

# **NRESi NOTES**

# FROM THE RESEARCH MANAGER

NRESi Bi-WEEKLY NEWS

Feb 6 - Feb 17, 2017

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

Hello everyone,

Hope that everyone is enjoying Reading Week. The weather over the course of the last couple of weeks sure has been interesting. As this Friday is during the reading week break there will be no Friday colloquium presentation. The next colloquium will be on February 24 and will feature Dr. Paul Kushner from the University of Toronto who will be talking about Canadian Snow and Sea Ice. The following Friday, March 3, Dr. Jim Pojar will be on hand to talk about Conservation in the Anthropocene. Dr. Pojar will also be speaking at the NRESi Annual Lecture is taking place on March 2, 2017. On Wednesday, March 1st there will be a special colloquium presentation taking place at 1:00 pm in the Canfor Theatre. Dr. Richard Dewey from Oceans Network Canada, will be speaking about Recent Pacific Anomalies.

Al Wiensczyk, RPF Research Manager, NRESi

# **UPCOMING EVENTS**

# **NRESi COLLOQUIUM**

Below is the tentative speaker line-up for the winter colloquium series. The lectures for the winter semester will be held 3:30—4:30 pm in the Canfor Theatre—Room **6-213**.

# **TENTATIVE WINTER SEMESTER COLLOQUIUM SCHEDULE**

Presentation Date	Tentative Presenter and/or Topic
Feb 24, 2017	Canadian Snow and Sea Ice: From Observations, to Models, to Predictions. Dr. Paul Kushner, University of Toronto
Mar 1, 2017 1:00 pm*	Recent Pacific Anomalies: Oscillations, El Nino, and The Blob. Dr. Richard Dewey, Science Services, Oceans Network Canada
Mar 3, 2017	Conservation in the Anthropocene. Dr. Jim Pojar, Ecologist
Mar 10, 2017	Is climate change altering B.C.'s timber supply. Dr. Lisa Wood, UNBC
Mar 17, 2017	Andrew Adams, Hope Farms
Mar 24, 2017	Chronic wasting disease. Where is it leading us? Dr. Evelyn Merrill, U of Alberta
Mar 31, 2017	Dr. Michele Venter

\* please note the different start time for this colloquium presentation. This presentation will not be available on LiveStream but will be broadcast using Blue Jeans.

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PLEASE EMAIL ALL INFORMATION AND MATERIAL TO: al.wiensczyk@unbc.ca

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

# **NRESi COLLOQUIUM**

## Dr. Paul Kushner

#### **University of Toronto**

#### Canadian Snow and Sea Ice: From Observations, to Models, to Predictions

The daily weather forecasts we count on for planning our work and leisure are just part of a suite of environmental prediction tools that are available to predict climate over the coming weeks, the next season, the next decade, and the next century. What's the best way to develop these predictions, to test them, and ultimately to measure their utility? I'll try to tackle these questions with a focus on the work of the Canadian Sea Ice and Snow Evolution Network (CanSISE <u>www.CanSISE.ca</u>). CanSISE brings together researchers from across Canada, including right here at UNBC, to improve Canadian capacity to predict sea ice and snow over a wide range of timescales from the seasonal to the centennial.

Snow and sea ice research is no exception to the rule that "variety is the spice of life": if you gather researchers with different perspectives, models reflecting different types of scientific thinking, and observations from different sources, you will end up with better and more useful predictions of snow and sea ice. I will highlight through a couple of case studies recent progress we've made in CanSISE, and reflect on what the future might hold for snow and sea ice in Canada as a result of anthropogenic climate change.

 3:30 pm - 4:30 pm
 Canfor Theatre Room: 6-213

 To participate remotely:
 <u>http://www.unbc.ca/nres-institute/colloquium-webcasts</u>

## **UPCOMING EVENTS**

Friday, Feb 24, 2017

## Dr. Richard Dewey

Associate Director, Sciences Services Oceans Network Canada



In this overview of major events dating from 2012 through to the end of 2016, we will piece together some of the puzzle, or puzzles, peculiar to the northeast Pacific to reveal what we know and don't know about this critical region, possible teleconnections, and if there are any aspects attributable to climate change.

