

NRESi WEEKLY NEWS

February 2 - 6, 2015

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



NRESi NOTES

Hello everyone,

Chris Opio shared with me some exciting news, that he has been selected as one of the recipients of University of New Brunswick's Proudly UNB Awards of Distinction! This award recognizes the significant contributions made by UNB alumni in their local communities and beyond. He has been invited back to where he completed his BSc to receive his award on March 26th. Please join me in congratulating Chris on his achievement!

NRESi's 2015 Annual Lecture is quickly approaching on Thursday, April 16th. The public lecture will be held at 7pm in the Canfor Theatre. This year we are welcoming David Hughes as our guest lecturer. David is a geoscientist who has studied the energy resources of Canada and the U.S. for four decades, including 32 years with the Geological Survey of Canada as a scientist and research manager, where he headed unconventional gas and coal research. His research focus is on unconventional fuels, primarily shale gas and tight oil, but also coalbed methane and other unconventional sources, including oil sands, coal gasification, and gas hydrates. David is currently President of Global Sustainability Research Inc., a consultancy dedicated to research on energy and sustainability issues. Clients include a range of energy companies, investment firms and non-profits. His talk is titled: *BC LNG and the Shale Revolution: Myths and Realities*. We hope you will mark your calendars to attend!



February 5th was UNBC's Sweater Day, where the UNBC community was invited to turn down the heat, take a selfie of wearing their sweaters and then Tweet it! Jutta Koehler, Brenda Janzen and I joined in the fun!

Annual Lecture Presentation Abstract: Politicians in the US and Canada have promoted LNG exports as a way to monetize the perceived gas bounty made possible by the so-called "shale revolution". However, a review of major US shale gas plays suggests production is not sustainable at low prices and high volumes in the medium- and long-term. Several US shale plays are already past peak production and the recent collapse in oil prices suggests that other plays will not be far behind. In Canada, gas production is down 20% below its all-time peak in 2002. Ramping up BC production to supply five LNG terminals would require spectacular growth, from 409% to 633%, and the drilling of between 38,000 and 49,000 new wells at a cost of up to \$432 billion. These projects are vulnerable both from a lowered price in export destinations and from higher domestic gas prices. If the nascent BC LNG industry gets off the ground its economic impact is likely to be far less than purported, its environmental impact significant, and its impact on future Canadian energy security worrisome.



Leanne Elliott
NRESi Research Manager

NRESi's two Research Managers showing off their sweaters for UNBC's Sweater Day - Jeanne Robert was even wearing two for the occasion!

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

PLEASE EMAIL ALL INFORMATION AND MATERIAL TO: leanne.elliott@unbc.ca

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

COMING EVENTS

NRESI RESEARCH COLLOQUIUM SERIES

Dr. Kyrke Gaudreau

UNBC Sustainability Manager



The Sustainable University - The Role of Higher Education in Preparing Our Students for the Challenges and Opportunities Ahead

In 2007, UNBC adopted the trademark "Canada's Green University." As we pass the midway point of our 25th Anniversary, now is an opportune time to reflect on our Green successes to date, and consider the challenges and opportunities that lie ahead. In this presentation, I will do so by asking the following question: What role will UNBC play in creating a future where both the people and the planet can flourish? Come join for a whirlwind tour of UNBC sustainability and help shape our future directions.

Friday, FEB 6th, 2015

3:30 pm - 4:30 pm

Room: Weldwood Theatre (7-238)

To participate remotely: http://www.unbc.ca/nres/nresi_webcast.html

COMING EVENTS

SPECIAL LECTURE

Sebastian Ibarra

MPM, Simon Fraser University



Contributions and Thoughts on the Ecology of the Bald-faced Hornet and Other North American Yellowjackets

