

NRES NEWS July 2008

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

THESIS DEFENCE

Mr. Gregory Smith is a candidate for the degree:

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

Mr. Smith will be defending his thesis entitled:

"Facilitation of Endemic *Dendroctonus ponderosae* Populations Through the Mediation of Host Subcortical Environment and Chemical Signature by a Secondary Bark Beetle, *Pseudips mexicanus*"

Supervisors: **Dr. Staffan Lindgren** and Dr. Allan Carroll

Date: July 24, 2008 Time: 9:00 am Room: Senate Chambers Room 1079

Administration Building

UNBC Prince George Campus

Congratulations to David Radies on the successful defence of his Master's thesis, "Canopy Macrolichen Distribution in a Very Wet Oldgrowth Forest Landscape of the Upper Fraser River Watershed". (Supervisor: **Dr. Darwyn Coxson**, ESM)

IN THE COMMUNITY

Hugues Massicotte (ESM Faculty) and Dan Orcherton (ESM Adjunct Associate Professor/ FORREX Extension Specialist, Socio-Economics) attended the 6 billionth tree planting on June 5 at Highglen Elementary School. This event was sponsored by the Western Silviculture Contractor's Association (WSCA).

CALL FOR PAPERS

BC Protected Areas Research Forum Conference. The Call for Papers for the BCPARF conference to be held Dec 1-3, 2008 at UNBC is now open and will be until the end of August. Please see the website www.unbc.ca/bcparf for full details and submission information. Faculty and graduate student papers/ posters are encouraged — senior undergraduate (e.g., honours thesis) are welcome as well.

For additional information please contact **Pam** (wright@unbc.ca).

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

CONFERENCE PRESENTATIONS / POSTERS

Canadian Society of Soil Science — 2008 Annual Meeting, July 6-10, UNBC

Seminar: Stephen Déry — "Snow, soils and climate".

Posters: Tackaberry, L.E., H.B. Massicotte, D. Scott Green. Soil properties may impact mycorrhiza com-

munities, early growth and relocation success of whitebark pine.

Gorzelak, M., **H.B. Massicotte**, S. Hambleton. Assemblages of ericoid mycorrhizal and root-associated fungi from Vaccinium membranaceum across an elevational gradient in BC's eastern Rocky Mountains.

Robertson, S.J., **P.M.** Rutherford, H.B. Massicotte. 2008. Root-associated microbial communities differ with *Pinus contorta* var. *latifolia* and *Vaccinium vitis-idaea* co-inhabiting sub-boreal forest soils.

McKechnie, I.M., **H.B. Massicotte, P.J. Burton**. Fungal and soil inoculation influence on seedling growth and survival of black huckleberry (*Vaccinium membranaceum*) and velvet-leaf blueberry (*Vaccinium myrtilloides*).

Darwyn Coxson, Katherine Stewart, and Jocelyn Campbell will be making presentations at the International Association of Lichenology meetings in Asilomar, California from July 14 -19. This will be the first meeting of the International Association of Lichenologists in North America. Research results being presented will highlight the global significance of BC's inland rainforest lichen communities.

Phil Owens attended the 5th International conference of the European Sediment Network in Oslo, Norway in May 2008 and gave an invited presentation; *Sustainable management of sediment resources: sediment management at the river basin scale.*

OF INTEREST

A search has begun to find a permanent director for the Pacific Institute for Climate Solutions (PICS) of which UNBC will be participating. Consult the PICS website (http://www.pics.uvic.ca/) or **Ken Wilkening/Stephen Déry** for details.

PUBLICATIONS

Granger, S.J., Bilotta, G., Bol, R., Butler, P., Haygarth, P.M., Heaton, T.H.E. and **Owens, P.N**. (2008). Using δ^{15} N and δ^{18} O to evaluate the sources and pathways of NO₃⁻ in storm event discharge from drained agricultural grassland lysimeters at high temporal resolutions. *Rapid Communications in Mass Spectrometry*, 22, 1681-1689.

