

# NRESi WEEKLY NEWS May 11 - June 7, 2015

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

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### **NRESi NOTES**

### FROM THE DIRECTOR & RESEARCH MANAGER

Hello everyone,

Even though it feels like summer and the halls are quieter, NRESi and its members continues to stay busy, as you'll see in this month's summary of events, activities, and announcements!

NRESi would like to welcome the newest member of its **Steering Committee**, **Allan Costello**! We look forward to your participation and ideas for NRESi. As they say, with every new beginning, comes some other beginning's end. Big thanks go to **Art Fredeen** for your long-time contribution and role in the leading of NRESi, being involved as Co-Director or on the Steering Committee! Art will remain involved in NRESi activities, such as continuing as our Publications Editor and one of NRESi's representatives on the Cumulative & Community Impacts Research Consortium's Steering Committee (CCIRC) (see page 2).

Another change to NRESi's Steering Committee will be our Pacific Institute for Climate Solutions (PICS) representative. **Kyle Aben** has accepted a position at the David Suzuki Foundation and will be moving to Vancouver. His last day at UNBC will be June 19th. We also thank Kyle for all his hard work and commitment to NRESi, CCIRC and UNBC! While we're sorry to see you go, we wish you all the best in this new opportunity! Kyle will continue to be part of our network as an Associate Member. Once PICS identifies a new representative for UNBC, we'll be welcoming that person to join our Steering Committee.

As part of the 2015 convocation and alumni events in Prince George, a number of NRESi members were honoured with awards. Congratulations to **Todd Whitcombe** for receiving an honorary UNBC alumni designation at the 2015 Alumni Awards Reception on May 28! He is now an honorary member of the Alumni Association. This is in recognition of the community contribution he has



Below: This is the site were 11,000 of the 16,000 seedlings NRESi will be planted in honour of UNBC's 25th Anniversary and the 16,000 petition signers and members of the Interior University Society. See page 2 for more details on the project. Photo credit: Leanne Elliott

**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

made. You can read more <u>here</u>. A number of NRESi members also received University Achievement Awards during the convocation events on May 29. **Mike Gillingham and Jueyi Sui** received research awards, **Kathy Lewis** was honoured with a service award, and **Keith Egger** received a teaching award. Congratulations to all recipients! You can read the press release about convocation and the awards <u>here</u>.

NRESi, together with the Community Development Institute and the Health Research Institute, is excited to officially announce the launch of the **Cumulative & Community Impacts Research Consortium** (CCIRC)! This initiative creates a space for research, dialogue, and knowledge sharing focusing on the impacts natural resource development has on community, health, and the natural environment. A <u>UNBC press release</u> sent out in May received a lot of traction and attention from the community and media alike! Chris Buse, CCIRC's Project Lead, was interviewed on <u>CBC Radio 1 Daybreak North</u> and <u>CFNR Radio</u> and CCRIC was also covered by the <u>PG Citizen</u> and <u>250 News</u>. Click the links to listen to the interviews and read the articles. Thanks to the media attention, we have received a lot of interest from the community about being part of our network and getting involved. If you would like to participate and be added to our distribution list, simply connect with Chris: chris.buse@unbc.ca or 778-349-4242. Stay tuned for more updates and activities to come, as well as mark your calendar for a public Kick-Off event planned at UNBC's PG campus on October 2-3!

The Office of Research held a special event honouring research faculty and staff at UNBC in May. As part of the 25th anniversary, they put together a **video showcasing research at UNBC**, its successes, and looking to the future. It also includes interviews featuring many NRESi members! To watch the video, visit the <u>Office of Research's website</u> and scroll down the page to the media player.

NRESi is in the final stages of its **UNBC 25th Anniversary project**. As part of the UNBC regional convocations last week, with NRESi's support most campuses planted ceremonial trees in recognition of this milestone. We have also identified the locations and made arrangements for the planting of the 16,000 seedlings in honour of the 16,000 petition signers who were instrumental in making the dream of UNBC a reality. These projects will be highlighted as part of UNBC's 25th Anniversary Community Celebration on June 20th. All are welcome to attend! See page 6 for more information about the event and how to RSVP.

