PROJECT PROGRESS REPORT

PROJECT NUMBER: 2-14-04

RESEARCHER: Morgan Anderson

TITLE: Peary caribou landscape genetics: critical habitat and population structure in the high arctic

ORIGINALLY FUNDED: 2014-2015

NWMB FUNDING: \$36,000

PROJECT SUMMARY: The purpose of this project is to gain information on movement, relatedness, range use, dispersal and population definition for Peary Caribou. Specifically, the project aims to: 1) identify movement corridors, sex-biased dispersal and landscape features blocking/facilitating movement; 2) determine whether caribou on Bathurst Island are primarily descended from survivors of the die-offs, or whether caribou have recolonized the island from other areas; 3) provide insight into source-sink dynamics; and 4) characterize the differences among Peary caribou, Dolphin-Union caribou and barren ground caribou.

FINANCIAL REPORT:

Amount from NWMB:	\$ 36,000
Amount from Others:	\$ 80,000
TOTAL	\$ 116,000
Expenses:	\$ 48,817
Difference	+ \$ 67,183

COMMENTS: Pellet samples (as well as some opportunistic collection of hair and tissue from old carcasses) were collected from central Ellesmere Island, Axel Heiberg Island, and Melville Island, and are currently undergoing analysis. Previous samples collected between 2000 and 2008 were analyzed. Preliminary results indicate that significant population structure is present, and that Peary caribou are using ice corridors to facilitate movement between islands. As indicated in the interim financial report, the entire study area could not be sampled due to inclement weather. The researcher hired a summer student from Grise Fiord to assist with field work through the Government of Nunavut's Summer Student Employment Equity Program (separate funding), which reduced the project costs. Preliminary results were presented to Resolute and Grise Fiord Hunters and Trappers Organizations.

RECOMMENDATIONS:

 NWMB Wildlife staff do not have any recommendations for this reporting period. The project leader has met all of the reporting requirements to date. A final financial report will be required by June 30th 2015 as per the NWRT policy. Project results will be captured in the final project report which is required by September 30th, 2015.

CONSULTATIONS: Sarah Spencer, Wildlife Management Biologist, NWMB **PREPARED BY:** Karla Letto, Wildlife Management Biologist, NWMB