

NRES WEEKLY NEWS

January 17 - 21, 2011

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

COMING EVENTS

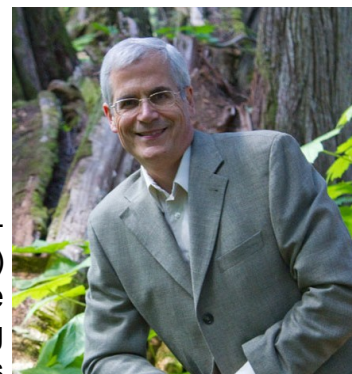
NRESI RESEARCH COLLOQUIUM SERIES

Next Friday

Gerald Kutney, Ph.D.

**Managing Director,
Sixth Element Sustainable Management**

Bioenergy & Climate Change



We are in the “carbon century”, the moniker that has opened the new millennium. Anthropogenic carbon dioxide (CO₂) and other greenhouse gas (GHG) emissions especially from electricity generation and the driving of vehicles are pushing our planet’s ecosystems toward a state of anarchy, as we are emitting 1,000 tones of carbon dioxide every second. The scientific evidence indicates conclusively that our consumption of fossil fuels has begun to destabilize the Earth’s atmosphere, resulting in the potential calamity known as climate change. We will present an overview of the latest information on climate change. Among the renewable energy sources (RES) available to combat climate change is bioenergy. Bioenergy represents a vast array of processes and technologies. We will examine the various options. Can we defeat climate change with bioenergy? Can we defeat climate change without bioenergy?

January 21, 2011

3:30 - 4:30 pm

Lecture Theatre 7-150

In two weeks

Dr. Marianne Douglas

**Director, Canadian Circumpolar Institute
University of Alberta**

Environmental Change in Canada’s High Arctic: Past to Present



High latitude regions are exhibiting high rates of changing environmental conditions in part related to polar amplification. Paleolimnology, the study of lake sediments, can be used to assess the rate and effect of these changes to the terrestrial system and to reconstruct past natural baseline conditions. Our investigations of aquatic ecosystems over the past two decades reveal that they are undergoing important changes in their physical, chemical and biological characteristics. Understanding these changes provides insight into what future arctic conditions may prevail. In this presentation I will use examples from our research on lakes and ponds in the Canadian High Arctic to show some of the practical applications of paleolimnology in studying regional climate change, archaeology and airborne pollutants.

January 28, 2011

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/>

GRADUATE THESIS DEFENCES

Mr. Donald Morgan is a candidate for the degree:

Master of Science in Natural Resources and Environmental Studies

Mr. Morgan will be defending his thesis entitled:

“Exploring the social-ecological resilience of ecosystem services”

Supervisor: Dr. **Chris Johnson**

Date: **January 14, 2011**

Time: **9:00 am**

Room: **Senate Chambers**

Mr. Jordan Koopmans is a candidate for the degree:

Master of Science in Natural Resources and Environmental Studies

Mr. Koopmans will be defending his thesis entitled:

“Spatial and temporal analyses of bark beetle population dynamics in southern British Columbia: Standlevel studies of the bole-infesting assemblage during eruptive transitions of mountain pine beetle, *Dendroctonus ponderosae* Hopkins”

Supervisor: Dr. **Brian Aukema**

Date: **January 14, 2011**

Time: **1:00 pm**

Room: **Room 8-166**

Jordan Koopmans (see above thesis defence) practiced his defence on December 3 by delivering the special Peter A. Rush Tribute Seminar to the Department of Entomology at the University of Minnesota, where **Brian Aukema** is now located. To the best of anyone’s knowledge, Jordan became the department’s first guest speaker to give a seminar based on a practice defence talk for another institution. The first question from the Department Head following the seminar was whether Jordan would accept an invitation to stay at UMN for a Ph.D.!