In partnership with the **Fish & Wildlife Compensation Program - Peace**, NRESi hosted a second lecture presented by Dr. Dale Seip. Dale presented his caribou talk in Fort St. John on May 7th. It was an excellent evening with a great turnout! This event was also supported by the Association of Professional Engineers & Geoscientists - Peace River Branch. Thanks for your contribution to the event and helping with the logistics!

Have a great month and I'll talk to you again in July!

Leanne Elliott NRESi Research Manager





Above: Dan Bouillon, Project Manager for the Fish & Wildlife Compensation Program - Peace, provides an overview of the program during the event NRESi hosted in Fort St. John. Photo credit: Darwyn Coxson

Left: Dale Seip presents his talk on caribou and the challenges their populations face in Fort St. John.

Photo credit: Darwyn Coxson

### **UNBC PRINCE GEORGE CONVOCATION 2015**



The town crier leads the procession of College of Science & Management grads through the Agora Courtyard on May 29th. Congrats to all NRES graduates!



Left: Catherine Nolin, Ellen Petticrew

Right: Brent Murray, Neil Hanlon and Staffan Lindgren







Right: Hugues Massicotte and long-time NRESi supporter Antonia Mills



Above: NRESi members Dezene Huber, Allan Costello, Kathy Parker, Art Fredeen, and Ken Otter, as well as Oye Abioye (School of Business)



Left: Roy Rea, Chris Johnson, and Dezene Huber

### PUBLICATIONS

Clark, D.E., Vogels, M.F.A., van der Perk, M., **Owens, P.N.**, **Petticrew, E.L.** 2015. Effects of a small-scale, abandoned gold mine on the geochemistry of fine stream-bed and floodplain sediments in the Horsefly River watershed, British Columbia, Canada. Mineralogical Magazine 78(6): 1491-1504. http://minmag.geoscienceworld.org/content/78/6/1491.abstract

Lautensach, A.K. & S.W. Lautensach. 2015. Prepare to be Offended Everywhere: How Cultural Safety In Public Places Can Prevent Violent Attacks. International Journal of Sustainable Future for Human Security (J-SustaiN) 3 (1): 56-62. http://www.j-sustain.com/files/pub/file/Vol%202015/Vol%203%20No%201/J-SustaiN Vol3 No1 56-62 SS-019-01152.pdf

Leggat, M.S., **Owens, P.N.**, Stott, T. A., Forrester, B.J., **Déry, S.J.**, **Menounos, B.** 2015. Hydro-meteorological drivers and sources of suspended sediment flux in the proglacial zone of the retreating Castle Creek glacier, Cariboo Mountains, British Columbia, Canada. Earth Surface Processes and Landforms 40(7). <u>http://onlinelibrary.wiley.com/doi/10.1002/esp.3755/abstract#</u>

**Owens, P.N., & E.L. Petticrew**. 2015. Breaking down barriers. International Innovations 164: 102-104. http://www.internationalinnovation.com/breaking-down-barriers/

### **TRAVEL & CONFERENCES**

**Phil Burton** participated in the 38th Annual Conference of the Society of Ethnobiology, May 6-9, at the University of California at Santa Barbara, presenting or co-authoring the following papers: Burton, P.J., and C.M. Burton, "Forest Planning Adjustments to Protect Traditional Non-Timber Resources in Northern British Columbia," and Burton, C.M. and P.J. Burton, "Trade of Plant Products in Northwestern British Columbia – Past, Present, and Future."

**Roger Wheate** attended and helped organize the 40th annual meeting of the Canadian Cartographic Association in Charlottetown, PEI, May 27-29. This now completes the full set of provinces for the CCA.

**Alex** and Sabina **Lautensach** are organizing a four-member panel and presenting talks at the upcoming conference of the Academic Council on the United Nations System (ACUNS) in The Hague on 11-13 June 2015. Title: *Sustainable Global Human Security and Distributive Justice in the 21<sup>st</sup> Century.* 

**Tony Dhaliwal**, NRES student (MA, Geography), travelled to the Annual Meeting of the Canadian Association of Geographers, held at Simon Fraser University (June 1-5, 2015), to present the following paper: **Tony Dhaliwal & Zoë A. Meletis**. Sustainability and culture: reflections on initial findings of studying Sikh participation in, and perceptions of, recycling in Abbotsford, BC.