Bald-faced hornets and yellow jackets are eusocial insects feared for their painful sting. Stinging of a nest perpetrator that attempts to prey on their brood (larvae and pupae) induces pain and swelling and thus reduces the probability of nest predation. To mount a coordinated, directed and efficient nest defense, nest mates must communicate among themselves about the incipient threat to the nest. Several species of hornets, yellowjackets, paper wasps, and other hymenoptera, including honeybees, exhibit pheromone-mediated alarm and defense behaviour including stinging. In most species the alarm pheromone is found in the venom gland or sting apparatus. We tested pheromone-mediated defensive behaviour by *Dolichovespula maculata* hornets in response to venom gland extracts from conspecifics. Analyzing venom gland extracts by gas chromatographic-electroantennographic detection (GC-EAD) and by GC-mass spectrometry, we have identified 7 components which – when tested as a synthetic blend - induced defensive behavior comparable to that of venom gland extracts.

Tuesday, FEB 10th, 2015

9:30 am - 10:30 am

Room: Weldwood Theatre (7-238)

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UPCOMING CONFERENCE

Contested Economies and Environments

The 57th Annual Meeting of the Western Division of the Canadian Association of Geographers (WD-CAG)

Hosted by the UNBC Geography Program and to be held at the University of Northern BC, Prince George, British Columbia

March 13 - 14, 2015

Online registration is available now. Further information and how to register can be found on the event's website: <http://resweb.res.unbc.ca/wd-cag/>



UNBC UNIVERSITY OF
NORTHERN BRITISH COLUMBIA

CONTESTED ECONOMIES AND ENVIRONMENTS

WDCAG 2015
Western Division of the Canadian Association of Geographers Annual Meeting
Hosted by the UNBC Geography Program

While we invite submissions from all areas of geographic scholarship, the theme of the meeting is *Contested Economies and Environments*.

The preliminary schedule of events (draft and subject to change) is as follows:

Friday March 13, 2015
9:00am - 5:00pm Field Trips (details to follow)
6:00pm - 7:00pm Reception, Registration
7:00pm - 9:00pm Key Note Presentation - Dr. Charles Helm
The Tumbler Ridge Global Geopark - A First for Western North America
(Canfor Theatre, UNBC)
9:00pm - 12:00am Pub Night at the Thirsty Moose (UNBC Student Society Pub)

Saturday March 14, 2015
8:00am - 9:00am Registration
9:00am - 12:00pm Concurrent Paper & Poster Sessions (refreshment breaks)
12:00pm - 1:30pm Catered Lunch (costs included with Registration)
1:45pm - 4:45pm Concurrent Paper & Poster Sessions (refreshment breaks)
4:30pm - 6:00 pm AGM
6:30pm - 1:30am Banquet (UNBC Campus)

+ March 13 & 14
Friday & Saturday

+ UNBC's
Prince George Campus

+ Contact
Dr. Neil Hanlon
Phone: 250-960-5881
Email: neil.hanlon@unbc.ca

+ Deadlines
Abstracts: February 14, 2015
Special Sessions: January 30, 2015

Website: <https://www.eply.com/2015-57th-Annual-WD-CAG>

OTHER UNBC EVENTS

**TERRACE LECTURE
SERIES**
4837 Keith Avenue,
Terrace, BC
12:00pm - 1:00pm

A History of the Lakelse Hot Springs

Kelsey Wiebe, Curator at Terrace Heritage Park Museum
Wednesday, February 11, 2015

A History of Lakelse Hot Springs will look at the tiered development of the Lakelse Hot Springs, ranging from log-cabin bathhouses in the early 1900s to a seven-tower ski hill in the 1960s to the UFO H2O waterpark purchased from Expo '86. Throughout its tumultuous history, the Lakelse Hot Springs have been frequented by residents of the northwest in pursuit of leisure, health, and entertainment. The various ambitions, economic downturns, and natural disasters reflect and inform patterns of history in northwestern British Columbia.

Kelsey Wiebe is the Curator of Heritage Park Museum, as well as an alumna of UNBC. Through her work at Heritage Park Museum, she developed a Community Memories exhibit on the history of the Lakelse Hot Springs. The material in this talk was collected for that project, which is available online at www.virtualmuseum.ca.

This presentation will also be available to remote participants by following on [Livestream](#).