CONGRATULATIONS

Kara Przeczek successfully defended her MSc thesis entitled, “Assessment of Optimum Snowmelt Model Complexity, Cariboo Highlands, British Columbia, Canada”. Kara was co-supervised by **Brian Menounos** and **Stephen Déry**.

Laura Machial, co-advised by **Brian Aukema** and **Staffan Lindgren**, won second place in the Ecology section of the student talk competition at the Entomological Meeting of America in San Diego just before Christmas, for her talk entitled, “The role of vision in host selection of Warren root collar weevil, *Hylobius warren*”. Well done, Laura!

TRAVEL

Ian Hartley will be in Vancouver January 17-18 for a Workshop and a Board of Director’s meeting of the NSERC NEWBuilds research network.

We’re on the web at : www.unbc.ca/nres/newsletter

PUBLICATIONS

- Arocena, J.M.**, van Mourik, J.M., Schilder, M.L.M. and Á. Faz Cano. (2010) "Initial soil development under pioneer plant species in metal mine waste deposits". *Restoration Ecology* 18(S2):244–252
- Haeussler, S.** (2010) Climate change adaptation for British Columbia Forest and Range Ecosystems: an analysis of existing research frameworks and research needs for the Future Forest Ecosystem Scientific Council (FFESC). Natural Resources and Environmental Studies Institute Occasional Paper No. 7 (Prince George, BC: University of Northern British Columbia). 37 p.
http://www.unbc.ca/assets/nres/nresi_op_7_haeussler_2010.pdf
- Haeussler, S.** (2010) "LINK News: Taking ecology's temperature in a warming world". *BC Journal of Ecosystems and Management* 11(1&2):vii–x. <http://jem.forrex.org/index.php/jem/article/view/77/26>
- Smith, G.D., Carroll, A.L., and **B.S. Lindgren**. (2011) "Facilitation in bark beetles: endemic mountain pine beetle gets a helping hand (Coleoptera: Curculionidae: Scolytinae)". *Agric. For. Entomol.* 13: 37-43.
- Laplante, JP (MA NRES candidate) and **C. Nolin**. (2011) "Snake Oil and the Myth of Corporate Social Responsibility," *Canadian Dimension* 45 (1) Special Issue: "Bad Neighbours: A Focus on Canadian Mining Abroad", January/February. Access at: <http://canadiandimension.com/magazine/issue/jan-feb-2011/>
Excerpt: "Nearly every major extractive industry player has adopted voluntary CSR policies or social sustainability statements However, ongoing violations of human rights beg the question: is talking in terms of CSR useful to those trying to seek justice for harms committed by Canadian multinationals?"
- Rea, R.V.** and **H.B. Massicotte**. (2010) "Viewing plant systematics through a lens of plant compensatory growth". *The American Biology Teacher* 72: 540-543. Feature article.
- Todoruk, T.M. and **I.D.Hartley**. (2011) "Sorption properties of lodgepole pine (*Pinus contorta*) wood chips affected by the mountain pine beetle (*Dendroctonus ponderosae*)". *Holzforschung*, In press. (Available online: doi:10.1515/HF.2011.008)
- Todoruk, T.M., **Hartley, I.D.**, Teymoori, R., Liang, J., and H. Peemoeller. (2011) "¹H Nuclear Magnetic Resonance of Lodgepole Pine Wood Chips Affected by the Mountain Pine Beetle". *Materials* 4(1):131-140
- Pasca, S.A., **Hartley, I.D.**, Reid, M.E., and **R.W. Thring**. (2010) "Lodgepole pine (*Pinus contorta* var. *latifolia*) compatibility with Portland cement in wood composites". *Materials - Special Issue: Innovative Materials in Civil Constructions* 3(12):5311-5319
- Aben, K. Wilkening, K and **I.D. Hartley**. (2010) "Deciphering the source of technology change: greenhouse gas emission reduction in the British Columbia forest industry, 1990-2005". *Technology in Society* 32(4):288-294

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