



NRES WEEKLY NEWS

October 19 - 23, 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 Friday



Dr. Ellen Petticrew
Dr. John Rex
Geography Program, UNBC



Influence of bio-geomorphic processes on marine-derived nutrient cycling in Pacific salmon-bearing streams

Pacific salmon are recognized as a keystone species in their Pacific Northwest natal watersheds. Spawning salmon can deliver substantial quantities of marine derived nutrients and organic matter to natal streams because they gain 95-99% of their mass while at sea. Spawning salmon also alter streambed conditions by redistributing gravels and resuspending fine sediment during the construction of their nests, termed redds.

The terrestrial benefits of spawning salmon are broadly recognized because of the direct consumption of salmon by bears, scavenging by birds and insects, and the uptake of marine derived nitrogen by riparian vegetation. Aquatic benefits appear to be less obvious with some studies showing that nutrients returned by spawning salmon support algae, benthic macroinvertebrates, and fish including juvenile salmon while others have shown that the disturbance and nutrient exports caused by spawning activities resulted in a net loss of nutrients. To understand this apparent discrepancy it is first necessary to understand the underlying nutrient delivery and retention processes that influence the ability of a watershed and its aquatic biota to benefit from salmon delivered nutrients.

This talk presents findings from a series of field and controlled flume investigations that have identified a mechanism for the retention of these marine-derived nutrients.

Light Refreshments will be Served

Oct. 23, 2009

3:30 - 4:30 pm

Lecture Theatre 7-152

Unable to make it in person? Watch the colloquium at your desk!

For Elluminate information and link to the webcast: http://www.unbc.ca/nres/nresi_webcast.html

Log in as "Guest"

View upcoming seminars at: <http://www.unbc.ca/nres/seminar/index.html>

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

COMING EVENTS (cont'd)

in 2 Weeks

Dr. Jerry Osborn

Professor, Dept. of Geoscience, University of Calgary



The Global Warming Debate: the messy and bitter intersection of science and politics.

The great majority of climate scientists are convinced that recent warming is largely due to anthropogenic effects, and many think that serious, perhaps catastrophic, climatically-induced problems await humanity in the next several decades. But a small minority of actively publishing climate scientists, a considerable number of scientists in other fields, many conservative politicians, as well as some significant proportion of the general public, remain skeptical. Even though the train is already preparing to leave the station, in the form of proposed cap-and-trade legislation in the U.S., debate continues in a variety of venues that include scientific journals, the web, pop print media and television, think tanks, houses of government, courtrooms, schools, and churches. The debate is complicated by fusion of several questions which are not always separated by debaters, and by mixing of scientific and social issues to the degree that interpretations of science are influenced by social/political philosophy.

The result is wildly varying views on scientific issues, defensiveness and entrenchment of scientists, cherry-picking of evidence to support points of view, diversions over hockey sticks and oil-company funding, and immense public confusion, as each side belittles the other in an attempt to sway public opinion.

This talk will offer a brief overview of the state of debate over CO₂-generated warming, from a point of view that is disinterested politically and without vested interests scientifically. Some examples of influences on, and excesses of, the debate will be followed by a very brief look at current arguments made by both believers and deniers. It is concluded that there will be no end to controversy in the near future, because cooling influences provided by internal ocean-atmosphere variability and a quiet sun may for the next few or several years mitigate whatever anthropogenic warming is in the system, leaving room for some ongoing ambiguity.

Light Refreshments will be Served

Oct. 30, 2009

3:30 - 4:30 pm

Lecture Theatre 7-152

CONGRATULATIONS

Congratulations to Irene McKechnie (recent MSc NRES grad, supervisor: **Hugues Massicotte**) for winning the first annual "Best Graduate Student NRESI Research Extension Note" -- along with the \$500 cash prize! Irene's Research Extension note was entitled "Propagation and Fungal Inoculation of Black Huckleberry and Velvet-Leaf Blueberry: How Can These Species be Used in Ecological Reclamation?" and was coauthored with Philip Burton and Hugues Massicotte. This prize is sponsored by the Institute, the Dean of Graduate Programs, and NSERC and is awarded each fall to the best extension note submitted by a NRES Graduate Student. This is an annual award, so please encourage your students to consider submitting an extension note based on their thesis work!

CONFERENCES / TRAVEL / OTHER

Stephen Déry, Gail Fondahl, Phil Owens, Ellen Petticrew and six UNBC graduate students and research assistants participated in the 3rd annual QRRC Open House on Saturday, 3rd October. The event was a combination of research presentations and tour of facilities, followed by a BBQ lunch, and was attended by about 45 people (mainly local residents). It is planned to hold the 4th Open House at a similar time next year.

Hugues Massicotte was invited on October 6-7 by the NSERC Industrial chair in Sustainable Forest Management (Dr Yves Bergeron) to give a presentation in Rouyn (UQAT) on "Défier les règles botaniques: mycohétérotrophie et mixotrophie comme stratégie végétale-implications pour la forêt boréale". He participated to the grad course discussion with Dr. Brian Harvey on "Sujets de pointe en écologie et en sciences de l'environnement" over an afternoon, and spend a day visiting sites to explore future collaborative projects, and visit the Lake Duparquet Research and Teaching Forest.

Phil Owens attended the 6th International SedNet conference on The Role of Sediments in Coastal Management in Hamburg, Germany (7-9 October) and presented a poster entitled "The role of environmental stewardship and stakeholder collaboration in sediment management: the example of the Fraser River Basin, British Columbia, Canada".

Caitlin Pitt, Tamara Richardson, **Lisa Poirier**, and **Dezene Huber** are attending the joint meeting of the Entomological Society of Canada and the Entomological Society of Manitoba. It's being held in Winnipeg from 18 - 21 October. We are each giving research presentations.

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