Wednesday, Mar 1, 2017

 1:00 pm - 2:00 pm
 Canfor Theatre Room: 6-213

 To participate remotely:
 <u>http://www.unbc.ca/nres-institute/colloquium-webcasts</u>

# **UPCOMING EVENTS**

Dr. Jim Pojar

Ecologist

## **Conservation in the Anthropocene**



**NRESI/CMOS COLLOQUIUM** 



Humans increasingly dominate Earth and our activities have become the chief force of global change. In this epoch of upheaval, traditional mid-20th century conservation philosophy and practices require rethinking. Let us examine some thorny issues including: conservation planning, protected areas, wilderness, social justice, matrix management, postmodern and "new" ecology, ecosystem services, biodiversity offsets, restoration ecology, grizzly bear...

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## NRESI COLLOQUIUM

management, role of predators, species at risk, GMOs. If climate change has altered the rules, how should we regard peripheral species, exotic invasive species, novel ecosystems, assisted migration? Can nature conservation be revamped, and how might that apply to northern British Columbia?

Friday, Mar 3, 2017

3:30 pm - 4:30 pm Canfor Theatre Room: 6-213 To participate remotely: http://www.unbc.ca/nres-institute/colloquium-webcasts

# **UPCOMING EVENTS**

# **NRESi Annual Lecture**

Dr. Jim Pojar

Ecologist Smithers, BC

## The Impossible will take a little while

What have I learned about the environment and natural resource management after 45 years living and working in British Columbia? Some good things: importance of teachers, mentors, learning and working outside and in multidisciplinary teams; value of protected areas, open minds, humour. Some bad things: disrespect for the environment; uncritical thinking; hegemony of neoliberal economics; stain of politics. Perspective on some difficult issues: forestry myth and reality; banality of environmental assessment; science and society; life on the cube farm. Hope persists and with good reason, despite the challenges.

> 7:30 pm - 9:00 pm Canfor Theatre Room: 6-213 To participate remotely: http://www.unbc.ca/nres-institute/colloquium-webcasts

## **UPCOMING EVENTS**

Thurs, Mar 2, 2017

Wednesday, March 8<sup>th</sup>, 2017

7:00-9:30 pm

LIDO Theatre, 10156 100th Ave., Fort St. John, BC

Missing Wildlife: A First Nation's Perspective—George Desjarlais, West Moberly First Nations First Nations elders from the West Moberly First Nations have noted a marked decrease in the number of mountain ungulates (Caribou, sheep and goats) in their traditional territory. George will share his thoughts and those of the Elders on the potential reasons for the decline, the fundamental information needs required

to effectively manage both the mountain ungulates and the Foothills ungulates (moose, deer and elk) that may be affected by further development, and the impacts population declines of these species would have on the traditional way of life of his people.

Caribou and of the Williston Basin: What do we know of their status after 50 years of reservoir flooding and 30 years of study? - Scott McNay, Wildlife Infometrics Inc.

There are six caribou herds whose ranges are wholly (or mostly) enclosed by the boundaries of the Williston Basin, and five other herds that have a minor part of their range within the basin. We now know that at least three of the herds were impacted by construction of the reservoir, one of them significantly

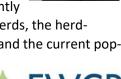
enough that full recovery of their historic range is unlikely. I will discuss the biological status of the herds, the herdspecific impacts that the reservoir has had, results from 30 years of studies on the Williston caribou, and the current population management actions being supported by the Fish and Wildlife Compensation Fund.

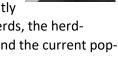
This project is funded by the Fish and Wildlife Compensation Program on behalf of its program partners BC Hydro, the Province of BC, First Nations and the public, who work together to conserve and enhance fish and wildlife impacted by existing BC Hydro dams.

