



## NRES WEEKLY NEWS

### December 7 - 11, 2009

A newsletter for faculty, staff and students  
who participate in the  
Natural Resources & Environmental Studies Institute  
and NRES Graduate Programs

#### COMING EVENTS

#### NRESI RESEARCH COLLOQUIUM SERIES

**This Friday**

**Jocelyn Campbell, UBC / UNBC**

**Unfaithful fungi: lichen as a symbiosis**



Whether one ascribes to a mutualistic or a more parasitic paradigm, lichens are a symbiotic relationship. Under appropriate climatic conditions, this relationship provides a somewhat reliable source of fixed carbon for fungal metabolism in return for a conduit for mineral nutrients to, and a protective shell of hyphae for, the photosynthetic partner. The widespread success of this arrangement implies that these are reasonable trade-offs for the fungus, particularly when no other carbon source is readily available. Cyanolichens are a special type of lichen in which the photosynthetic partner is a nitrogen-fixing cyanobacterium. These species are generally restricted to wet forests and form a distinct assemblage of epiphytes strongly associated with old forests in inland British Columbia. Cyanolichens are disproportionately abundant and species-rich on conifer saplings beneath mature cottonwoods and aspens, and are often observed beneath *Populus* even in stands that are otherwise too dry to support them. These observations suggest that *Populus* facilitates cyanolichens by providing some factor that is critical to establishment or growth, however the factor remains unknown. This talk will explore potential climatic and chemical factors governing the strong relationship between cyanolichens and poplar and present a hypothesis related to the chemical secretions of the poplar tree itself.

Nov. 27, 2009

3:30 - 4:30 pm

Lecture Theatre 7-152

**Unable to make it in person? Watch the colloquium at your desk!**

**For Elluminate information and link to the webcast: [http://www.unbc.ca/nres/nresi\\_webcast.html](http://www.unbc.ca/nres/nresi_webcast.html)  
Log in as "Guest"**

#### PUBLICATIONS

Rose, N.-A., and P.J. Burton (2009) "Using bioclimatic envelopes to identify temporal corridors in support of conservation planning in a changing climate." *Forest Ecology and Management* 258S: S64-S74.

#### CONFERENCES / TRAVEL

**Roy Rea** was an invited speaker at the Guide Outfitters Moose Management Conference in Victoria 16-17 November.

**Kathy Parker** was in Williams Lake 25 November for collaborative research with BC Ministry of Environment, forest industry, and the National Council for Air and Stream Improvement.

**Kathy Parker** is attending the CARMA (caribou) meeting in Vancouver 3 - 6 December.

Along with colleagues from the University of Guelph and Oregon State University, **Hugues Massicotte** and Linda Tackaberry will be presenting a poster at the Eastern regional meeting of the Canadian Society of Plant Physiologist/Plant Development workshop on December 4 & 5, 2009 at the University of Guelph. The poster is entitled "Mycoheterotrophic plants: the pinnacle of evolutionary plant-fungal specialization" authored by Massicotte, H.B., Melville, L.H., Tackaberry, L.E., Luoma, D.L. and R.L. Peterson.

**We're on the web at : [www.unbc.ca/nres/newsletter](http://www.unbc.ca/nres/newsletter)**

## THESIS DEFENCES

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Ms. Nancy-Anne Rose is a candidate for the degree:  
**Master of Science in Natural Resources and Environmental Studies (Biology)**

Ms. Rose will be defending her thesis entitled:

“Collapsing the Fourth Dimension: Using Bioclimatic Envelope Modeling to Incorporate Spatial and Temporal Dynamics of Climate Change into Conservation Planning”

Supervisor: **Dr. Phil Burton**

Date: December 14, 2009

Time: 9:00 am

Room: 6-307, Conference Centre

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Ms. Catherine Henry is a candidate for the degree:  
**Master of Science in Natural Resources and Environmental Studies (Environmental Science)**

Ms. Henry will be defending her thesis entitled:

“Semi-Industrial Scale Testing of Biologically-Induced Copper Heap Leaching at Imperial Metals Corporation — Mount Polley Mine”

Supervisor: **Dr. Mike Rutherford**

Date: December 14, 2009

Time: 1:00 pm

Room: 6-307, Conference Centre

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Ms. Jennifer Herkes is a candidate for the degree:  
**Master of Science in Natural Resources and Environmental Studies (Geography)**

Ms. Herkes will be defending her thesis entitled:

“Planning for Resilience: A Case Study of Kitimat, BC”

Supervisor: **Dr. Greg Halseth**

Date: December 15, 2009

Time: 9:00 am

Room: 1079, Senate Chambers

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Mr. Ian Picketts is a candidate for the degree:  
**Master of Natural Resources and Environmental Studies**

Mr. Picketts will be defending his thesis entitled:

“Community Adaptation to Climate Change: An Exploration of Climate Change Adaptation Planning in British Columbia”

Supervisors: Drs. **John Curry** and Eric Rapaport

Date: January 8, 2010

Time: 9:30 am

Room: 6-305, Conference Centre

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**REMINDER:** Share your information about recent publications, grants, and/or other honours you may have received with others interested in NRES issues.

**PLEASE EMAIL ALL INFORMATION AND MATERIAL TO MICHELLE KEEN: [keenm@unbc.ca](mailto:keenm@unbc.ca)**