**Zoë Meletis** recently travelled to Drexel University, in Philadelphia, PA, to attend the successful PhD dissertation defense of Aliki Panagopoulou, on May 27th, 2015. Aliki's dissertation contains chapters on: 1) sea turtle dive behaviour; 2) satellite tracking of and behaviour of Crete's female sea turtles during the inter-nesting period, and, 3) fisher perceptions of sea turtles (and other phenomena), in Crete. Zoë was on her committee for 3 years and will now work with Aliki to submit co-authored publications about fisher perceptions of sea turtle-fisher interactions.

### **MEMBERS IN THE NEWS**

**Chris Johnson** was a guest on CBC's Quirks & Quarks talking about his caribou research and challenges being faced by the population. Listen to the interview <u>here</u>. Some related articles were also released, including one by CBC (click <u>here</u>), the Globe and Mail (click <u>here</u>), and the PG Citizen (click <u>here</u>).

Did you know that **Chris Opio** is the Chairman of the Northern Uganda Development Foundation (NUDF)? It's one way he gives back to the country where he grew up, by raising funds and doing projects that provide clean water, improve farming practices, develop solar energy, as well as contribute to better health and education, and business opportunities. Chris was featured in a PG Citizen article ahead of their annual fundraising event (read it <u>here</u>). To learn more about NUDF, visit their <u>website</u>.

**Kyle Aben**'s course, Carbon Management: The Intersection of Business and Environmentalism, was a partnership between UNBC and the PG Chamber of Commerce. It provided the opportunity for students to work with local businesses, exploring and identifying their sources of carbon emissions and how to reduce them. Read more about the initiative and partnership <u>here</u>.

Chris Opio explains the work and success of the Northern Uganda Development Foundation Photo credit: Dan Ryan



**Brian Menounos** was part of a team modeling future glacier melting scenarios. This <u>Terrace Standard article</u> looks deeper into the results they found for the Frank Mackie Glacier Complex, including the Salmon Glacier near Stewart.

Staffan Lindgren was interviewed on CKPG about the giant water bugs appearing around northern BC. Have a listen here.

Todd Whitcombe provides some of his thoughts on one of the signed LNG MOUs in the PG Citizen.

**Roy Rea** is kicking off a project to gather information about the experience people have during and after an animal-vehicle collision. More details can be found in the <u>PG Citizen article</u>, including a link to a survey at the end where you can add your own experiences.

May 29th was an insect-themed show on CBC Radio Daybreak North, with two NRESi members participating: **Staffan Lindgren** talked about the insects that many are starting to now see as summer approaches and **Aynsley Thielman** brought in some edible bugs for sampling and talked about the benefits of adding insects to your diet!

Phil Burton adds his expertise into a PG Citizen article looking at the connections between aspen and wildfire.

**Brian Menounos** was part of team who used high resolution models to make projections about size and thickness of glaciers in BC and AB. Read the article in the <u>Interior News</u>, exploring the results of their work for the Smithers and Bulkley Valley area.

### **NRES STUDENTS IN THE NEWS**

Melanie Anderson, a UNBC undergraduate student in Environmental Studies, was selected as one of 10 finalists in the United Nations World Environment Day blog competition! Her site is called 'Mel the Locavore', where she talks about her year-long journey, started in September 2014, of shopping local (nothing from a chain or franchise), eating local (eating in season, organic, local), and living local (reduce waste, build food sovereignty, support local initiatives). Read about the competition <u>here</u> and find a link to Melanie's blog <u>here</u>. Congratulations!

