

**Clayoquot Alliance for Research, Education and Training
Research Proposal**

**Submitted by,
Jennifer Yakimishyn
University of Victoria, Geography Department
Master of Science Work in Progress**

Thesis Research Project Summary

Seagrass beds are one of the most productive benthic ecosystems in estuarine and coastal areas. The perceived global roles seagrass beds play in supporting marine biodiversity include, providing nursery habitats for fish and invertebrates and supporting productivity in marine food webs. Eelgrass beds (*Zostera marina* L.) in the Clayoquot Sound cover hundreds of hectares of nearshore habitat. Many local industries, such as crab fisheries, sport fisheries, whale watching and tourism rely on healthy eelgrass habitat to support them. Coastal development in the Clayoquot region and inadequate scientific information has generated the need to better understand eelgrass ecosystems to develop effective management and conservation programs.

My thesis research in the Geography Department at the University of Victoria examines the current status of eelgrass beds in Clayoquot Sound and fish biodiversity supported by this ecosystem. Field studies conducted from April to September in 2002 will include sampling the eelgrass fish diversity and measuring several eelgrass bed habitat characteristics. This information will then be used to characterize and assess seasonal variation in the eelgrass bed study sites. By establishing the current status of eelgrass habitat, baseline data will be established and will aid in developing and implementing local monitoring programs and assess the current health of nearshore ecosystems in Clayoquot Sound.

Proposal

The Clayoquot Alliance for Research, Education and Training would enhance this research project by funding a research assistant, an outreach program for local youth and Research Update talks through the summer. The research assistant would provide field support and supervise and train local youth work experience interns. This project's outreach program will provide the local youth community with the opportunity to gain invaluable work experience in marine biology through hands-on scientific research. During the school months high school students will be provided the opportunity to gain experience in marine biology through the Career Prep program at Ucluelet Secondary and in July and August through the Young Canada Works program. By assisting in beach seining and eelgrass sampling activities during the school year youth will gain appreciation and understanding for local marine habitat and this awareness will facilitate environmental stewardship in their community.

To foster stewardship and understanding of the coastal marine ecosystems in Clayoquot Sound an interactive presentation will be given to the Ucluelet Secondary science class. An engaging discussion and slide show presentation of the local marine environment and careers in marine biology will increase the awareness and understanding of students in the Clayoquot community of local marine biodiversity and conservation, and presented tangible ways they can help preserve marine environment. Summer Research Update presentations will occur in the amphitheatre in Pacific Rim National Park, open to the community and visitors to Clayoquot Sound to raise awareness and understanding of the local marine ecosystems, their importance and conservation. In addition, these presentations will facilitate connections between the community and Parks Canada. In summary, this research is an integral component to understand, conserve and manage coastal marine ecosystems and biodiversity in the Clayoquot Sound region. Increased community awareness and participation will foster stewardship towards conserving eelgrass habitats.