



NRESi WEEKLY NEWS

March 30 - April 2, 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

FROM THE DIRECTOR & RESEARCH MANAGER

Hello everyone,

This week we congratulate NRESi member Ron Thring on receiving a national award and designation of "Fellow of Engineers Canada"! He was recognized at a ceremony in Vancouver on March 12, with a presentation from John Clague (President, Association of Professional Engineers and Geoscientists of British Columbia (APEGBC)) and Ann English (Chief Executive Officer and Registrar, APEGBC). Congratulations on your accomplishments, Ron!



John Clague (left) and Ann English (right) pose with Ron Thring recognizing his Fellow of Engineers Canada award.

Photo provided by: Ron Thring

Background on Engineers Canada: Engineers Canada is the national organization of the provincial and territorial associations that regulate the practice of engineering in Canada and license the country's 280,000 members of the engineering profession. Engineering is a self-regulated profession. Engineers Canada exists to support the provincial and territorial engineering regulatory bodies. Together, we work to advance the profession in the public interest. Engineers Canada promotes and maintains the integrity, honour and interests of Canada's engineering profession. For more information see:

<https://www.engineerscanada.ca/fellowships-program>

<http://www.engineerscanada.ca/about-engineers-canada-0>

www.engineerscanada.ca



Please note that we have adjusted the time of **NRESi's Annual Lecture** presentation on Thursday, April 16th. It will now **start at 7:30pm in the Canfor Theatre** (not 7:00pm).

I want to wish each of you a great long weekend! I hope you take some time to enjoy the sunshine!

Leanne Elliott
NRESi Research Manager

Spring in Terrace, BC: *Lysichiton americanus* Hulten & H. St. John.
Photo credit: Phil Burton

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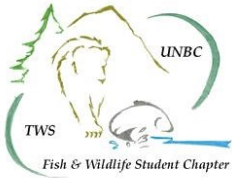
PLEASE EMAIL ALL INFORMATION AND MATERIAL TO: leanne.elliott@unbc.ca

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

COMING EVENTS

NRESi SPECIAL LECTURE

In partnership with:



Dr. Karen Hodges

Associate Professor, Biology
University of British Columbia Okanagan



Population Issues at Geographic Range Edges

The geographic ranges of species are seldom static, but the causes for the edges of ranges are often unclear. Many conservation laws and policies are structured in ways that protect range edge populations, especially if the range periphery occurs in one jurisdiction, but the main range is elsewhere (as occurs in BC's sage-steppe habitats in the Okanagan and the Vancouver Island garry oak ecosystems). Simultaneously, as global warming continues, many northern peripheral populations are acting as leading edges of range expansion. In this talk, I examine whether we have sufficient biological understanding of range edge populations, and the causes of range edges, to be able to predict which peripheral populations are genuinely valuable enough to warrant separate conservation attention or to predict which range edge populations might expand or contract. In so doing, I examine some conservation policy and data gaps, and I derive a possible classification of range edge types.

Monday, APRIL 13th, 2015

3:30 pm - 4:30 pm
Room: 8-166

To participate remotely on Livestream or Elluminate: http://www.unbc.ca/nres/nresi_webcast.html

UPCOMING EVENTS

NRESi's 2015 ANNUAL LECTURE

David Hughes

Geoscientist, Independent Energy Policy Analyst &
Formerly with Geological Survey of Canada



The Potential LNG Industry and BC's Natural Gas Supply

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% from 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.

David Hughes is a geoscientist who has studied the energy resources of Canada and the U.S., including 32 years spent 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. Hughes 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.

Thursday, APRIL 16th, 2015

7:30pm in UNBC PG's CanforTheatre

RECEPTION to FOLLOW

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THESIS DEFENSE NOTICE

GRADUATE DISSERTATION DEFENCE

Mr. Siraj ul Islam is a candidate for the degree:

Doctor of Philosophy in Natural Resources and Environmental Studies

Mr. Islam will be defending his dissertation entitled:

“Ensemble Simulation and Forecasting of South Asian Monsoon”

Co-Supervisors: **Dr. Youmin Tang & Dr. Peter Jackson**

Date: **April 7, 2015** Time: 1:00pm Room: Senate Chambers (PG Campus)

