



# NRES WEEKLY NEWS

Nov. 15 - 19, 2010

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**

**Mark Fercho**

**Manager of Sustainability, City of Prince George**



### Community Sustainability in Plain Language

Sustainability. A well used but not well understood term. What does it mean, and what does it mean for a community? The City of Prince George and UNBC have partnered to work with many community organizations and residents to develop the sustainability plan "my PG" for Prince George. This discussion will provide you with a clear understanding of what sustainability means for a community, and the challenges ahead for implementation in Prince George. The discussion will be in practical terms, with the local community as real life example.

*UNBC students were hired on the myPG team and were key to the plan development. There may be student opportunities for implementation in the year ahead.*



November 12, 2010

3:30 - 4:30 pm

Lecture Theatre 7-150

**Next Friday**

**Dr. Paul Sanborn**

**Environmental Science Program, UNBC**



### Soil Change and Soil Resilience: Lessons from Natural Experiments on Multiple Time Scales

Using examples of natural experiments in soil formation, I will show how a pedological perspective can inform the way we view soil change and resilience on multiple time scales in our region. The geological youthfulness of our soil landscapes provides a degree of geochemical resilience that we usually take for granted. This youthfulness, characterized by large reserves of unweathered nutrient-bearing minerals, is created and maintained by disturbance events occurring on a range of scales, for example, continental glaciations, volcanic eruptions, landslides and dust deposition. In the absence of these events, in otherwise highly productive environments, subtle initial features of soil parent materials can trigger a downward spiral of ecological decline. In other settings, parent material characteristics can amplify the retarding effect of extreme cold and/or aridity on soil change and ecological succession.

November 19, 2010

3:30 - 4:30 pm

Lecture Theatre 7-150

For Elluminate information and link to the webcast: [http://www.unbc.ca/nres/nresi\\_webcast.html](http://www.unbc.ca/nres/nresi_webcast.html)  
For a list of upcoming seminars: <http://www.unbc.ca/nres/seminar/>

## OTHER COMING EVENTS

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UNBC will be receiving each seminar in high definition video in the Access Grid collaboration node room in Admin 2024.

### 2010 COAST to COAST Canadian Seminar Series: The Marine Environment and Climate Change: Problems and Possible Solutions

**November 16 — 11:30-12:20**

#### How will Marine Ecosystems Adapt to a Future Ocean that will be Warmer, More Acidic and Less Oxygenated?

Ken Denman, DFO Institute of Ocean Sciences, and EC Canadian Centre for Climate Modelling and Analysis, University of Victoria

Primarily from burning fossil fuels, humans are adding increasing amounts of the greenhouse gas carbon dioxide to the atmosphere. More than a third of this new carbon dioxide ends up in the ocean, and more than 90% of the additional heat from the greenhouse effect is entering the oceans. As a result the oceans are becoming more warmer and more stratified, which reduces the mixing of nutrients from below up into the surface ocean and of oxygen from the surface layer down into the subsurface ocean. In addition the extra carbon dioxide is causing the oceans to become more acidic. Can we predict how whole marine ecosystems will adapt, when we do not yet know how much capacity individual species have to adapt to these expected changes to their environment? I will outline a modeling framework to explore the capacity of species to adapt to a changing environment based on existing 'phenotypic' diversity and potential 'plasticity'.

<http://c2c.irmacs.sfu.ca/>

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### 2010 Doug Little Memorial Lecture Series

**December 2, 2010**

**7:30 pm**

**Canfor Theatre (6-213)**

**Dr. Briony Penn**  
**Journalist and Adjunct Professor**  
**School of Environmental Studies,**  
**Geography Department and Restoration of Natural Systems Program**  
**University of Victoria**



### The Big Burn

The combination of a gutted Forest Service, vast areas of not sufficiently restocked forestlands, a quirky loophole in the Kyoto Protocol and a provincial government ideologically driven to sell off public assets has created the perfect opportunity to burn down BC's forests in a biofuel boondoggle and the last barriers to privatization of BC's crown forests. Journalist Briony Penn expands on a series of interviews conducted with over a dozen ex-government foresters, industry representatives, contract foresters, silviculturalists, forest sector round table participants and political representatives to provide insight into the direction that government is taking Crown forests — with no public consultation and a media that is failing to serve public interests. The voices of the whistle blowers point to a colossal failure of imagination by government that has implications to forest health, climate change mitigation and adaptation, other public interests in Crown lands from public access to biodiversity and water quality, First Nation interests and international credibility on carbon accounting and standards. The lecture will explore the dystopic picture of what is planned and the alternate vision for Crown forests that has been put forward by the critics as a world leader in ecosystem services and valuation.

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

## GRADUATE THESIS DEFENCES

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Mr. Samuel Albers is a candidate for the degree:

**Master of Science in Natural Resources and Environmental Studies (Biology)**

Mr. Albers will be defending his thesis entitled:

“The Salmon Disturbance Regime: Effects on Biofilm, Sediment and Water”

Supervisor: Dr. **Ellen Petticrew**

Date: **December 2, 2010**

Time: **1:00 pm**

Room: **Senate Chambers**

[https://cms.unbc.ca/assets/nres/defences/albers\\_101202.pdf](https://cms.unbc.ca/assets/nres/defences/albers_101202.pdf)

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Ms. Young Joo Jenny Lee is a candidate for the degree:

**Master of Science in Natural Resources and Environmental Studies (Biology)**

Ms. Lee will be defending her thesis entitled:

“Fungal Community Assessment in Canadian Arctic Soils from Alexandra Fiord,  
Ellesmere Island, Nunavut”

Supervisor: Dr. **Keith Egger**

Date: **December 16, 2010**

Time: **9:00 am**

Room: **Senate Chambers**

## TRAVEL / CONFERENCES / FIELD WORK

On Friday November 12th **Pam Wright** will participate in a special panel sponsored by the University of Calgary Faculty of Environmental Design and the Canadian Parks and Wilderness Society on the *Future of Ecological Integrity in our Parks and Protected Areas*. That evening Pam, and colleagues from the independent Panel on the Ecological Integrity of Canada's National Parks will receive the J.B. Harkin Medal for Conservation (<http://www.cpaws.org/harkin/>). As vice chair (science chair) for the panel Pam traveled the country preparing the 2000 report entitled *Unimpaired for Future Generations: Conservation Ecological Integrity with Canada's National Parks*.

**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)**