

PROJECT PROGRESS REPORT

PROJECT NUMBER: 3-14-01

RESEARCHER: Steven Campana

TITLE: Growth and sustainable yield of lake trout in Nunavut

ORIGINALLY FUNDED: 2014-2015

NWMB FUNDING: \$55,000

PROJECT SUMMARY: The purpose of this study is to determine the age and growth of Nunavut's resident lake trout populations, then develop a predictive model which will allow the lake trout growth rate in unstudied lakes to be predicted based only on lake characteristics. Specifically, the project's main objectives are to: 1) use modern, accurate ageing methods to determine the age composition, mean and maximum ages of lake trout in a cross section of lakes across Nunavut; 2) estimate growth rates and parameters for each of the studied lakes; 3) measure key characteristics of each of the studied lakes such as mean water temperature and fishing history; 4) develop a model which will predict growth of lake trout based on lake characteristics; 5) map expected surplus production and yield of lake trout throughout the Canadian North based on location and lake characteristics; and 6) develop a Google Earth application that allows managers to point and click to determine the long-term sustainable yield of lake trout in Nunavut.

FINANCIAL REPORT:

Amount from NWMB:	\$55,000
Amount from Others:	\$65,000
TOTAL	\$120,000
Expenses:	\$55,000 [†]
Difference	\$0

[†] The interim financial report only showed those budget items funded by Nunavut Wildlife Research Trust.

COMMENTS: This was the second year for this three year project. As indicated in the interim progress report the project progress is slightly ahead of schedule. In the second year, 252 lake trout were sampled from six lakes in western Nunavut. The physical characteristics of each lake were measured and recorded, and temperature-depth recorders were deployed to measure water temperature throughout the year. All otoliths (fish inner ear bone) are currently being processed for age determination. As well, progress has been made in developing a Google Earth overlay for Nunavut lakes and their projected yield of lake trout. As indicated in the interim financial report, all of the Nunavut Wildlife Research Trust funding has been spent. A preliminary project progress report has been sent to the Ekaluktutiak Hunters and Trappers Organization.

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: Danica Crystal, Wildlife Management Biologist, NWMB

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