NRES WEEKLY NEWS
February 15 - 19, 2010

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

Roy V. Rea, Ecosystem Science & Mgmt. Program, UNBC

YouTube™ Insights into Moose-Train Interactions

To gain a better understanding of the behavioral aspects of moose-train encounters, we reviewed videos of ungulate-train interactions available on YouTube™ and from train operators. Video footage viewed included: moose (47.4%), cattle (15.8%), deer (10.5%), elk (10.5%), camels (10.5%) and sheep (5.3%), 46% of which were adults. Although footage of ungulates in general was recorded predominantly in snow-free conditions, most of the recorded moose-train interactions were taken in winter when moose appeared to be "trapped" by deep snow on either side of the rail bed. In fact, when under chase by trains, moose, elk and deer all ran within ~50-60 cm of track center and ran less than ~30 cm outside of the steel rails where snow was restricting mobility. Escapes from train chases in winter occurred where a discontinuity in the habitat/setting was encountered by moose and where the speed of train enabled them time to escape. Ungulates in groups displayed social behaviors in response to group leadership that generally elicited escapes; although one cow-calf moose pair was struck as was a domestic livestock calf when attempting to follow the herd across the track in front of an oncoming train. Most ungulates were killed on straight stretches of track. We determined that videos are a valuable resource for trying to understand reactions of ungulates to trains. We suggest that videos continue to be filmed and be posted on open source databases such as YouTube™ for use by biologists attempting to understand the dynamics of collisions for mitigation.

Feb. 12, 2010 **3:30 - 4:30 pm** **Lecture Theatre 7-152**

NO SEMINAR FEBRUARY 19 — READING WEEK BREAK

Next Friday

CO-SPONSORED BY: The Peace/Williston Fish and Wildlife Compensation Program

George Desjarlais, West Moberly First Nations, and
Melanie Karjala, Project Co-ordinator, Aleza Lake Research

The Seven Year Itch: Re-visiting and Adapting the Aboriginal Forest Planning Process (AFPP) for Fisheries and Wildlife Management

Setting the stage, George Desjarlais from the West Moberly First Nations will present his personal perspective and definition of what Traditional Ecological Knowledge (TEK) is. George refers to TEK as "A Lived Knowledge" and will present examples from his own experiences and those canvassed from other First Nations communities. The intent is to demonstrate how TEK and "Western Science" can complement each other.

In the second part of the talk, Melanie Karjala will reinforce George's points by presenting the Aboriginal Forest Planning Process (AFPP) Guidebook as an example of how TEK was used, and can be used, in forestry and fish and wildlife management. The Aboriginal Forest Planning Process (AFPP) Guidebook was published in 2003 as a community-based strategic forest planning tool written for First Nations. The AFPP used a systemic process derived from social science research techniques to harness Traditional Ecological Knowledge in support of the visioning and strategizing stages of the planning process. Expert reviewers of the AFPP at the time indicated that the process was adaptable to other natural resource and community planning processes other than forestry. Melanie's presentation will identify why First Nation participation is important, review the key goals and stages of implementing the AFPP, and provide examples of how the AFPP could be used for fisheries and wildlife management, including the benefits and realities of implementing such a project.

Feb. 26, 2010 **3:30 - 4:30 pm** **Lecture Theatre 7-212**

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"

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Global Fridays **Senate Chambers** **12:00 - 1:30 pm**

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February 26, 2010

Dr. Emily Spencer, History Program, UNBC

Cultural Intelligence: Key to Global Security and Stability?

NRESi Annual Poster Session **March 18, 2010** **UNBC Atrium**

Set up: 4:30 pm
Poster Session: 5:00—6:00 pm

Showcase your research at the NRESi's Annual Poster Session, preceding the Annual NRESi Lecture. NRES graduate students and NRESi members alike are invited to present posters.

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PUBLIC LECTURE
7:00 pm — Canfor Theatre (6-213)

Dr. Bram Noble

Associate Professor, Dept. of Geography & Planning, University of Saskatchewan

Cumulative Environmental Effects and the Tyranny of Small Decisions

PUBLICATIONS

Steele, P.H., **Hartley, I.,** Cooper, J., Conners, T. and R. King (2010) "The Differential Thermal Response of Knots and Clear Wood following Rapid Heating." *Research in Nondestructive Evaluation*, 21: 30-47

Sykes, G.E. and **J.M. Shrimpton** (2010) "Temperature and flow effects on smolting in Chinook salmon (*Oncorhynchus tshawytscha*): the relationship between migratory behaviour and physiological development." *Canadian Journal of Fisheries and Aquatic Sciences*, 67: 191-201

Walter, R.P., **Shrimpton, J.M**., and D.D. Heath (2010) "Reply to Comment on 'Gene flow increases temporal stability of Chinook salmon (*Oncorhynchus tshawytscha*) population in the Upper Fraser River, British Columbia, Canada'." *Canadian Journal of Fisheries and Aquatic Sciences*, 67: 206-208.

Sanborn, P. (2010) "Soil reconnaissance of the Fort Selkirk volcanic field, Yukon (1151/13 and 14)." in: MacFarlane, K.E., Weston, L.H. and L.R. Blackburn (eds) *Yukon Exploration and Geology 2009* (Yukon Geological Survey, Government of Yukon: Whitehorse) 293-304 (http://ygsftp.gov.yk.ca/publications/yeg/yeg09/YEG/21_sanborn.pdf)

CALL FOR PAPERS

Jianbing Li is serving as a Guest Editor for *International Journal of Risk Assessment and Management*. The topic of the special issue is "Advances in Risk Assessment for Contaminated Environments", and the "Call for Papers" can be found at: http://www.inderscience.com/browse/callpaper.php?callID=1312 .

UNBC REEF TANK

On Sunday February 7 the UNBC Reef Tank was shown to interested enthusiasts. About 10 people showed up and provided comments/advice or learned from the assembled 'experts'. The tour was hosted by **Staffan Lindgren** and Russell Vander Ende, a local expert who volunteers in the maintenance of the tank. After some stressful times due to a mishap during a water change, the tank has now stabilized. A tax-free account has been established to accept donations to support the considerable costs in maintaining this resource. To date, two donations (one private and one from the Biology Club's pub night in November) have provided funds to support the purchase of livestock, food, chemicals and hardware when other sources have not been available. We acknowledge support from several sources at UNBC for some necessary recent upgrades (in progress). New additions since the fall include an anemone, several brain corals, several small polyp stony corals, two species of shrimp, three Rainford's goby, a yellow tang, and a sea star. The next steps will be to install a donation drop box at the tank, and to upgrade the lighting slightly. Your support is critical – thanks to those of you who have supported the UNBC reef tank. Pictures of the tank and some of it's inhabitants, and from other reef tank events can be found at http://www.canreef.com/vbulletin/showthread.php?t=56446&page=3 .

TRAVEL

Chris Hawkins will be conducting field research near Fort Nelson 14 - 19 February.

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