



NRES WEEKLY NEWS

October 26 - 30, 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

This Friday



Dr. Ellen Petticrew and 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.

Oct. 23, 2009

3:30 - 4:30 pm

Lecture Theatre 7-152



Dr. Jerry Osborn
Professor, Dept. of Geoscience, University of Calgary

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

Next Friday

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.

Oct. 30, 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"**

OTHER COMING EVENTS

Global Fridays
Senate Chambers
12:00—1:30 pm

October 30, 2009

Dr. Jamie Peck, CRC, Urban and Regional Political Economy, Geography Dept., UBC

Neoliberalism: Dead or Alive?

THESIS DEFENCES

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

Ms. Zhang will be defending her thesis entitled:

“Surfactant Enhanced Biodegradation of Petroleum Hydrocarbons in Oily Sludge”

Supervisor: **Dr. Jianbing Li**

Date: November 9, 2009

Time: 3:00 pm

Room: 6-205, Conference Centre
UNBC Prince George campus

Ms. Prudence-Elise Breton is a candidate for the degree:
Master of Natural Resources and Environmental Studies

Ms. Breton will be defending her thesis entitled:

“Organizing for Sustainability at a Small Scale: A Case Study of an Ecovillage Experiment”

Supervisor: **Dr. David Connell**

Date: November 27, 2009

Time: 2:00 pm

Room: 1079, Senate Chambers
UNBC Prince George campus

PUBLICATIONS

Cooke, S.J., Donaldson, M.R., Hinch, S.G., Crossin, G.T., Patterson, D.A., Hanson, K.C., English, K.K., **Shrimpton, J.M.**, Farrell, A.P. (2009) “Is fishing selective for physiological and energetic characteristics in migratory adult sockeye salmon?” *Evolutionary Applications* 2: 299-311

Sykes, G.E., **Johnson, C.J.**, **Shrimpton, J.M.** (2009) “Temperature and flow effects on migration timing of Chinook salmon (*Oncorhynchus tshawytscha*) smolts” *Transactions of the American Fisheries Society* 138: 1252-1265

CONFERENCES / TRAVEL / FIELDWORK

Faculty members **Darwyn Coxson** and **Paul Sanborn** and graduate student Kasia Caputa were conducting fieldwork on biological soil crusts this past weekend (Oct. 16/17th) in range reference areas in the Williams Lake area (near Farwell Canyon). The BC Ministry of Forests and Range fenced enclosure network (range reference areas) provides an ideal setting for our studies on rangeland disturbance dynamics and climate change. More information is available on the range reference network at: <http://www.for.gov.bc.ca/HRA/Ecology/index.html> .

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

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