



NRES MONTHLY NEWS AUGUST 2006

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

WEDNESDAY, AUGUST 30

THESIS DEFENCE

Ms. Jennifer Walker, candidate for the degree:

Masters in Natural Resources and Environmental Studies (Biology)
will defend her thesis entitled:

**“DETECTION OF SHIFTS IN MICROBIAL FUNCTIONAL GENE (*NOSZ* AND *NIFH*) DISTRIBUTION
DUE TO LONG TERM WARMING OF A HIGH ARCTIC SOIL”**

Supervisor - **Dr. Keith Egger**, Ecosystem Science and Management Program

Date: Wednesday, August 30

Time: 1:30 pm

Place: Senate Chambers (Rm. 1079)



NRESI COLLOQUIUM FALL 2006 SERIES

- The Natural Resource and Environmental Studies Institute Colloquium Series (<http://www.unbc.ca/nres/seminar/index.html>) will resume the first week of September.



We still have many opportunities for Institute members and others to share their research with UNBC faculty/staff and the public. The Series is enriched by the perspectives of visiting scholars. If you have a colleague on campus for a Friday please encourage their active participation (i.e., a colloquium).

Chris Johnson (johnsoch@unbc.ca) and **Roy Rea** (reav@unbc.ca) are organizing the Series and would be glad to work with you to find a suitable time slot. Please come out and support the NRESI and the Colloquium Series. As is tradition, we are meeting on Fridays at 3:30.

PUBLICATIONS

- Sanborn, P.**, C.A.S. Smith, D. Froese, G. Zazula, and J. Westgate. 2006. Full-glacial paleosols in perennially frozen loess sequences, Klondike goldfields, Yukon Territory, Canada. *Quaternary Research* 66:147-157.
- Kennedy, N.**, Brodie, E., Connolly, J., and Clipson, N. (2006). Seasonal influences on fungal community structure in unimproved and improved upland grassland soils. *Canadian Journal of Microbiology* 52: 689-694.
- Siddique, T., Rutherford, P. M., Arocena, J. M. and Thring, R. W.** 2006. A proposed method for rapid and economical extraction of petroleum hydrocarbons from contaminated soils. *Canadian J. Soil Sci.* 86: 725-728.

- Joselito M. Arocena, Sanjay K. Nepal, Michael Rutherford** 2006. Visitor-induced changes in the chemical composition of soils in backcountry areas of Mt Robson Provincial Park, British Columbia, Canada. *Journal of Environmental Management* 79:10-19
- Seybold, S. J., **Huber, D. P. W.**, Lee, J. C., Graves, A. D., Bohlmann, J. 2006. Pine monoterpenes and pine bark beetles: a marriage of convenience for defense and chemical communication. *Phytochemistry Reviews* DOI: 10.1007/s11101-006-9002-8.

This paper is dedicated to Professor David L. Wood (UC Berkeley, Department of Environmental Science, Policy and Management) on the occasion of his 75th birthday, January 8, 2006

BABY NEWS!

- Congratulations to Anne Hardy and Pete Topliss on the birth of their baby daughter - Alice, born on July 26 weighing in at 4040 grams.



Baby Alice



Baby Thea

Thea Elizabeth arrived on July 23 weighing 7 lbs. 11 oz. - a healthy baby girl for **Jennifer Psyllakis** and husband Pete Rosenberg. Congratulations to all of you!

TRAVEL

- On June 26-29, **Sue Roberston, Monika Gorzelak, Linda Tackaberry and Hugues Massicotte** attended the 42th Canadian Botanical Association meeting at Concordia U. (Montréal) where they presented the following posters:
 - Robertson SJ, PM Rutherford & HB Massicotte. Ecto- and ericoid mycorrhizal system responses to petroleum hydrocarbon contamination in sub-boreal forest soils.
 - Gorzelak M & HB Massicotte. Rocky mountain high: ericoid mycorrhizas across altitudinal gradients.
 - Massicotte HB, LH Melville, LE Tackaberry & RL Peterson. Comparative studies of arbutoid mycorrhizas in several genera of Pyrolaceae (Ericales) from Western Canada.
 - Massicotte HB, LH Melville, LE Tackaberry & RL Peterson. Structural characteristics of young mycorrhizal embryos of *Pityopys californicus* (a mycoheterotrophic plant).