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# **PFWCP/NRESi Presentations**









## **Canadian Institute of Forestry E-lectures**

<b>Tim Keddy</b> —Wood Fibre Development Specialist, and <b>Derek Sidders</b> —Program Manager and Regional Coor- dinator, Canadian Wood Fibre Centre.
ve approach urceCosmin Filipescu—Research Scientist, Canadian WoodFibre Centre.
on from bio- Fibre Centre, and Yabo Chen—PhD student, Universi- ty of Toronto.
able fibrePatrick LenzResearch Scientist, Canadian Wooda genomicsFibre Centre
o ic r

member: www.cif-ifc.org/membership-content/become-a-member/

www.cif-ifc.org/e-lectures/

For additional information or to register, contact the Ronnie Huang (CIF-IFC)

E-mail: electures@cif-ifc.org Tel: 705-744-1715 ext. 630

# **UPCOMING EVENTS**

## Bringing Genomics Home: Putting Genomics to work: Protecting the earth from climate change

Dr. Sally Aitken, Professor, Department of Forest and Conservation Science, University of British Columbia February 23, 2017

6:30—8:00 pm

Exploration Place, Prince George, BC

Learn how cutting edge genomic tools are being used to detect and combat the threat of climate change in our environment.

Open to the public

Registration is free but required

To register go to: <a href="http://www.genomebc.ca/news-events/event/putting-genomics-work-adapting-climate-change/">http://www.genomebc.ca/news-events/event/putting-genomics-work-adapting-climate-change/</a>

# **UPCOMING EVENTS**

# **Invasive Species Research Conference**

## Invasive Species Research Conference: Turning Science into Action

June 20-22, 2017

Thompson Rivers University, Kamloops BC

Thompson Rivers University (TRU) and the Invasive Species Council of BC are co-hosting this conference which will bring together scientific researchers and practitioners and features two renowned keynote speakers, Dr. Daniel Simberloff & Dr. Anthony Ricciardi. The conference agenda inclues a series of oral and poster presentations, lightning talks, invasive species field trips and more - all in the beautiful, sunny location of Kamloops, BC. Invasive species researchers and practitioners from across the Pacific North-West are invited to attend and to submit scientific research abstracts for presentations at the Invasive Species Research Conference.

The deadline for submitting abstracts has been extended to February 28, 2017.

There is also a poster session.

For more information go to the conference website. <u>http://events.bcinvasives.ca/about-invasivespeciesresearchconference/</u>

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# PRESENTATION

# **FILM SCREENING**

## **Primeval: Enter the Incomappleux**

Thursday March 16, 2017 7:00 pm

Room 7-212, UNBC

The Valhalla Wilderness Society is presenting a film from award-winning filmmaker Damien Gillis of Fractured Land. The majesty, magic and endurance of one of the world's last truly intact temperate rainforests—the Incomparable Incomappleux.

Q&A with Damien Gillis and VWS Director Craig Pettitt + a presentation on the Selkirk Mountain Caribou Park Proposal. For more info go to <u>www.vws.org</u>.

# Northern Analytical Laboratory Service (NALS) Update

The **UNBC-NALS** is home to an extensive suite of analytical science instrumentation that enables a broad spectrum of biological, chemical and physical analyses. NALS has a mission to contribute to the development and application of sound, well-documented science-based knowledge to support faculty research and client based analytical services. NALS is committed to providing analytical services, the pursuit and advancement of scientific knowledge, and the training of students aimed at creating highly qualified professionals capable of contributing to industry in their future careers. One of our main mandates is to make the lab services more responsive to the needs of researchers and corporate clients throughout Northern BC. As a state-of-the-art education and research facility, NALS develops analytical methodologies at UNBC for both on campus and off-campus clients.

NALS analytical services are available to the private, public and non-profit sectors to help meet their research, development and quality assurance needs.

#### Need more information?

http://www.unbc.ca/northern-analytical-lab-service

To arrange a tour please contact Hossien Kazeman at hossein.kazemian@unbc.ca or Phone: 250-960-5168

## **IN THE NEWS**

(Government press releases)

## Factsheet: Canada-U.S. Softwood Lumber Trade

**Feb 15, 2017.** Since 1982, lumber trade between Canada and the U.S. has been either the subject of U.S. trade litigation against Canadian exports to the U.S., or been managed through a trade agreement. There have been four U.S. trade cases pertaining to Canadian softwood lumber exports since 1982, and three managed trade agreements.

