



NRES WEEKLY NEWS

Nov. 8 - 12, 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

Next 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**

in Two Weeks

Dr. Paul Sanborn

Environmental Science Program, UNBC

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

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
For a list of upcoming seminars: <http://www.unbc.ca/nres/seminar/>

OTHER COMING EVENTS

GLOBAL FRIDAYS
SENATE CHAMBERS
12:00 - 1:30 pm

November 5, 2010

Professor William Carroll, Department of Sociology, University of Victoria

"The Transnational Capital Class"

http://www.unbc.ca/internationalstudies/news_events.html

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

PUBLICATIONS

Pullinger MG & **C.J. Johnson** (2010) "Evaluation of the least-cost path model for maintaining or restoring connectivity of modified landscapes". *Landscape Ecology*. 25: 1547-1560

Einbinder, N.* and **C. Nolin** (2010) "Voices from the Edge: A Mayan community shares stories of its struggle to avoid forced eviction by a nickel mine." *Cultural Survival Quarterly*, 34 (3) Fall, 28-33. http://www.culturalsurvival.org/publications/csq/csq_article.cfm

*Nathan Einbinder is a graduate of the MA NRES program now pursuing a PhD in Geography at Queen's University.

Rea, R.V., Child, K.N. and D.A. Aitken. (2010) "You Tube insights into moose-train interactions". *Alces* 46:183-187

TRAVEL / CONFERENCES / FIELD WORK

Oscar Garcia traveled to Mérida, Venezuela, for a two-week stay at the School of Forestry and Environmental Sciences of the University of Los Andes, as part of his sabbatical. He will conduct a workshop for faculty on forest biometry and modelling, and collaborate with research on plantations of teak and other species. Oscar will also deliver undergraduate and public lectures.

Chris Johnson attended the 13th North American Caribou Workshop in Winnipeg and presented at the opening plenary session. Good news for you *Rangifer* enthusiasts: the next Workshop will be held in BC in 2012.

Pat Maher and **Phil Mullins** are attending the 38th Annual International Association for Experiential Education (AEE) Conference 3 - 7 November in Las Vegas, NV.

Catherine Nolin and graduate student Alexandra Pedersen (supervisor: **C. Nolin**) were invited speakers at Peace & Development's October 30th "Social Justice Forum for Youth and Young Adults" held in Prince George, BC for youth across northern BC. Catherine and Alexandra's visual presentation was titled: "*Get these monsters out of here": Canadian mining in Guatemala.*"

Ellen Petticrew and **Phil Owens** visited University of Manitoba's Soil Science Department for several days this week to investigate some collaborative field sites. Ellen presented a talk in the department's seminar series entitled: Effects of marine derived organic matter on fine sediment transport.

Ron Thring and two graduate students (Fikre Debela and Nathan Park) participated at the 60th Canadian Chemical Engineering Conference, Saskatoon, SK (Oct. 24-27) and gave the following presentations (students in bold black; presenter underlined)

Debela, F.; **Thring, R.W.**; **Arocena, J.M.** "Encapsulation of Pb and Zn in Metal-Contaminated Soils with Partially Oxidized Organic Matter: Preliminary Results"

Park, N.; Garton, R.; **Thring, R.W.** "Enhanced Wastewater Treatment Plant Biogas Production by Anaerobic Co-Digestion of Sewer Sludge and Supermarket Waste"

Ramsay, K.; **Thring, R.W.** "Spatial and Temporal Metal Contamination at a Mine in Canada's Far North"

Zhang, J.; **Li, J.B.**; Chen, L.; **Thring, R.W.** "Bioaugmented Remediation of Oil Sludge Using Biosurfactants"

Ni, P.; **Thring, R.W.** "Accelerated Weathering and Biodegradation of Lignin-Derived Polyurethanes"

Wong, T.; **Thring R.W.** "Enzymatic Hydrolysis and Fermentation of Brewer's Spent Grain for Ethanol Production"

Ron also chaired 3 Technical Sessions, under "Environment", Polymer Materials and Nano-Processing I; Innovative Materials for Capture of Pollutants, and under "Energy", Gasification and Hydrogen Production.

TRAVEL / CONFERENCES / FIELD WORK (cont'd)

Pam Wright will be attending the Canadian Council on Ecological Areas Conference on Responding to Climate Change in Ottawa 3 - 5 November where she will give two papers: the first paper on behalf of BC Parks colleagues Tory Stevens and Doug Biffard titled *Assessing Shoreline Vulnerability for BC Protected Areas* and the second her own paper titled *Climate Change Monitoring with a Limited Budget*.

A substantial contingent of the Forest Insect Research Group (past and present) attended the Joint Annual Meetings of the Entomological Societies of British Columbia and Canada in Vancouver, BC, October 31 – November 3. **Dezene Huber** received the highly prestigious C. Gordon Hewitt Award, given to an early-career entomologist, and **Staffan Lindgren** presented the Heritage Lecture. **Dezene** also organized a symposium on mountain pine beetle genomics, presented an oral paper, was part of the conference organizing committee (Scientific Program and co-organizing the President's Prize competition), served as a designated photographer at major sessions, and attended the autumn meeting of the Entomological Society of BC (as a Director). He was busy as a bee!!!

Caitlin Pitt, Jordie Fraser, Kishan Sambaraju, Celia Boone, Lisa Poirier, and **Staffan Lindgren** presented oral papers, and Kendra Schotzko, Erin Clark, and undergraduate Kathryn Berry gave poster presentations on their research. **Staffan Lindgren** attended the editorial board meeting of the Canadian Entomologist. Tamara Richardson was a key volunteer, and Brian Aukema, now at the University of Minnesota, attended. Allan Carroll, UBC, adjunct at UNBC, gave an oral presentation, and Ward Strong, who has applied for adjunct status, also attended and was part of the organizing committee. UNBC alumni Kathy Bleiker and Greg Smith (Both MSc), David Jack (BSC NRM Forestry) attended and John Borden (honorary doctorate) also gave an oral presentation.



Staffan presenting the Heritage Lecture.

Back row (left to right):

Kendra Schotzko, Caitlin Pitt, Staffan Lindgren, Jordie Fraser, Brian Aukema, Dezene Huber

Front row (left to right):

Kishan Sambaraju, Lisa Poirier, Kathryn Berry, Erin Clark, Cedia Boone



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