THESIS DEFENSE NOTICE

GRADUATE THESIS DEFENCE

Ms. Kirsten Thompson is a candidate for the degree:

Master of Science in Natural Resources and Environmental Studies (Biology)

Ms. Thompson will be defending her thesis entitled:

“Ectomycorrhizal Fungal Communities of Douglas-Fir on Diverse Soil Lithologies of Central British Columbia”

Co-Supervisors: **Dr. Hugues Massicotte & Dr. Paul Sanborn**

Date: **April 8, 2015** Time: 9:00am Room: 6-205/211 (PG Campus)

THESIS DEFENSE NOTICE

GRADUATE THESIS DEFENCE

Mr. Michael Klaczek is a candidate for the degree:

Master of Science in Natural Resources and Environmental Studies (Biology)

Mr. Klaczek will be defending his thesis entitled:

“Denning Ecology of Barren-Ground Wolves in the Central Canadian Arctic”

Supervisor: **Dr. Christopher Johnson**

Date: **April 13, 2015** Time: 9:30am Room: 6-305 (PG Campus)

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THESIS DEFENSE NOTICE

GRADUATE THESIS DEFENCE

Mr. Michael Bridger is a candidate for the degree:

Master of Science in Natural Resources and Environmental Studies (Biology)

Mr. Bridger will be defending his thesis entitled:

“Assessing Cumulative Impacts of Forest Development on the Abundance and Distribution of Furbearers ”

Supervisor: **Dr. Chris Johnson**

Date: **April 15, 2015** Time: 9:00am Room: 6-205/211 (PG Campus)

THESIS DEFENSE NOTICE

GRADUATE THESIS DEFENCE

Ms. Serena Black is a candidate for the degree:

Master of Science in Natural Resources and Environmental Studies (Environmental Science)

Ms. Black will be defending her thesis entitled:

“Building Resilience in the Agricultural Sector of the Omineca: Assessing Barley (*Hordeum Vulgare*) Cultivars Response to Water Stress and Cultural Practices of Northern Producers ”

Supervisor: **Dr. Scott Green**

Date: **April 16, 2015** Time: 1:00pm Room: 6-307 (PG Campus)

PUBLICATIONS

Boyce, M.S., **Johnson, C.J.**, Merrill, E.H., Nielsen, S.E., Solberg, E.J., and van Moorter, B. Can habitat selection predict abundance? *Journal of Animal Ecology* DOI: 10.1111/1365-2656.12359

Burton, C.M., and **P.J. Burton**. 2015. Recovery of *Oplopanax horridus* (Sm.) Miq., an important ethnobotanical resource, after clearcut logging in northwestern British Columbia. *Ethnobotany Research & Applications* 14: 1-15. DOI: 10.17348/era.14.0.1-15

Edwards, M., M. Krawchuk, and **P.J. Burton**. 2015. Short-interval disturbance in lodgepole pine forests, British Columbia, Canada: Understory and overstory response to mountain pine beetle and fire. *Forest Ecology and Management* 338: 163-175. DOI: 10.1016/j.foreco.2014.11.011

Haughian, S.R, and **P.J. Burton**. 2015. Microhabitat associations of lichens, feathermosses, and vascular plants in a caribou winter range, and their implications for understory development. *Botany* 93(4): 221-231. DOI: 10.1139/cjb-2014-0238

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PUBLICATIONS (continued)

Johnson, C.J., L.P.W. Ehlers, and D.R. Seip. 2015. Witnessing extinction - Cumulative impacts across landscapes and the future loss of an evolutionary significant unit of woodland caribou in Canada. *Biological Conservation* 186:176-186.

Klassen, H.A., and **P.J. Burton**. 2015. Climatic characterization of forest zones across administrative boundaries improves conservation planning. *Applied Vegetation Science* 18(2): 343-356. DOI: 10.1111/avsc.12143

MEMBERS IN THE NEWS

The news in this section and next is from NRESi's social media connections to UNBC and others. See the original posts and hear the latest first by [following us!](#)

David Connell was interviewed on the topic of a public market in Prince George. Check it out [here](#).

