



**University
of Victoria**

Graduate Studies

**Notice of the Final Oral Examination
for the Degree of Master of Arts**

of

HEIKE LETTRARI

BA (University of Victoria, 2011)

**“The Mountain Pine Beetle, Climate Change, and Scientists: Understanding
Science’s Responses to Rapid Ecological Change in Western Canada”**

School of Environmental Sciences

Tuesday, May 2, 2017

10:00AM

David Turpin Building

Room A144

Supervisory Committee:

Dr. Eric Higgs, School of Environmental Studies, University of Victoria (Supervisor)

Dr. Jessica Dempsey, School of Environmental Studies, UVic (Member)

External Examiner:

Dr. Allen Thompson, Department of Philosophy, Oregon State University

Chair of Oral Examination:

Dr. Vivien Corwin, Peter B. Gustavson School of Business, UVic

Abstract

Today, climate change and rapid ecological change are causing impact in numerous, often surprising ways. These changes result in social, cultural, ecological, and economic impacts, as exemplified in the climate-exacerbated mountain pine beetle outbreak in British Columbia, and have recently boosted calls for “usable science.” By interviewing scientists researching the mountain pine beetle, in this thesis I ask, “How are scientists and their institutions responding to rapid ecological change?” Numerous factors shape MPB science—institutional support, funding, and values—and these factors enable and constrain effective relationships and ultimately, useful science, in responses to the outbreak. Results suggest that while science and scientific institutions change slowly, and while relationships between MPB science and policy are characterized as tenuous, there are signs that crossing institutional boundaries (such as the TRIA Network) contributes to producing science that is more effective for responding to rapid ecological change.