

PROJECT PROGRESS REPORT

PROJECT NUMBER: 2-14-09

RESEARCHER: Markus Dyck

TITLE: M'Clintock Channel Polar Bear Genetic Mark-Recapture 2014-2016

ORIGINALLY FUNDED: 2014-2015

NWMB FUNDING: \$75,000

PROJECT SUMMARY: The objectives of this project are to: 1) estimate the current population size and composition of the M'Clintock Channel polar bear subpopulation; 2) compare a new estimate of abundance with the one derived during the last study in-order to gain insight into population trend and status; 3) estimate survival and reproductive parameters (to the extent possible) in-order to facilitate population viability analyses; 4) evaluate polar bear distribution with respect to environmental variables, particularly ice conditions, topography and food availability distribution; 5) demonstrate the utility of genetic mark-recapture as a less invasive alternative to physical capture for the purpose of population monitoring; and 6) enhance public participation and provide Hunters and Trappers Organization-designated personnel with training in survey methods.

FINANCIAL REPORT:

Amount from NWMB:	\$ 75,000
Amount from Others:	\$ 446,000
TOTAL	\$ 521,000
Expenses:	\$ 478,182
Difference	+ \$ 43,492

COMMENTS: 2014 was the first year of this three year genetic mark-recapture study. Between 5 May and 18 June 2014 a total of 155 polar bears (in 119 groups) of various age classes and both sexes were encountered, of which 127 were biopsied (figure 1). Due to weather delays and logistical constraints resulting from these, sampling was not distributed across the entire M'Clintock Channel study area. Overall, with the exception of a few smaller cubs of the year, bears appeared well-fed indicating an ample supply and availability of prey items. One Spence Bay and one Ekaluktutiak Hunter and Trappers Organization member each participated in the fieldwork. As indicated in the interim financial report, all of the NWRT funds were used towards helicopter time and fuel caching activities.

RECOMMENDATIONS:

1. 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

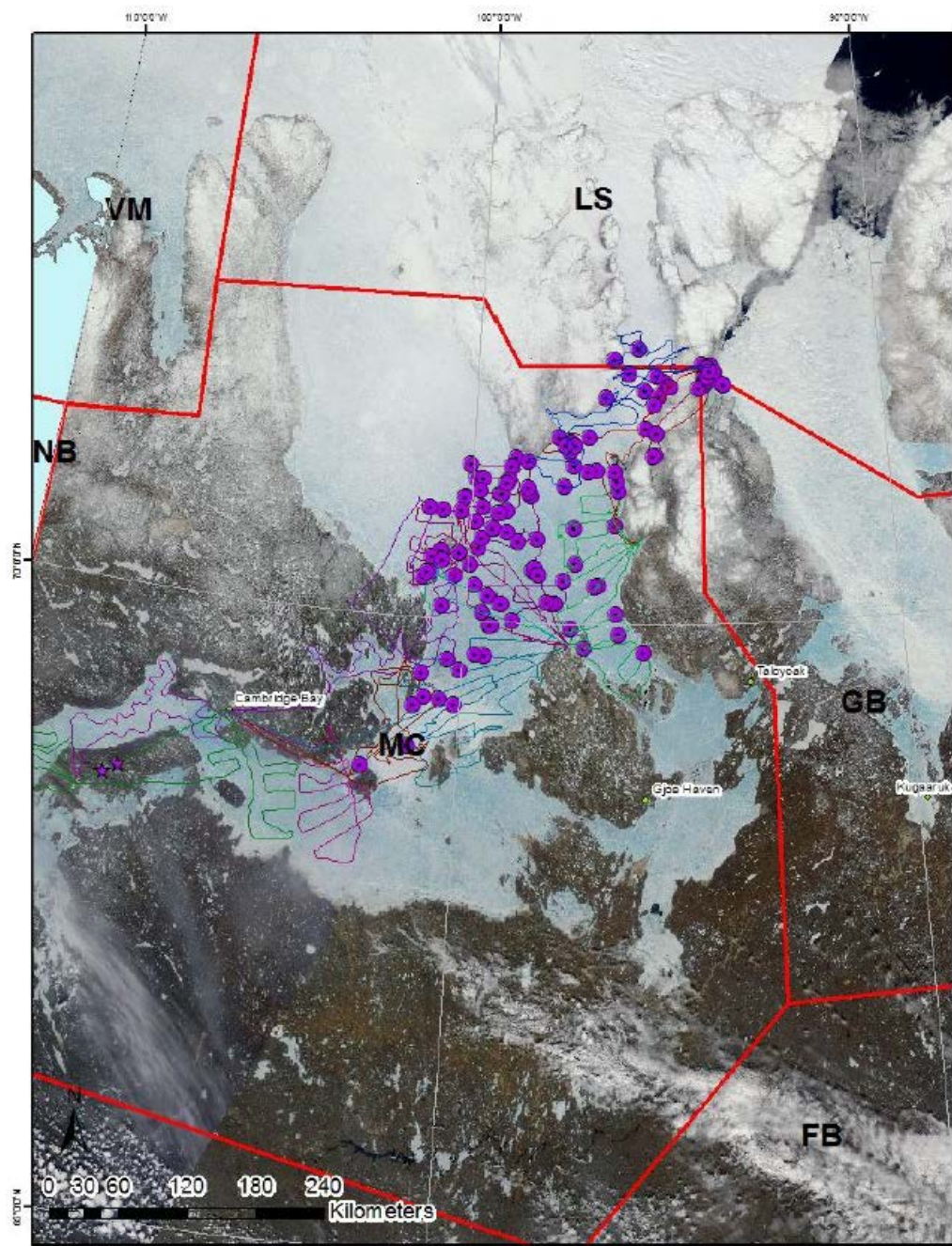


Figure 1. Locations of individual and groups of polar bears encountered during the spring of 2014 in M'Clintock Channel. The two stars represent brown bears, and the lines the daily search tracks. Note: the entire survey area was not covered.