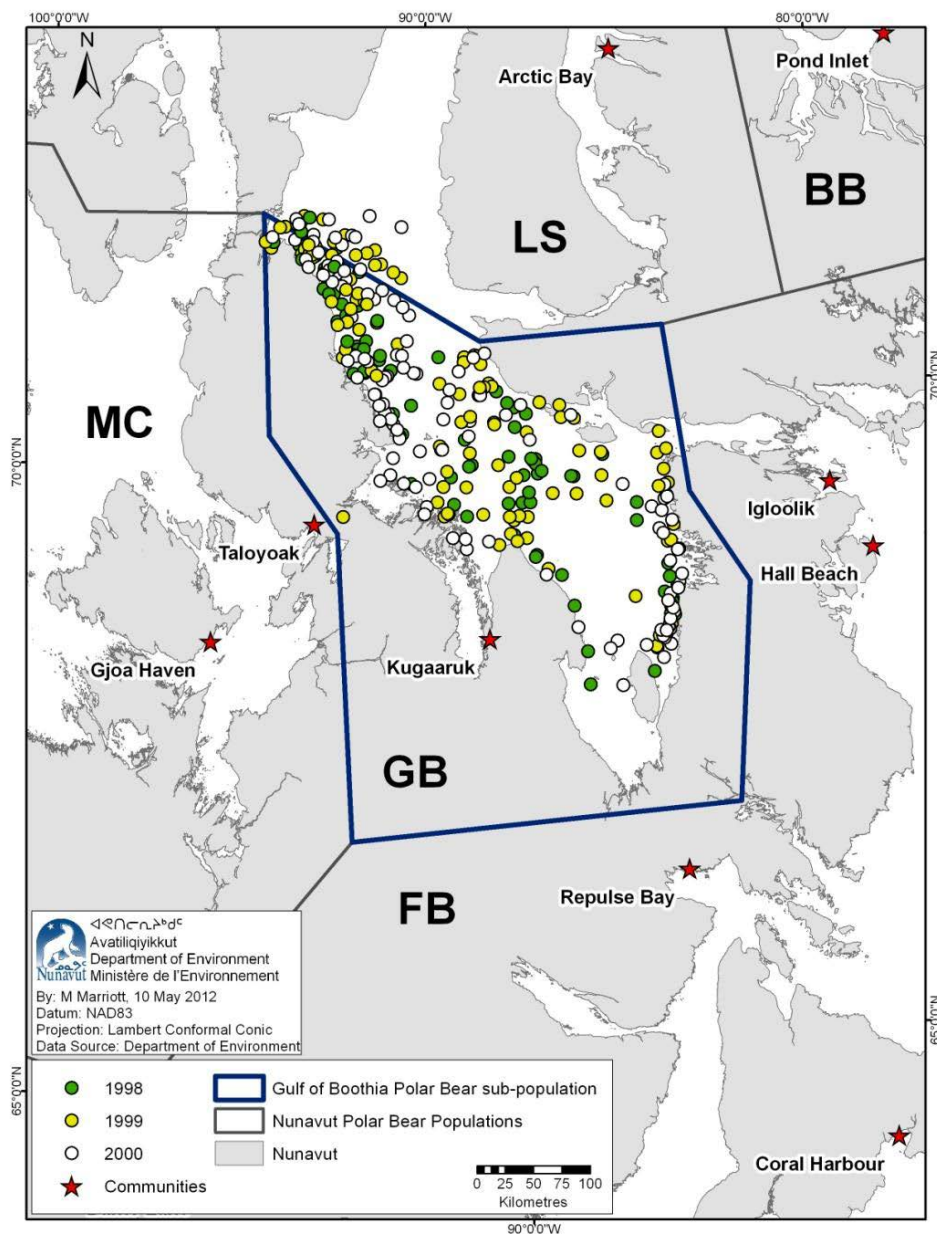


Figure 1. Map of the Gulf of Boothia polar bear subpopulation boundary and location of nearest communities that harvest from there (Note: past capture locations are also indicated).



Figure 2. View of biopsy dart with skin sample (insert) and the visibly low impact on a bear after darting (orange in larger picture is the dart).