

# PROJECT PROGRESS REPORT

**PROJECT NUMBER:** 2-13-14

**RESEARCHER:** Malik Awan

**TITLE:** Estimation of population size for wolverine (*Gulo gulo*) in the vicinity of Baker Lake, using DNA based mark-recapture method

**ORIGINALLY FUNDED:** 2014-2015

**NWMB FUNDING:** \$23,000

**PROJECT SUMMARY:** The purpose of this study is to investigate the ecology and to estimate wolverines density and abundance in the Kivalliq region based upon a DNA sampling grid located near Baker Lake. The project's main objectives are to: 1) determine wolverine density; 2) determine baseline population data which can be used for long-term population monitoring; 3) determine landscape use and movements of wolverine; 4) provide field work training and employment to Hunters and Trappers Organization members; and 5) increase collaboration between government and resource users.

## FINANCIAL REPORT:

<b>Amount from NWMB:</b>	\$23,000
<b>Amount from Others:</b>	\$50,000
<b>TOTAL</b>	\$73,000
<b>Expenses:</b>	\$85,950
<b>Difference</b>	- \$12,950

**COMMENTS:** This is a two year study that began in March 2013. A total of 209 bait posts and 25 motion triggered digital cameras were deployed in the study area (Figure 1). Caribou meat and commercial lures were used to bait the posts. Each post was visited 3 times at about 10-day intervals to collect all visible hairs and wolverine scat. Seventeen wolverines were detected in 2013 sampling. Samples collected in 2014 are still undergoing genetic analysis. Data from both years will be combined for population analysis and will be presented in the final project report. The interim financial report indicated that the Government of Nunavut provided extra funding which explained the variance in the original budget. Preliminary results have been presented to Baker Lake and Arviat Hunters and Trappers Organization and the Kivalliq Wildlife Board.

## RECOMMENDATIONS:

1. NWMB Wildlife staff does 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 30<sup>th</sup> 2015 as per the NWRT policy. Project results will be captured in the final project report which is required by September 30<sup>th</sup>, 2015.

**CONSULTATIONS:** Sarah Spencer, Wildlife Management Biologist, NWMB

**PREPARED BY:** Karla Letto, Wildlife Management Biologist, NWMB

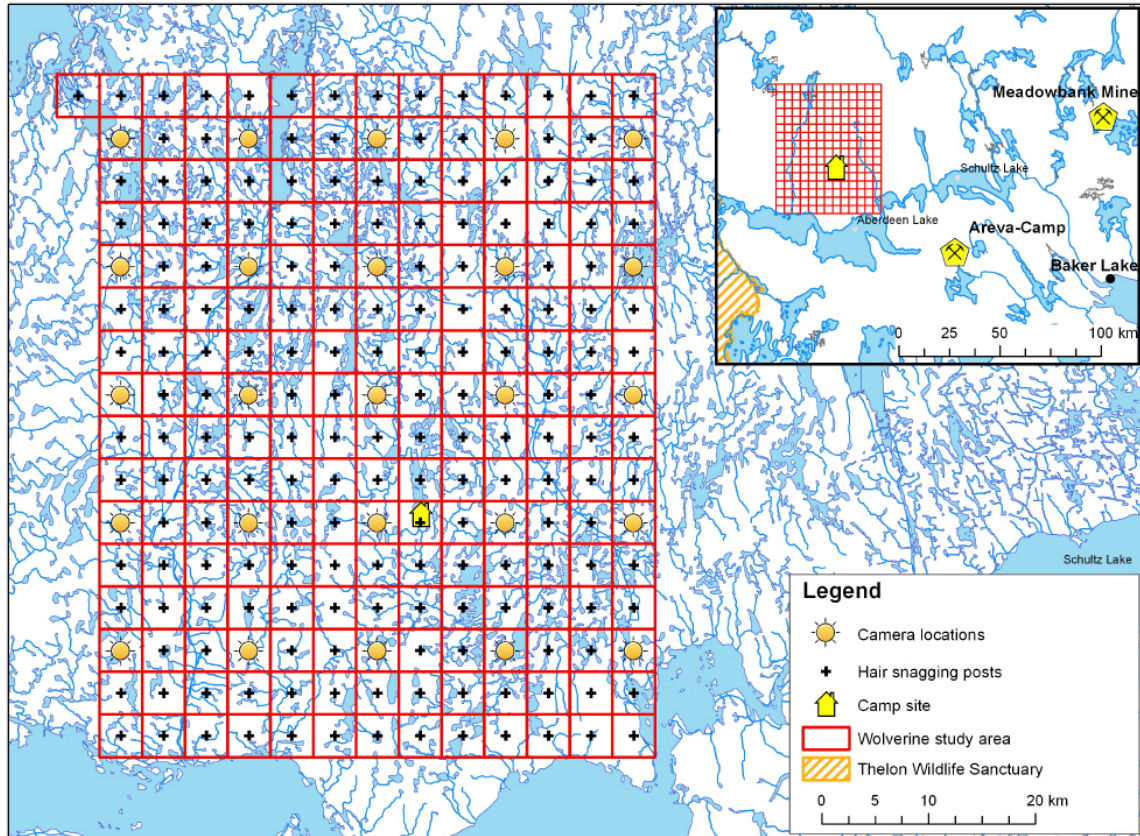


Figure 1. Study area (3,344 km<sup>2</sup>) with 209 4x4 km cells.