OTHER UNBC EVENTS

GLOBAL FRIDAYS
UNBC PG Campus
Room: 6-306
12:00pm - 1:30pm

National Native Title Tribunal of Australia: Sharing the Knowledge, Sharing the Future

Raelene Webb, QC, President, National Native Title Tribunal, Australia
Thursday, April 2, 2015

In many countries around the world, states and others seeking to promote development need to engage in some way with indigenous land rights and use claims. The High Court of Australia first recognized the existence of native title in Australia in 1992, many years after it was first acknowledged in some other settled colonies. The slow progress of claims for native title since that time has continued to frustrate native title parties, as well as governments and third parties. It is well documented that recognition of native title and tenure certainty are essential steps to enable indigenous participation in economic development. This paper discusses a collaborative project which provides early access to historic tenure and other information relevant to land rights and land use, to allow knowledge to be shared, and assist parties work towards a shared future with benefits for all.

The presentation will also be available to remote participants via [Livestream](#)

OTHER UNBC EVENTS

**TERRACE LECTURE
SERIES**
4837 Keith Avenue
Terrace, BC
Room 147
12:00pm - 1:00pm

Indigenous Arts and Title Claims in Canada, Australia, and New Zealand


Rocque Berthiaume
Wednesday, April 8, 2015

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

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OTHER UNBC EVENTS OF INTEREST



On April 8th 2015 ...

NORTHWORKS CAREER FAIR
A CNC AND UNBC JOINT PARTNERSHIP

Student Success Street - 10:00am – 3:00pm

- Networking Opportunities
- Contact Perspective employers
 - Learn About Companies
 - Apply for Interesting Jobs
 - Strategize you Career Plan
 - Get a Jump on Your Future!!

So Bring Your Résumé to:

RESUME & COVER LETTER DROP IN
MON: 11 AM – 1 PM
WED: 11 AM – 1 PM
FRI: 10 AM – 1 PM

OTHER UNBC EVENTS OF INTEREST

BC Hydro - Site C Discussion

Wednesday, April 8th at 2pm
NUSC Event Space 6-520 at UNBC PG campus

As part of ENVS 326, students will be hosting a public engagement event with a representative from BC Hydro. This is an event where you can come learn a little bit about their next project, Site C. There will be a friendly discussion where you will be able to ask questions and learn about some of the key concepts of the project.

OTHER UNBC EVENTS OF INTEREST

Retirement Celebration for Lee Keener

Friday April 10th, 2015
3:30 -- 5:00 in the Faculty Association Lounge

We wish to honour Lee Keener for his contributions to the Mathematics and Statistics Department, the Faculty Association, and the University as a whole. He arrived in 1993 and created the original Mathematics and Computer Science Program and designed the degrees. His 9 years as Chair was interrupted by a year as Acting Dean of the College of Science and Management. He was Chief Negotiator for UNBC's first agreement. He has been the Faculty Association President and served on Senate and on the Board of Governors. While doing all of this, his teaching prowess led to a UNBC Teaching Excellence Award. Lee has made a lasting mark on UNBC and we wish to publically acknowledge this.



OTHER UNBC EVENTS OF INTEREST

The Cell & Molecular Biology Interest Group (CMBIG) will be hosting another lecture before the end of the semester. Mark Monday, April 13th in your calendars to participate in Dr. Sharon Aviran's talk. Dr. Aviran is visiting UNBC from UC Davis. This will take place at 11:30 in 7-150.

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OTHER UNBC EVENTS OF INTEREST





The Community Development Institute at UNBC presents:

Community Speaker Series


Free Public Lecture
Wednesday, April 15, 2015
7:00-8:30 pm

The Prince George Public Library
Bob Harkins Branch
Keith Gordon Room
888 Canada Games Way
Prince George, BC

Speaker Series Co-Sponsors:



For information, contact the CDI at:
(250) 545-4700
jennifer.hall@unbc.ca



Lori Ackerman
Mayor, City of Fort St. John

**Building a Revitalized Future:
The Role of Community Leadership and Vision**

Mayor Ackerman's presentation will discuss the importance of community leadership, and the power of a community vision, in building and sustaining vibrant and livable communities. Mayor Ackerman will speak to effective ways to engage stakeholders, including community residents, business owners, local government employees, and elected officials. Her talk will address ways to draw on community strengths and maintain interest and participation in the process of revitalization over time. Finally, Mayor Ackerman will discuss the different components of an effective revitalization plan, and how to manage challenges and opportunities encountered.