### OTHER NRESI-RELATED NEWS ITEMS

David Hughes' report on the gas reserves needed to feed proposed LNG projects has now been released. A summary is available here: <a href="http://thetyee.ca/News/2015/05/26/Hughes-Natural-Gas-Report/">http://thetyee.ca/News/2015/05/26/Hughes-Natural-Gas-Report/</a> and the full report can be downloaded at: <a href="https://www.policyalternatives.ca/publications/reports/clear-look-bc-lng">http://thetyee.ca/News/2015/05/26/Hughes-Natural-Gas-Report/</a> and the full report can be downloaded at: <a href="https://www.policyalternatives.ca/publications/reports/clear-look-bc-lng">https://www.policyalternatives.ca/publications/reports/clear-look-bc-lng</a>. The release of the report was also covered in the Vancouver Sun and David was interviewed by CBC Radio 1 Daybreak North. If you're interested in hearing David's response to some of the comments following the release of his report, click <a href="https://www.been">https://www.been</a> release of his report.

As part of NRESi's UNBC 25th Anniversary project, we helped the regional campuses during their convocations and Quesnel River Research Centre with planting trees to commemorate the milestone. Read the article about the planting in Terrace <u>here</u>.

### **UNBC 25TH ANNIVERSARY COMMUNITY CELEBRATION**

#### 25th Anniversary Community Celebration: The Founding and the Future

Saturday, June 20, 2015 from 2:30-4:45 UNBC Prince George Campus: Charles Jago Northern Sport Centre & Agora Courtyard

The Community Celebration will commence at the Charles Jago Northern Sport Centre. During intermission, guests will be asked to move to the UNBC Agora Courtyard to participate in the remainder of the program. A light reception with refreshments will follow. <u>RSVP for the Celebration</u>

#### Schedule of Events

- 1. Opening and Presentations 2:30pm in the Charles Jago Northern Sport Centre
- Procession of presenters and special guests
- Opening Remarks from the chair of the 25th Anniversary Steering Committee, Dr. Tracy Summerville
- Learn about some of the elements that are unique to UNBC's founding and how these shape the identity and culture of UNBC.

These elements also serve as a platform for envisioning our future to be presented by President Dr. Daniel Weeks.

#### 2. Unveiling of the 16,000 names - 4:00pm in the Agora Courtyard

• Join us for the unveiling of a display that showcases the names of each of the 16,000 northerners who joined the public campaign to create UNBC in the late 1980's.

#### 3. Reception and Reunion - 4:45pm in the Agora Dining Hall

- Refreshments and time to reminisce with friends
- Multimedia presentations about UNBC's history and the 25th anniversary period

More information about the event and to RSVP, click here.

### **EVENT OF INTEREST**

#### 2015 Biological Survey of Canada Bio-Blitz:

June 22-26, 2015 in the Peace Region, British Columbia

You are invited to participate in the 11th Biological Survey of Canada (BSC) Bio-Blitz on June 22-26, 2015. This Bio-Blitz is co-organized by the BSC, Royal BC Museum and Yellowstone to Yukon Conservation Initiative (Y2Y).

The Peace Region is the traditional territory of the Treaty 8 First Nations and is one of the most biologically fascinating areas of British Columbia. It is a crossroads of biotas, lying between the eastern prairies and boreal forest and the western mountains, and between the southern Cordillera and the Beringian mountains of the far northwest. The Peace River pre-dates the Rockies, so has long provided a corridor between east and west. The close proximity of prairie grassland, aspen parkland, southern boreal forest, riparian woodland, large and small rivers and streams, a variety of wetlands, and subalpine and alpine habitats in the Rocky Mountains adds up to a spectacular region for a BioBlitz. There are a number of endemic species and subspecies in the region as well; these apparently originated in unglaciated areas along the dry east slopes of the Rockies in the late Pleistocene.

Over the next decade, the region is expected to experience a significant transformation due to major expansions in the energy sector, including the proposed construction of the Site C hydroelectric dam. The Site C Dam has been given approval by the B.C. government, and will flood more than 80 linear km and

5,550 hectares of river valley in the Peace region, resulting in significant environmental changes. Assuming development proceeds, this project would forever change the natural landscapes – not just in the area of the flood zone, but also in the surrounding and downstream areas. Sites A and B were built without detailed study and without comprehensive collections of specimens. We have advance warning and should use this time wisely to systematically document the biota for posterity and public benefit.