For more details...

#### New agreements strengthen economic future for Lax Kw'alaams

Feb 15, 2017—Victoria. The Province of British Columbia and the Lax Kw'alaams Band have reached multiple agree-<br/>ments to ensure benefits accrue for First Nations as a result of the construction and operation of a liquefied natural gas<br/>(LNG) export industry in the Prince Rupert area.For more details...

#### Factsheet: Government support for forestry dependent communities

Feb 15, 2017. The Forestry is one of B.C.'s founding industries and a key driver of B.C.'s economy. Forestry directly employs about 60,000 people in over 140 communities around the province.For more details...For more details...

## B.C. solidifies benefits for Metlakatla First Nation

 Feb 15, 2017—Victoria. The Province of British Columbia and the Metlakatla First Nation have reached new agreements to ensure benefits accrue as a result of the construction and operation of a liquefied natural gas (LNG) export industry in the Prince Rupert area.

 For more details...

#### Factsheet: Canada-U.S. softwood lumber trade: Why it should matter to Americans

 Feb 15, 2017. In the 1970s a number of events occurred at the same time which led to B.C. becoming a significant supplier of softwood lumber to the U.S. This included: Expansion of power and transportation infrastructure in B.C.'s interior allowing new sawmill investments;

 For more details...

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## **IN THE NEWS**

#### Factsheet: B.C.'s forest economy: softwood lumber

Feb 15, 2017. Forestry is one of B.C.'s founding industries and a key driver of B.C.'s economy. In 2016, the industry ac-<br/>counted for \$14billion in exports – 35% of all B.C. goods exported.For more details...For more details...

## FAQ. Softwood lumber dispute

**Feb 15, 2017.** Why weren't you able to reach a new agreement with the U.S.? B.C. worked closely with the federal government which is responsible for representing Canadian interests in trade negotiations. While the federal government engaged extensively with their U.S. counterparts, there is not yet enough common ground to support an agreement.

For more details...

#### Public asked to be on lookout for White Nose Syndrome in bats

 Feb 10, 2017—Victoria. The Province, in partnership with the BC Community Bat Program and other concerned groups, are asking the public to be on the lookout for dead or sick bats that may have contracted an invasive fungal disease called White Nose Syndrome.

 For more details...

#### Factsheet: BC parks

 Feb 9, 2017. BC Parks manages the third-largest parks system in North America, behind the United States National Park

 Service and Parks Canada.

#### Factsheet: Mining industry safety post-Mt Polley.

**Feb 8, 2017.** The failure of the tailings storage facility (TSF) at Mount Polley mine was a wakeup call, and not just for British Columbia but for the mining industry and governments throughout Canada and around the world.

For more details...

#### Factsheet: Site C Clean energy project

Feb 8, 2017—Victoria. The Site C Clean Energy Project is being built to meet future electricity demand in British Colum-<br/>bia, which is projected to increase by almost 40% in the next 20 years.For more details...

#### Factsheet: Mount Polley return to full operations

 Feb 8, 2017—Victoria. Last June, after careful evaluation, statutory decision makers with the Ministry of Energy and

 Mines authorized the Mount Polley Mine to return to full operations using the repaired and strengthened tailings storage facility (TSF) to manage tailings.

 For more details...

#### Logging trailers built in Vanderhoof a boon to industry

**Feb 7, 2017.** FreFlyt Industries is doing its part to help find efficiencies in the forest sector. The company's new, nine-axle logging truck trailers make it more efficient for Interior logging companies to move logs from the bush to the mill site.

For more details...

## Factsheet: Canada-EU Economic and Trade Agreement (CETA)

Feb 3, 2017. As Canada's Asia Pacific Gateway, British Columbia is a strong supporter of free trade and the many bene-<br/>fits that free-trade agreements bring for B.C. businesses.For more details...