Mayor Ackerman has lived in the Peace Region for over 30 years and became Mayor of Fort St. John in 2011. She has been appointed to a number of boards, and from 2002-2013 was the Executive Director of Sci-Tech North, a non-profit organization that supports innovators and entrepreneurs in the Northeast. Mayor Ackerman serves as the Vice Chair of the BC Regional Science and Technology network, and as a member of the Economic Development Association of BC.

UNBC UNIVERSITY OF NORTHWESTERN BRITISH COLUMBIA
3333 University Way • Prince George, BC • Canada • V2N 4Z9

OTHER EVENTS OF INTEREST

NASA's top climate scientist to give Vancouver and Victoria talks

Gavin Schmidt, one of the world's top climatologists and director of the National Aeronautics and Space Administration (NASA) Goddard Institute for Space Studies (GISS) in New York, will be giving two free public talks. Schmidt is appearing as a guest of the Pacific Institute for Climate Solutions (PICS). More info and the presenter bio can be found [here](#).

VICTORIA TOPIC: "Climate change: Choose your own adventure!"

WHEN: 7 p.m. Wednesday, April 8

WHERE: David Lam Auditorium (room A144), MacLaurin Building, UVic

Webcast: <http://www.uvic.ca/systems/services/avmultimedia/webcasting/livewebcasting.php>

Abstract: New observations of past climate change allow us to gain a better appreciation of where we are now. Through the use of climate models, Schmidt will demonstrate how those observations give us a better view of how and where we might end up as a result of the choices we make.

VANCOUVER TOPIC: "What are climate models good for?"

WHEN: 7 p.m. Thursday, April 9, 2015

WHERE: Theatre C300, UBC Robson Square, 800 Robson Street, Vancouver

Webcast: <http://pics.uvic.ca/events/what-are-climate-models-good-lecture-dr-gavin-schmidt>

Abstract: Explaining current climate change, and what might happen in the future, requires large-scale complex climate models of the atmosphere, ocean, land surface and cryosphere. But can models predict climate changes in the face of the chaotic dynamics of weather? Schmidt will show that while climate models are not perfect, they can be very useful for improving our understanding of the complexities of climate change, for determining what is driving the changes, and for informing policy decisions.

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OTHER EVENTS OF INTEREST

Ecohealth in Action Webalogue - Wednesday April 15, 2015 at 12:30-2:00pm PDT.

The Ecohealth in Action Webalogue series, hosted by the Western Node of CoPEH-Canada, aims to highlight the diverse ways in which practitioners, professionals, policy-makers, community members and researchers are responding to topical issues at the nexus of health, ecosystem, and society. The interactive 90-minute sessions will focus especially on action and practice, and will purposefully profile issues that cut across disciplines, sectors, jurisdictions, species and geographical boundaries.

Our topic for the month of April is: "**Activism in Academia: A good idea, in theory**"

This webalogue will explore the different mechanisms by which people in academia may be able to overtly advocate (a.k.a. 'do activism') for the well-being of human beings and the ecosystems on which we depend. With a hostile political climate ever narrowing avenues for solidary action, we do not pretend to come with answers for how exactly to reconcile our perspectives and knowledge with whatever it is that drives us to act. Instead we hope to discuss options we are familiar with, add to that your ideas, and discuss some of the theoretical bases for taking actions that complement our convictions.

The presenters for the April webalogue will be:

* Bjorn Stime, PhD Candidate at the University of British Columbia, School of Population and Public Health, MPH and BSc in Environmental Sciences

* Dr. Ben Brisbois, Postdoctoral fellow at the Dalla Lana School of Public Health, University of Toronto, PhD in Population and Public health and MSc in Environmental Studies

NOTE to UNBC participants: Those interested in participating in the Webalogue with a group of others UNBC, or learning more about CoPEH-Canada, please contact Shayna Dolan (CoPEH-Canada Western Node Coordinator at dolans@unbc.ca).

You can REGISTER for this webalogue by visiting: <http://ecohealthkta.net/webalogue-registration-april/> For more information on this event, past and future webalogues please visit: <http://ecohealthkta.net/>

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**

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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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