



## NRES WEEKLY NEWS

### November 23 - 27, 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**

**Dr. Kathy Lewis, Chair, ESM, UNBC**

**Red band needle blight: the canary in the forest health coal mine.**

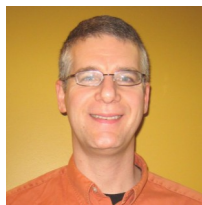


Red band needle blight, caused by the fungus *Dothistroma septosporum*, is a foliar disease of native lodgepole pine in North America, and occurs globally on a wide range of pine species. In the southern hemisphere it causes serious damage to exotic pine plantations, but in the northern hemisphere, the disease has caused little damage until recently. Within the past decade, *Dothistroma* has become the most serious pathogen of young lodgepole pine in BC, and has resulted in plantation failures. The situation in BC is unique because the pathogen is attacking a native tree species, and because unlike populations in the southern hemisphere, the fungus in BC has the ability to reproduce sexually. Several explanations for the sudden change in disease severity and extent exist, and include relatively recent introduction of the fungus to a population of trees that have not developed resistance through co-evolution, development and spread of a particularly virulent strain of the fungus, and climate that is more conducive to disease development than in the past. This presentation will explore each of these explanations and build an argument that the current outbreak of *Dothistroma* is a not-so-early warning of impending dramatic change in the health of our forests.

**Nov. 20, 2009**

**3:30 - 4:30 pm**

**Lecture Theatre 7-152**



**Dave Tamblin, Public Health Engineer, Northern Health**

**Groundwater at Risk of Containing Pathogens**

Over 85% of public and semi-public drinking water systems in northern BC use a groundwater source. Is this groundwater inherently safe from industrial and fecal contamination? This seminar examines the current issues around assessing the safety of groundwater. Starting from the "first principles" of groundwater – surface water interaction and well hydraulics, we move to cover current professional practice in assessing, modeling, and implementing groundwater protection, including the new provincial policy on assessment of groundwater at risk of containing pathogens. These techniques are then applied in a case study assessment of real wells in a local aquifer.

**Tuesday, Nov. 24, 2009**

**11:30 am - 12:50 pm**

**Lecture Theatre 6-205**

**Dr. Darren Irwin, Dept. of Zoology, UBC**

**After the Ice: the western Canadian suture zone as a natural laboratory for the study of speciation**

**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"**

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

## OTHER COMING EVENTS

The **UNBC Biology Club** is hosting a “**Saving Nemo**” night at the **Thirsty Moose** to raise desperately needed funds for the **salt water tank**. There is a trivia contest and prizes as well as drink specials. For those of you interested in attending, it will be on **Thursday, November 25th** from **7:00 - 11:00 pm**. Tickets are \$5. If you are unable to attend perhaps you would consider giving a \$5 donation towards the cause. To pick up a ticket or to give a donation you can drop by Jenia Blair's office (8-246).

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**Global Fridays**

**Senate Chambers**

**12:00—1:30 pm**  
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**November 20, 2009**

Professor Don Munton, International Studies, UNBC

**Canada as a Global Spy: Demolishing the Myth of the International Boy/Girl-Scout**  
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## THESIS DEFENCES

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Ms. Zheng Zhe He is a candidate for the degree:  
**Master of Natural Resources and Environmental Studies**

Ms. He will be defending her thesis entitled:

“Export Barriers to the Chinese Market: Insights from British Columbia Forest Products Firms”

Supervisor: **Dr. Chris Opio**

Date: November 27, 2009

Time: 9:00 am

Room: 1079, Senate Chambers  
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Ms. Prudence-Elise Breton is a candidate for the degree:  
**Master of Natural Resources and Environmental Studies**

Ms. Breton will be defending her thesis entitled:

“Organizing for Sustainability at a Small Scale: A Case Study of an Ecovillage Experiment”

Supervisor: **Dr. David Connell**

Date: November 27, 2009

Time: 2:00 pm

Room: 1079, Senate Chambers  
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Ms. Alyssa Shaw is a candidate for the degree:  
**Master of Science in Natural Resources and Environmental Studies (Biology)**

Ms. Shaw will be defending her thesis entitled:

“The Use of Platelet Monoamine Oxidase-B as a Biomarker for Mercury Neurotoxic Effects Among Inuit in Arctic Canada”

Supervisor: **Dr. Laurie Chan**

Date: November 27, 2009

Time: 3:00 pm

Room: 6-205, Conference Centre  
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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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## PUBLICATIONS

Tuason, M.M.S. and **J.M. Arocena** (2009) “Calcium oxalate biomineralization by *Piloderma fallax* in response to various levels of calcium and phosphorus.” *Applied and Environmental Microbiology* 75: 7079-7085.

**Owens, P.N.** (2009) “Adaptive management frameworks for natural resource management at the landscape-scale: implications and applications for sediment resources.” *Journal of Soils and Sediments* 9: 578-593.

## CONFERENCES / TRAVEL

**Catherine Nolin** attended the UBC-O Public Forum on *The Experiences of Immigrants in Small/Medium-Sized Cities in Canada and the United States* on November 13, 2009 which brought together academics, government and non-government policy makers from across North America to meet in Kelowna.

**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)**