## **TRAVEL & CONFERENCES**

**Paul Sanborn** attended a training course on digital soil mapping, January 30-February 2, sponsored by Agriculture and Agri-Food Canada, and held at SFU's downtown campus in Vancouver.

# **Other News**

## NASA study identifies new pathway for Greenland meltwater to reach ocean

"Cracks in the Greenland Ice Sheet let one of its aquifers drain to the ocean, new NASA research finds. The aquifers, discovered only recently, are unusual in that they trap large amounts of liquid water within the ice sheet. Until now, scientists did not know what happened to the water stored away in this reservoir -- the discovery will help fine tune computer models of Greenland's contribution to sea level rise."

For more details go to: <u>https://www.eurekalert.org/pub\_releases/2017-02/nsfc-nsi021517.php</u>

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# (Government press releases)

## **Other News**

## **Canadian Society for Ecology and Evolution**

The Canadian Society for Ecology and Evolution (CSEE) is a collective of scientists that conducts research on ecology and evolution. CSEE hosts an annual meeting that provides opportunities for investigators to meet, disseminate their results and participate in a variety of workshops. The society is especially helpful for graduate students, giving out student awards annually and hosting workshops and job forums for young investigators. In addition, your CSEE council represents you at NSERC to promote research on ecology and evolution in Canada.

Join/renew your membership today and be a part of a strong society of scientists in Canada! 2017 **membership** renewals : <u>http://csee-scee.ca/</u>

There are a few important deadlines that are coming up very soon (please see under `news` and `announcements` for more information on the awards and council nominations : <u>http://csee-scee.ca/?cat=29</u> )

Election nominations for **CSEE council**: **OPEN** 

## **NRESi Members in the News**

#### UNBC Professor named Wilburforce Fellow in Conservation Science

Northern British Columbia is blessed with a tremendous amount of untamed wilderness and UNBC Outdoor Recreation and Tourism Management Associate Professor **Dr. Pamela Wright** is passionate about conserving those spaces for future generations.

Dr. Wright's research interests fall into two categories – conserving ecologically important places and connecting people to the outdoors.

Whether it is working with the staff at BC Parks to develop long-term ecological monitoring programs, supervising graduate students mapping and measuring wilderness values in the Muskwa-Kechika and Peace River Break or helping undergraduate students gain their own research experience through ecosystem restoration projects, Dr. Wright's research is focused on finding the best conservation planning and management techniques for specific areas in the North.

As a 2017 Wilburforce Fellow, Wright will be able to continue her research in conservation planning and maintaining the ecological integrity of parks and protected spaces.

"The Fellowship will help bring focus and attention to my research activities and connect me with other researchers and interested groups working in similar areas," Dr. Wright said. "It will help build our mutual capacity and provide support and new tools to communicate the results of that research to communities and policy makers."

The Wilburforce Fellowship is a year-long program open to scientists working in conservation biology, ecology, environmental economics or traditional ecological knowledge. The Fellows receive training in leadership and communication to prepare the scientists to continue to engage in conservation management and policy discussions.

Wright is the first UNBC researcher to earn the Fellowship and is one of 20 scientists in Western North America to receive a Fellowship this year.

The Wilburforce Foundation is a private philanthropic foundation based in Seattle.

# PUBLICATIONS

- McKay, A.J., and **C.J. Johnson**. 2017. Confronting barriers and recognizing opportunities: Developing effective community -based environmental monitoring programs to meet the needs of Aboriginal communities. Environmental Impact Assessment Review 64:16-25.
- Abadzadesahraei, S., **Déry, S.J.** and **Rex, J.**(2017):Quantifying the water balance of Coles Lake in northeastern British Columbia using in situ measurements and comparisons with other regional sources of water information; in Geoscience BC Summary of Activities 2016, Geoscience BC, Report 2017-1, p. 69–74

Islam, S. U., **Déry, S. J.**, and Werner, A. T., 2017: Future climate change impacts on snow and water resources of the Fraser River Basin, British Columbia, *Journal of Hydrometeorology*, **18(2)**, 473-496, doi: <u>http://dx.doi.org/10.1175/JHM-D-16-0012.1</u>.

