



NRES WEEKLY NEWS

April 13 - 17, 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

Next THURSDAY

Dr. Stephen J. Mitchell

Associate Professor
Department of Forest Sciences, UBC



Windthrow Risk Modelling

I will present on our mechanistic and empirical windthrow modelling work and give an update on the status of Forest-GALES_BC, the windthrow risk model that we are developing in conjunction with the UK Forestry Commission. Our mechanistic work includes measuring drag on conifer and deciduous crowns in the UBC Mechanical Engineering wind tunnel, modeling windflow over terrain with MM5 and MC2 mesoscale numerical weather simulation models, tree-pulling to measure critical turning moments. Our empirical work includes fitting logistic regression models to predict the probability of cutblock edge windthrow using edge segment databases assembled in geographic information systems, and fitting models to tree outcomes using plot-based datasets for partial cuts. We have drag and winching datasets for interior spruce and lodgepole pine and empirical models for stands near Prince George.

Light Refreshments will be Served

Thursday, April 16, 2009

1:00 - 2:00 pm

Lecture Theatre 7-152



Dr. Ron Stewart

Professor and Head,
Department of Environment & Geography,
University of Manitoba

COMING SOON

Extremes: Too Wet and Too Dry

This study examines some of the basics of precipitation extremes. Extremes such as too much or too little precipitation are inherent aspects of the climate system. On occasions, these two types of extremes can also occur in close proximity, spatially or temporally. Examples are given in this presentation using the recent drought that affected the Canadian Prairies as well as nearby regions including British Columbia. This drought was a multi-year event that brought enormous hardship and did not always illustrate some of the typical features of drought — such as hot and cloud-free conditions. As well, heavy precipitation sometimes occurred around the edge of this drought and on occasion passed over drought regions. We therefore need to consider two intertwined extremes of too dry and too wet. Given the general warming that is occurring and the effect of this on accelerating the hydrological cycle, it may be that such instances increase.

Light Refreshments will be Served

Friday, May 8, 2009

3:30 - 4:30 pm

Lecture Theatre 7-238

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

PUBLICATIONS

Koch, J., **Menounos, B.**, Clague, J. (2009) "Glacier change in Garibaldi Provincial Park, southern Coast Mountains, British Columbia, since the Little Ice Age". *Global and Planetary Change*. 66: 161-178.

TRAVEL

Staffan Lindgren will travel to Sweden 13-25 April on personal business, but will take the opportunity to spend three days working with former post-doctoral fellow Niklas Björklund, Swedish University of Agricultural Sciences (SLU), Uppsala, on several publications in preparation. He will also meet with several other colleagues at SLU in Uppsala and Umeå.

UPCOMING THESIS DEFENCES

Ms. Monika Gorzelak is a candidate for the degree:

Master of Science in Natural Resources and Environmental Studies (Forestry)

Ms. Gorzelak will be defending her thesis entitled:

"Identification and Community Profiling of *Vaccinium membranaceum* Root-associated Fungi Over an Elevation Gradient in BC's Eastern Rocky Mountains"

Supervisor: **Dr. Hugues Massicotte**

Date: April 14, 2009

Time: 9:00 am

Room: Senate Chambers, Room 1079
UNBC Prince George campus

Ms. Nicole Balliet is a candidate for the degree:

Master of Science in Natural Resources and Environmental Studies (Forestry)

Ms. Balliet will be defending her thesis entitled:

"Genecology of 20 Paper Birch (*Betula papyrifera* Marsh.) Sources from British Columbia and Northern Idaho"

Supervisor: **Dr. Chris Hawkins**

Date: April 15, 2009

Time: 9:00 am

Room: Senate Chambers, Room 1079
UNBC Prince George campus

Mr. Timothy Phaneuf is a candidate for the degree:

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

Mr. Phaneuf will be defending his thesis entitled:

"Numerical Modelling of Airflow Within and Above Forests and Forest Clearings Using Computational Fluid Dynamics"

Supervisor: **Dr. Peter Jackson**

Date: April 16, 2009

Time: 10:00 am

Room: 6-307, Conference Centre
UNBC Prince George campus

Mr. Zhiyu Wang is a candidate for the degree:

Master of Science in Natural Resources and Environmental Studies

Mr. Wang will be defending his thesis entitled:

"Sequential Monte Carlo Methods for Data Assimilation in Strongly Nonlinear Dynamics"

Supervisor: **Dr. Youmin Tang**

Date: April 20, 2009

Time: 9:30 am

Room: 6-305, Conference Centre
UNBC Prince George campus

UPCOMING THESIS DEFENCES (cont'd)

Ms. Crystal Braun is a candidate for the degree:
Master of Science in Natural Resources and Environmental Studies (Biology)

Ms. Braun will be defending her thesis entitled:
"The Role of Weather and Topography in the Development of *Dothistroma septosporum*"

Supervisor: **Dr. Kathy Lewis**

Date: April 21, 2009

Time: 9:00 am

Room: Senate Chambers, Room 1079
UNBC Prince George campus

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

Ms. Allen will be defending her thesis entitled:
"Source Apportionment of Fine and Coarse Fraction Particulate Matter in Prince George and Kelowna, British Columbia"

Supervisor: **Dr. Peter Jackson**

Date: April 21, 2009

Time: 2:00 pm

Room: Senate Chambers, Room 1079
UNBC Prince George campus

Mr. Travis Gerwing is a candidate for the degree:
Master of Science in Natural Resources and Environmental Studies (Biology)

Mr. Gerwing will be defending his thesis entitled:
"Reproductive Ecology of the Common Riparian Willow, *Salix Sitchensis*"

Supervisor: **Dr. Cecilia Alström-Rapaport**

Date: April 23, 2009

Time: 11:00 am

Room: 10-4520, Teaching & Learning Bldg
UNBC Prince George campus

Ms. Marnie Graff is a candidate for the degree:
Master of Science in Natural Resources and Environmental Studies (Biology)

Ms. Graff will be defending her thesis entitled:
"Effects of Host Quality Parameters on Fitness of the Mountain Pine Beetle, *Dendroctonus ponderosae* Hopkins (Coleoptera: Curculionidae: Scolytinae)"

Supervisor: **Dr. Staffan Lindgren**

Date: April 28, 2009

Time: 1:00 pm

Room: Senate Chambers, Room 1079
UNBC Prince George campus



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