Jennifer Reade (MA IDIS 2005) and **Catherine Nolin** would like to announce their new book, "*Empowering Women: Community Development in Rural Guatemala*," Saarbrücken, Germany: VDM Müller, 2008. The book is based on Jenn's MA thesis research – defended in 2005 – and updated to include ongoing changes in the country and the way that we see the violent targeting of women for their activism and community participation.



VISITORS

The Aleza Lake Research Forest will be hosting a tour on Friday, July 11th for visitors from UBC, Ministry of Forests (Victoria), Canadian Forest Service, FPInnovations.

Prof. Tim Stott and 4 faculty and students from John Moore's University (JMU) in Liverpool, UK are visiting BC during July to undertake research at Castle Creek glacier near McBride as part of a collaborative project between JMU and UNBC (**Owens, Déry, Menounos** and **Petticrew**). They are presently in the field monitoring water flow and sediment fluxes in the proglacial river. They will also be visiting the QRRC at the end of July to undertake laboratory analysis of sediment samples. **Owens** and **Menounos** will continue this work in August with a UNBC undergraduate student.

TRAVEL / FIELD STUDIES

Staffan Lindgren visited Kalamalka research station, Vernon, BC, on 7 July, to spend a day with collaborators Dr. Ward Strong, BC Ministry of Forests and Range, Dr. Sylvie Desjardins, UBC-Okanagan, and most importantly new grad student Tamara Richardson. Tamara is working on the western conifer seed bug, an important seed predator of lodgepole pine. Staffan also met with UNBC adjunct Greg O'Neill.

The Northern BC Immigration Project, coordinated by **Catherine Nolin** & **Greg Halseth**, is in full swing for the second summer of field work (SSHRC, UNBC Office of Research & CDI-funded). RAs Anisa Zehtab-Martin and Laurel Van De Keere traveled to Smithers, Terrace, Kitimat, Fort St. John & Dawson Creek in June to meet with immigration service providers & immigrant women. The ethnographic field work this summer is focused on marriage & migration with emphasis on the experiences of foreign brides ('correspondence brides' who meet their Canadian husbands via the Internet) and their particular service needs. Our new website is available at: http://www.unbc.ca/immigration/.

Kathy Parker was in Fairbanks from 28 June through 4 July to participate in PhD qualifying exams and to work on caribou research with collaborators at the University of Alaska.

Mike Rutherford represented UNBC Environmental Science and Engineering at the 2008 BC Environmental Articulation Meeting, held May 27-30 in Prince Rupert.

Mike Rutherford was at Takla Lake on June 12 and 13 to train members of Takla Lake First Nations and Tsay Keh Dene on protocols for sampling/handling fish, birds, mammals, plants, soil and water for subsequent contaminant analysis (metals, mercury, organic contaminants). Mike is PI on the "Healthy Land: Healthy Future" project funded by the National First Nations Environmental Contaminants Program (NFNECP). Pam Tobin and Leana Garraway (both UNBC alumni) are project coordinators. **Lito Arocena** is an advisor on the project.

Paul Sanborn will be doing field work in 3 regions of Yukon from mid-July to mid-August, with M.Sc. student Lesley Dampier, and undergraduate research assistant Ekaterina Daviel. They will initially be working in Lesley's field area near Carmacks with Lesley's co-supervisor, SFU geologist John Clague (recently appointed as a UNBC adjunct), and collaborators Scott Smith (Agriculture Canada), Jeff Bond (Yukon Geological Survey), Derek Fabel (University of Glasgow) and Arjen Stroeven (Stockholm University). Paul will then link up with SFU grad student Derek Turner on the White River near the Alaska border, to examine paleosols in some thick sequences of glacial deposits. Finally, Paul, Lesley and Ekaterina will travel up the Dempster Highway to join **Scott Green** and his group in their treeline research area in the Richardson Mountains on the NWT-Yukon border.