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# **REVIEW PANEL VOLUNTEERS**

Science Mission Directorate is seeking subject matter experts to serve as mail-in and/or panel meeting reviewers of proposals submitted to ROSES-2016 programs in Earth Science and Planetary Science and also our NASA Earth and Space Science (graduate student) Fellowship programs. The landing page that will take you to all of the volunteer reviewer forms may be found at <u>https://science.nasa.gov/researchers/volunteer-review-panels</u> and the links to individual forms appear below.

We are currently seeking reviewers for:

\* ROSES-2016 A.51 Earth Science Applications: Food Security and Agriculture<<u>https://science.nasa.gov/researchers/</u>volunteer-review-panels/roses-2016-a51-earth-science-applications-food-security-and-agriculture>

\* ROSES-2016 C.3 Solar System Workings<<u>https://science.nasa.gov/researchers/volunteer-review-panels/2016-c3-</u> solar-system-workings>

\* ROSES-2016 C.4 Habitable Worlds<<u>https://science.nasa.gov/researchers/volunteer-review-panels/roses-2016-c4-habitable-worlds</u>>

\* 2017 NASA Earth Science Fellowship Proposals<<u>https://science.nasa.gov/researchers/volunteer-review-panels/2017-nasa-earth-science-fellowship-proposals</u>>

\* 2017 NASA Space Science Fellowship Proposals<<u>https://science.nasa.gov/researchers/volunteer-review-panels/2017</u> <u>-nasa-space-science-fellowship-proposals</u>>

# **Employment Opportunity**

#### Project Manager (British Columbia)

SYLVIS

SYLVIS is an established residuals management firm that provides professional environmental consulting and operational services to a wide range of clients in both the private and public sectors. SYLVIS exists because we believe that our sustainability is intrinsically linked to our ability to manage our residuals through innovation.

Application Deadline: February 24, 2017

For more info: http://sylvis.com/our-company/careers/program-manager-full-time

# PhD Opportunities

The School of Environmental Sciences at the University of Guelph is looking to fill two graduate student positions studying soils in riparian buffer systems. The two Ph.D. student positions, starting Summer 2017, within a project entitled *"Riparian buffer plantings: An agroforestry land-use for multiple benefits including greenhouse gas mitigation in Canadian agricultural systems"*, being funded through the Agricultural Greenhouse Gas Program of Agriculture and Agrifood Canada. This multidisciplinary study involves researchers from the Universities of Guelph, Waterloo, Toronto and Sherbrooke, as well as extension specialists associated with partnering NGOs that have the capacity to execute technology transfer to the agricultural sector. It will engage world-renowned extension agencies including the Grand River Conservation Authority, the Ontario Soil and Crop Improvement Association, and the Biomass North Development Centre.

Position #1: Characterizing the variability and dynamics of soil hydromorphism within riparian agroforestry systems ecosystems. This research will involve the application of infield multi-temporal surveys using geophysical proximal sensors, as well as laboratory determination of soil magnetic susceptibility and the characterization of iron oxides.

Position #2: Characterizing the variability and dynamics of topsoil structure within riparian agroforestry systems ecosystems. This research will involve multi-temporal infield assessment of soil morphology, as well as the collection of intact cores for quantitative characterization of structure using high-resolution x-ray computed tomography.

For further information, interested individuals should contact:

Dr. Richard J Heck, P.Ag., Associate Professor (Soils and Landscape Processes),

Tel: 519-824-4120 x52450; Email: <u>rheck@uoguelph.ca</u>

www.uoguelph.ca/~rheck

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# **RESEARCH FELLOWSHIP FUNDING OPPORTUNITY**

<u>WCS Canada</u> is pleased to announce that with generous support from <u>The W. Garfield Weston Foundation</u>, they are able to award annual fellowships to graduate students to support field research relevant to WCS Canada's conservation objectives at their two long-term conservation sites: the boreal region of northern Ontario and the northern boreal mountains of Yukon and British Columbia.

The application deadline for the 2017 W. Garfield Weston 2015 Fellowship Program is February 23, 2017.