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OTHER UNBC EVENTS

TERRACE LECTURE
SERIES
4837 Keith Avenue,
Terrace, BC
12:00pm - 1:00pm

Citizens or Consumers? Health vs. 'The Economy'

David Bowering
Wednesday, February 25, 2015

This presentation will also be available to remote participants by following on [Livestream](#).

TRAVEL & CONFERENCES

Stephen Déry is participating in the "Snow on Sea Ice" workshop February 5th and 6th at the National Center for Atmospheric Research (NCAR), in Boulder, Colorado.

PUBLICATIONS

Padilla, A., Rasouli, K., and Déry, S. J., 2015: Impacts of variability and trends in monthly runoff and water temperature on salmon migration in the Fraser River Basin, Canada, Hydrological Sciences Journal, 60, DOI:10.1080/02626667.2014.892602

OTHER NEWS ITEMS OF INTEREST

The Emily Carr University has partnered with the Wood Design & Innovation Centre, bringing to PG wood-focused art and design programs to Prince George. Read more [here](#).

As part of UNBC's 25th Anniversary, faculty, staff, and alumni are reflecting on its history, as well as looking forward to the future. Learn how this group is doing so through art. Read the article [here](#).

UNBC has a close partnership with the Canada Winter Games, including being the venue for the closing ceremonies. Read in [this article](#) how UNBC is helping to make the Games more sustainable.

Are you a UNBC alumni? A survey is being undertaken, looking for your views. The story features on CKPG can be viewed [here](#). To complete the survey, go to the following website: unbc.ca/survey

On a community note, read how the Canada Winter Games will be transforming PG and northern BC, as well as for the first time have an official host First Nation, the Lheidli T'enneh. Read the article [here](#).

DURING THE CANADA WINTER GAMES...

The Geoffrey R. Weller Library will be the 'Discovery Centre' during the Canada Winter Games.

Visit the library for the free event from Monday, February 16 - Friday, February 20 & Monday, February 23 - Friday, February 27 from 10am - 6pm daily.

Here you'll find opportunities to explore the knowledge and research at UNBC, featuring interactive, hands-on activities, tours of academic research facilities, light refreshments, etc. All info related to UNBC's participation with the Canada Winter Games can be found [here](#).

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SUSAN STEVENSON SCHOLARSHIP FUND

As its first project of this kind, the Natural Resources and Environmental Studies Institute (NRESi) is building a fund to support a scholarship in memory of wildlife ecologist and NRESi member Susan Stevenson. During a 35-year career built primarily in the BC central interior, Susan designed and implemented important research and inventory projects related to mountain caribou habitat, lichen biology, and silvicultural systems, collaborating with a diverse range of researchers, and gave generously of her expertise to the next generation of scientists. Susan exemplified the Institute's values of interdisciplinary curiosity and unselfish collaboration, and enriched the lives of all those who worked and studied with her. The Institute invites you to join it in supporting the Susan Stevenson Scholarship Fund:

1. Visit UNBC Development Office's website: www.unbc.ca/giving
2. Click on the grey **Make a Gift** button
3. Enter the information requested
4. When you reach the question of **Please direct my donation to:** select **Other**
5. ***Important*** - In the **Comments** area, add that you would like your gift to be contributed to the **Susan Stevenson Scholarship Fund**

SHARE YOUR PHOTOS & STORIES

Do you have a favourite photo, story or update from your research that you would like to share with your fellow members and the broader NRESi community in the newsletter? Send them to Leanne to include in an upcoming edition!

COLLOQUIUM ARCHIVE

Did you miss a colloquium or special lecture? Visit NRESi's webcast archive to catch up! This can be found through the following link: <http://www.unbc.ca/nres-institute/colloquium-series/archived-colloquium-series>

ARCHIVE OF PAST EVENTS

Information, links, proceedings, and other information from past NRESi hosted and co-led events can be found at: <http://www.unbc.ca/nres-institute/special-events>. This site currently includes information about the Forest Tenure events (Annual Lecture and workshop) and a link to the Cumulative Effects Workshop site.

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