



ses

school of environmental sciences

The Research Seminar Presentation by

Dylan Bowes

will be held on

Tuesday, November 17th, 2015

At 10:00 am

ALEXANDER HALL 337

Title: Food web structure in subarctic lakes surrounding the Meliadine gold mine

Abstract

A proposed gold mine is projected to open in Nunavut within four years. Mining operations may affect lower trophic levels in surrounding lakes, which in turn may be realized throughout the food web. Thus, it is paramount that the lakes which will be affected by the mine undergo population assessments to determine food web structure in a pristine (baseline) state in order to actively monitor the impact of the mine and prevent the loss of any local wildlife. The proposed research will establish food webs present in lakes surrounding the Meliadine mine. This will be achieved by establishing fish species present and determining “realized” food webs using community composition and stable isotope analyses. In order to examine lake differences, fish condition and health will be quantified and lake chemistry parameters measured. The research will also determine whether energy in the lakes is driven primarily through benthic pathways by investigating primary production. The data generated will inform mining operations and provide insight into food web interactions in subarctic lakes.

Everyone is welcome to attend

(This is a Research Proposal presentation by students in ENVS*6900)