For full details about the Fellowship Program and how to apply please go to the WSC Canada Fellowship page.

## **Indigenous Scholar faculty position**

The University of Manitoba Faculty of Agricultural and Food Sciences has an entry tenure-track faculty position for an Indigenous Scholar.

Position Start Date: July 2017

Closing Date for Applications: February 27, 2017

For details visit: http://umanitoba.ca/cgi-bin/human\_resources/jobs/view.pl?posting\_id=91345

## **Scholarship Opportunities**

## 2017 Bullitt Environmental Fellowship

The Bullitt Foundation will start to accept applications for the <u>Bullitt Environmental Fellowship</u> beginning January 1st. Each year, one graduate student attending a university physically located in British Columbia, Washington State, or Oregon is selected for this prestigious award of \$100,000, distributed over two years.

Eligible candidates will have a strong academic record, a demonstrated capacity for leadership, the promise of emerging as an environmental leader, and be nominated by a university faculty member. Students of color, those who come from a disadvantaged background, or who have overcome significant hardship are highly encouraged to apply for this award. Application deadline: **April 1, 2017**.

Visit the website for more information, FAQ's, and complete application instructions.

#### Dr. Karl C. Ivarson Scholarship for graduate students in soil and related sciences

Agricultural Institute of Canada Foundation

The Dr. Karl C. Ivarson Soil Science Scholarship provides financial support to a student entering the second or subsequent year of graduate studies in soil science (in the areas of agriculture, environment, geology, agro-ecology or other related disciplines) at a Canadian university. Candidates must hold Canadian Citizenship or Permanent Residence status in Canada and be enrolled in their graduate program for at least one semester beyond the application deadline.

This scholarship was created by Dr. Karl C. Ivarson through a gift to the Agricultural Institute of Canada Foundation and is administered by the Foundation. 2017 Application Guidelines and Application Form can be found

at www.aicfoundation.ca/ivarson-soils/.

Deadline for Application – March 27, 2017

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# **Course offering**

Field Course in Human Ecology (HHSC760/NRES760). Spring semester (May-June).

This field school is an intensive, interdisciplinary course addressing themes including social-ecological systems, humanenvironment relationships and ecosystem approaches to health. The hybrid course will combine northern BC field experiences focused on integrative approaches to health, environment and community issues, with real-time connections with students and instructors from four universities (UNBC, Guelph, U of T. & INRS). Field activities and inter-institutional learning will focus on the course theme of: "The role of universities in their watersheds".

The hybrid course is supported by the Consortium for the Canadian Community of Practice in Ecosystem Approaches to Health: <u>www.copeh-canada.org</u>.

For more information about the UNBC course, please contact: Margot Parkes margot.parkes@unbc.ca

# **On-line course offering\***

#### Multivariate Analysis in Community Ecology with PC-ORD

Announcing a live online software training and multivariate analysis short course to be held daily **Monday-Friday 20-24 February** 10:00-15:00 Eastern Standard Time (UTC -5).

These short-courses provide an introduction to the multivariate analysis process for ecological datasets when using the PC-ORD software. Tools will be explained and demonstrated using sample datasets and participants will practice analyses on their own computers.

**Tools include:** Weighted Averaging, Polar ordination, Canonical Correspondence Analysis, Redundancy Analysis, Fuzzy Set Ordination, Principal Components Analysis, Nonmetric Multidimensional Scaling, Cluster analysis, MRPP, PerMANO-VA, Mantel Test, Fourth Corner Analysis, Indicator Species Analysis.

**Skills include:** Importing data, Screening data, Restructuring datasets, Exploring datasets, Preparing datasets, Selecting analysis tools, Interpreting output, Customizing graphs.

Courses are taught by Jeri Peck of Penn State University. Participants must have computers with the PC-ORD software already installed. Sample datasets will be provided in advance. More information can be found at <a href="http://silv.cas.psu.edu/pcord.htm">http://silv.cas.psu.edu/pcord.htm</a> or email <a href="mailto:peckj@psu.edu">peckj@psu.edu</a> with specific questions.