Despite its diversity and biogeographic value, The Peace River Region is one of the most underrepresented regions in existing collections, making up less than 1% of the Royal British Columbia Museum Natural History Collection. Previous surveys conducted by consultants have not been comprehensive and voucher material has not been properly deposited in museums in all cases. In 2013, Entomology and Invertebrate staff sampled in the proposed flood zone over a five day period, collecting more than 1,800 individual dry specimens and 250 lots of wet specimens. Preliminary results already suggest significant findings, including undescribed species, new records for BC and Canada, and geographic range extensions.

For those whose sampling interests lie at elevations other than the floodplain and grasslands, there exists the possibility of visiting higher elevation sites, including those with Beringian species (e.g. Parnassius eversmanni). Just three hours to the south or north are Pine Pass/ Azouzetta Lake and Pink Mountain, respectively.

An expedition to the Peace River Valley will significantly enhance museum collections by filling existing gaps, and facilitate current and future research projects.

If you are not able to join us from June 22-26 or your taxon of interest is better collected at another time, you are still welcome to come to this region and sample. We are expecting to offer several options for campers, including free camping on private land. For those desiring hotel accommodations, the nearest towns are Chetwynd, Hudson's Hope, and Fort St. John. Boats will be provided to allow access to more remote areas along the Peace River.

An added attraction is the Global Geopark Inauguration that will be taking in nearby Tumbler Ridge on June 28th and 29th, 2015. A Geopark is an area recognized by the Global Geoparks Network with geological heritage of international significance and is supported by UNESCO. Significant finds of dinosaur bones and trackways have been made in the Tumbler Ridge area in recent years, and are displayed in the town's Dinosaur Discovery Gallery. More information on the Geopark can be found at <a href="http://www.trmf.ca/geopark.html">http://www.trmf.ca/geopark.html</a>.

If you would like to participate in this exciting Bio-Blitz opportunity, please let us know by June 15. Please inform us of: your taxon of interest (from bacteria to bears), dates that you expect to be there, and whether you prefer camping space. Also please contact us if you have additional questions. Please plan to join us in this beautiful part of Canada to sample an area rich in species and scenery.

Contact: David Langor: dlangor@nrcan.gc.ca

### NSERC COMMUNITY ENGAGEMENT SESSION & FEEDBACK REQUEST

Representatives from NSERC (Natural Science & Engineering Research Council) came to UNBC during their Community Engagement Visits. The event provided an overview of their current and new programs.

In addition, they are continuing to do ongoing program reviews, collecting feedback, suggestions, and comments from the community they work with to incorporate into their planning.

If you weren't able to attend, you can read more about their Community Engagement tour (click <u>here</u>) and find a link to the presentation on their website (direct link <u>here</u>). They were also encouraging anyone with thoughts, comments and ideas of how they can make improvements to their programs to email them at: connect@nserc-crsng.gc.ca

### **NEW NSERC FUNDING PROGRAM**

NSERC is piloting a new Discovery Grant Program, focusing on research proposals coming from small universities. More information about this program can be found on NSERC's <u>website</u>.

## MITACS FUNDING OPPORTUNITY

The deadline to submit a Mitacs Globalink Research Internship proposal is June 18, 2015 For more information, visit the Mitacs <u>website</u>.



### MATCH YOUR SUMMER 2016 RESEARCH PROJECTS WITH SOME OF THE WORLD'S BRIGHTEST UNDERGRADS

Mitacs Globalink Research Internships pair professors in Canada and international undergrads for 12-week internships. Faculty in all disciplines can preview and recruit potential graduate students, selected competitively from a pool of thousands of applicants.

- Work with exceptional undergrads from 8 partner countries: Brazil, China, France, India, Mexico, Saudi Arabia, Tunisia, and Vietnam
- Mitacs provides support for travel, visa, accommodation, and living expenses
- Returning students are eligible for exclusive graduate funding with the Globalink Graduate Fellowship

Mitacs encourages multiple project submissions to facilitate successful matching.

Submit your projects by June 18, 2015, at 5 p.m. PDT, for May–September 2016.

Submit now

www.mitacs.ca/globalinkfaculty2016

### 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: <u>www.unbc.ca/giving</u>
- 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

### **COLLOQUIUM ARCHIVE**

Did you miss a colloquium or special lecture? Visit NRESi's webcast archive to catch up! They can be found here.

# **ARCHIVE OF PAST EVENTS**

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