



# NRES WEEKLY NEWS

## January 28 - February 1, 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](http://www.unbc.ca/nres/nresi_webcast.html)



## Dr. Philip Jessop

Canada Research Chair of Green Chemistry, Queen's University

### CO<sub>2</sub>-Triggered Switchable Solvents and Surfactants



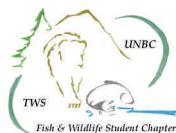
For many practical applications of solvents and surfactants, the ability to “switch” the material’s properties during a process would be extremely useful. Imagine, for example, a solvent that is capable of dissolving a desired product during an extraction, and then afterwards can be “switched off” so that it is no longer capable of dissolving the product. The product would then precipitate and be easily collected, without any need for distillation. The author invented the first switchable solvents in 2004 and has been working with his students to develop many more switchable liquid and solid materials since then. This presentation will summarize the series of switchable solvents and surfactants developed in the author’s labs.

Friday, February 1, 2013

3:30 - 4:30 pm

Room: 7-158

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

**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](http://www.unbc.ca/nres/newsletter)

## GRADUATE THESIS DEFENCE

Mr. Eric Kopetski is a candidate for the degree:

**Master of Arts in Natural Resources and Environmental Studies (Geography)**

Mr. Kopetski will be defending his thesis entitled:

**“You Want Me to Grow Trees? The Social Implications of Biomass Crops on the Resilience of Quesnel, British Columbia”**

Supervisor: **Dr. Greg Halseth**

Date: **February 5, 2013** Time: 10:00 am Room: Senate Chambers

## 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](mailto:michael@unbc.ca)) or Juri Peepre (<[jpeepre@yahoo.ca](mailto:jpeepre@yahoo.ca)>) to register or if you have additional questions.

## OTHER EVENTS

Psychology Colloquium — Thursday, February 7th at 4:00 pm in Senate Chambers (Room 1079)

**“It’s about time . . . To value your humanity: Toward a Dual Valuing Process Model”**

Dr. Fred Grouzet, Assoc. Prof. of social psychology, University of Victoria

Decades of research in personality and social psychology has shown the motivational function of values and other related concepts such as goals, aspirations and strivings. What we consider the most important things in life can shape our thoughts, feelings and behaviours, which in turn impact our personal, social and ecological well-being. Although we may expect that people will value what is good for their well-being and happiness, it seems that they often make the wrong choice. How could we explain that we value things that can undermine our personal well-being, as well as the well-being of our community and the planet? The objective of this talk is to present a model that describe and explain the social psychological processes of valuing. Recent empirical support to this model will also be presented.

## TRAVEL / CONFERENCES / RESEARCH

**Phil Burton** is participating in U.S. Forest Service workshop on ‘Science Considerations in Functional Ecosystem Restoration’ being held in Pittsburgh, PA, 4-5 Feb.

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**PLEASE EMAIL ALL INFORMATION AND MATERIAL TO: [Michelle.Keen@unbc.ca](mailto:Michelle.Keen@unbc.ca)**