The registration fee is \$425 (\$225 for students) and is only payable online by credit card. The required companion book (\$45 + shipping, <u>www.pcord.com/bookstepbystep.htm</u>) must be ordered separately no later than the registration deadline.

Version note: this webinar will be taught using PC-ORD version 7. However, there should be no problem attending using version 6 if you have not yet upgraded. It is recommended, however, that you nonetheless upgrade to the Second Edition (2016) of the Step-by-Step companion book, as the course has been redesigned to match the newer edition of the book.

**Registration Instructions** 

1. To reserve a place, each registrant must send an email by 1 February to <u>peckj@psu.edu</u> with the following information: name, email address, and any other information that should appear on the invoice (e.g., institutional address), type of data with which you work (i.e., plant community, fish count, water quality, etc.), and if you qualify for the student rate.

2. Wait for confirmation of registration; you will be sent an invoice for payment with your confirmation.

\* if more than 10 people interested Judi could give the course on-site.

REMINDER: Share your information about recent publications, grants, and/or other honours you have received with NRESi newsletter subscribers via our bi-weekly newsletter. PLEASE EMAIL ALL INFORMATION AND MATERIAL TO: al.wiensczyk@unbc.ca

## LITO AROCENA STUDENT AWARDS

In December 2015, dear colleague and founding UNBC faculty member, Dr. Lito Arocena passed away after a short battle with cancer. In honour of his memory, a UNBC memorial fund was established to support three student awards, which have recently been instituted:

- **Dr. Joselito (Lito) Arocena Memorial Scholarship** (\$1000). Available to a full time undergraduate student who has completed 90 credit hours and is pursuing a Bachelor of Science honours or majors degree in one of the following: Biology, Environmental Science, Geography, or Natural Resources Management. Criteria: Academic excellence
- **Dr. Joselito (Lito) Arocena Memorial Undergraduate Thesis Prize** (\$250). Awarded for the best thesis presented by undergraduate students completing an undergraduate major or honours degree in one of: Biology, Environmental Planning, Environmental Science, Environmental Studies, Geography, Natural Resources Management, or Nature-based Tourism Management.
- **Dr. Joselito (Lito) Arocena Memorial Graduate Prize** (\$250). The Prize will be awarded to the student nominated by the NRES Graduate Program for the UNBC Governor General's Gold Medal.

Thanks to contributions from donors and UNBC, the fund is currently large enough to endow the \$1000 scholarship in perpetuity. However additional contributions are needed to permanently endow the two prizes, and to increase the amounts awarded over time. If anyone would like to contribute to this fund, through payroll deductions or otherwise, please go to www.unbc.ca/giving or www.unbc.ca/giving/employee-giving for more information.

# SUSAN STEVENSON MEMORIAL AWARD

As its first project of this kind, the Natural Resources and Environmental Studies Institute (NRESi) has established the Susan Stevenson Scholarship Fund, 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.

Efforts have succeeded in reaching the goal of \$15,000 that will be matched by UNBC to allow for an annual award. Additional contributions to the fund are welcomed. The inaugural award will be presented in the 2016-2017 academic year. NRESi would like to thank everyone who contributed to the scholarship!

The following award criteria for the **Susan Stevenson Memorial Award** have been developed: **Value:** \$1,000

**Eligibility:** Available to a full or part time female graduate student enrolled in either the Masters (NRES) or PhD (NRES) degree programs with a research emphasis in one or more of: wildlife ecology, plant biology, forest ecology, or innovative silvicultural systems and practices that emphasize wildlife management and biodiversity objectives.

Criteria: Satisfactory Academic Standing (3.0 GPA)

**Conditions:** Student is unable to receive this award more than once.

**Recipient Selection:** Senate Committee on Scholarships and Bursaries on recommendation of the NRESi Steering Committee. Applicants will provide a statement, not exceeding 500 words in length, explaining how their intended research fits within the areas specified for his award.

# **COLLOQUIUM ARCHIVE**

Did you miss a colloquium or special lecture this semester? Visit NRESi's webcast archive to catch up! They can be found on the <u>NRESi Youtube channel</u>.

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