In addition, Hugue's colleagues from U. of Guelph will be attending the 5th International Congress on Mycorrhizas in Granada, Spain (July 23-27) and will be presenting the following poster: **Massicotte HB, LH Melville, LE Tackaberry & RL Peterson**. Comparative studies of arbutoid mycorrhizas in several genera of Pyrolaceae (Ericales) from Western Canada.

- **Staffan Lindgren** traveled to Victoria to meet with CFS colleagues **Allan Carroll** (adjunct) and Bill Riel, and graduate student **Greg Smith**. He also met with Dave Harrison regarding Mountain Pine Beetle Initiative progress. Staffan will also attend the 13th Scientific Conference of the International Boreal Forest Research Association, Umeå, Sweden, 28-30 August, 2006 where he will present a talk co-authored with **Niklas Björklund** entitled "Can stand parameters be used to predict mountain pine beetle brood productivity?"
- **Kevin Hall** (Geography) gave an invited paper at the 16th European Conference on "Fracture of Nano and Engineering Materials and Structures" and Chaired a session at the Symposium on "Fracture and Failure of Natural Building Stones" at Alexandroupolis, Greece.
- **Rob Higgins** (PhD NRES candidate) is attending the XV Congress of the International Union for the Study of Social Insects, Washington, DC, 31 July - 5 August. This meeting brings together social insect researchers from all over the world. Rob is presenting the poster: Higgins, R.J., B.S. Lindgren, and D.A. McColl: Ant community sensitivity to declining temperature associated with advancing seral stage in the central interior of British Columbia, Canada.
- **Paul Sanborn** did fieldwork in the west central Yukon (July 5-14) with collaborators Jeff Bond (Yukon Geological Survey) and Scott Smith (Agriculture Canada), continuing a project on the characteristics of soils in the unglaciated

area of the Klondike Plateau. This work will assist the mining industry by helping to refine methods for geochemical exploration in unglaciated landscapes.

- **Paul Sanborn, Brian Menounos**, grad student **Courtney Jermyn**, and Marten Geertsema (BC Forest Service) will be conducting field work (July 24-31) on landslides and soils in and near the Nahanni National Park Reserve, NWT. This work is receiving major logistical and financial support from Parks Canada, and will include field collaboration with another expedition that is exploring the unique limestone landforms of the Nahanni karst. Paul will stay on in Ft Simpson until August 7th to do additional fieldwork in the upper Mackenzie River valley area with the Geological Survey of Canada.
- **Chris Hawkins** will attend the 13th Conference of the International Boreal Forest Research Association (IBFRA) 28-30 August 2006, in Umeå, Sweden.

SCHOLARSHIP ANNOUNCEMENT

- **Greg Smith** (M.Sc. (NRES-Biology) candidate) will be awarded the UNBC Graduate Student Scholarship in recognition of academic achievement. Greg is studying interactions between mountain pine beetle and the secondary bark beetle *Pseudips mexicanus*, and is co-supervised by **Staffan Lindgren and Allan Carroll**.

ALEZA LAKE RESEARCH FOREST SOCIETY NEWS

- The ALRF would like to welcome **David Mills** to our team. David will be completing a 7 month internship with the Society to delve into the research heritage of the Aleza Lake Experiment Station and to assist in re-measuring the historic growth and yield permanent sample plots this fall. David is an MA candidate in History/English at UNBC. The internship is jointly funded by the BC Forest Science Program, Natural Resources Canada, and the ALRF Society.

FAREWELL

- A sad farewell to **Dr. Deb Thien**, SSHRC Post-doctoral Fellow in Geography. Deb will be leaving us next week, to take up a tenure-track position in Geography at University of California, Long Beach. She plans to continue research in northern BC, however, so we hope to see her back here from time to time. Best wishes for the new job!



EFL NEWS

- Professors/Sessionals/Grad students, if you will be teaching/leading a class or lab that requires plants for the Fall semester please contact **Steve Storch** x6808 or **John Orlowsky** x6478 and fill out a request form at <http://csamlrs.unbc.ca>. We may still be able to buy the plants you are looking for and certain annuals we could still grow from seed in time. If you are looking for plants for the Winter 2007 semester, now is also a good time to let us know as we could probably grow it at lower cost from seed, than buying plants.

REMINDER: Share your information about recent publications, grants, and /or other honours you may have received with others interested in NRES issues.

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

PLEASE EMAIL ALL INFORMATION AND MATERIAL to
Lucille Guiney: guineyl@unbc.ca