



NRES WEEKLY NEWS

February 4 - 8, 2013

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

COMING EVENTS

NRESI RESEARCH COLLOQUIIUM SERIES

For Elluminate information and link to the webcast: http://www.unbc.ca/nres/nresi_webcast.html



Sponsored by the TWS
Student Chapter



Dr. Kathreen Ruckstuhl
Dept of Biological Sciences, University of Calgary



Applying social network theory to wildlife

Social network analysis is increasingly used as a tool to infer relationships between pairs of individuals in social groups. Potential benefits of close associations range from decreased stress levels, information gathering, cooperation, increased survival and reproductive success, while the costs of close or many social ties can include increased susceptibility to disease transfer. In this talk I will report on the nature and benefits of social networks in two species, the European red deer (*Cervus elaphus*) and Rocky mountain bighorn sheep (*Ovis Canadensis*) for which we have longterm data sets. Red deer females are philopatric, and typically stay within the home range of their mother. We found that hinds closely associated with their mothers, sisters, daughters and other close relatives for most of their lives. These matrilineal groups were very cliquish and the degree of sociality and embeddedness of daughters within the social network closely matched those of their mothers. When looking for potential benefits of social ties, cliquishness, degree centrality, and matriline ID strongly affected the lifetime reproductive success of females. We also explored what happens to females that lose their close associates, such as mothers or sisters. Individuals who lost their mother had an increased risk of death but this trend was more pronounced, and persisted, in females compared to males. Bighorn sheep are very social and live in sexually segregated groups for most of their lives. We investigated the nature and potential benefit of social ties in bighorn rams, and found that rams form associations with relatives and same age peers. They exhibit both cooperative and controlling behaviours towards particular rams. It thus seems that both special benefit much more from being social than simply predator dilution effects, which have been typically put forward as the main driver for sociality.

Friday, February 8, 2013

3:30 - 4:30 pm

Room: 7-158

John Pineau

Chief Executive Officer

Canadian Institute of Forestry - Institut forestier du Canada



Sustainable Forest Management in Canada - A Brief Overview

Sustainable forest management in Canada is purportedly inherent within the policies, planning and practices undertaken by all of the country's provincial and territorial jurisdictions. The presentation focuses on the impact and importance of the forest sector, as well as the due diligence carried out by regulatory bodies, industry and third party certification systems; and outlines the importance of forests and forestry to Canada's prosperity and national identity, and that forest management is based on the application of sound science. The presentation also considers true sustainability, defined as achieving balance between ecological, economic and social components; and that it must now be considered within the full context of globalization, world population and climate change. Forestry career and job opportunities continue to be interdisciplinary, diverse, high-tech, green and more abundant than realized. A cross-country overview of Canada's various provinces and regions clearly demonstrates that although specific challenges exist, opportunities and solutions are quite similar across the country, and there is much that can be learned and accomplished through the application and implementation of sound forest science fostered through effective national knowledge exchange. Finally, the presentation provides a unique perspective from a career spanning over 30 years in the Canadian forest sector—in different jurisdictions and through employment positions relating to forestry within government, industry, academia and non-profit associations.

Friday, February 15, 2013

3:30 - 4:30 pm

Room: 7-158

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

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

GRADUATE THESIS DEFENCE

Mr. Blake Rowsell is a candidate for the degree:

Master of Arts in Natural Resources and Environmental Studies (Tourism)

Mr. Rowsell will be defending his thesis entitled:

“Mountain Bike Tourist Development Under the Midnight Sun: Capitalizing on Destination Attributes to Maximize Potential in the Yukon Territory, Canada”

Supervisor: **Dr. Pat Maher**

Date: **February 27, 2013** Time: 10:00 am Room: 6-306 Conference Centre

OTHER NRESi EVENTS

The Yellowstone to Yukon Conservation Initiative (Y2Y) and Natural Resources and Environmental Studies Institute (NRESi) are hosting a workshop entitled **“Protected or in Peril?: Conservation in the Peace River Break and Muskwa-Kechika Regions”** on Friday, March 15th and Saturday, March 16th. This workshop will focus on the conservation values, challenges and opportunities in the greater Peace River Break and northern Canadian Rockies region. The Peace River Break is one of the most ecologically diverse landscapes in the Yellowstone to Yukon Region, yet there are few protected areas, decreasing intact habitat for wide-ranging wildlife species, and a rapidly expanding industrial footprint—including the prospect of a third hydroelectric dam on the Peace River. A detailed workshop announcement can be found at

<http://web.unbc.ca/~Michael/Y2YPeaceBreakWorkshopAnnouncement.pdf>

The Friday NRESi Colloquium will kick off the workshop and there will be a public presentation Friday evening on the UNBC campus. **The day-long workshop on Saturday has room for 70 participants and advanced registration (no charge) is required.** Please contact Mike Gillingham (michael@unbc.ca) or Juri Peepre (<jpeepre@yahoo.ca>) to register or if you have additional questions.

OTHER EVENTS

February 15

Dr. Amy Verdun, University of Victoria

GLOBAL FRIDAYS
ROOM 7-158
12:00 - 1:30 pm

“The Future of the Euro and European Integration in the Wake of the Sovereign Debt Crisis”

All Global Friday presentations will be available to remote participants at: <http://bit.ly/unbc-globalfriday>

TRAVEL / CONFERENCES / RESEARCH

Roger Wheate will be a “visiting scientist” at the Earth Sciences sector of Natural Resources Canada, in Ottawa 13-21 February. He will give a talk entitled “Using remote sensing to monitor changes in Andrei glacier and icefield, 1965-2012”.

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PLEASE EMAIL ALL INFORMATION AND MATERIAL TO: Michelle.Keen@unbc.ca