



# NRES WEEKLY NEWS

## August 27 - September 14, 2012

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

### COMING EVENTS

### NRESI RESEARCH COLLOQUIUM SERIES

#### Garth Mowat, PhD

BC Ministry of Forests, Lands & Natural Resource Operations

#### The Relationship between population dynamics and habitat use of terrestrial carnivores

Most jurisdictions use population size as the most common metric to assess wildlife health while considerable research, many conservation decisions, and much on the ground effort is focused on habitat used by individuals in those populations. While the connection between animal populations and the place they live—habitat—is obvious at the coarsest view, there are few documented functional connections between animal population size and the habitat they chose.

Remote methods of sampling animals, especially those involving genetic identification of individuals, have allowed researchers to sample carnivores at much larger scales than previously. The focus of sampling is hence turned away from individuals, as in radiotelemetry based studies, and towards populations such that increasing the sample size means sampling more individuals. At these scales, choice is no longer simply a measure of behaviour but is also influenced by differences in population density among ecosystems.

I will demonstrate that habitat selection is not necessarily functionally connected to population density, or population change, at the scales we often study them. Typically, descriptive habitat use studies measure some combination of both behavioural choice of individuals and ecological differences in population density. The thesis of my argument is that habitat studies must be specifically linked to population dynamics of the study species via the testing of hypotheses that describe known links between resources or, other limiting factors and population dynamics. Simple descriptive studies of use rarely add general knowledge about the species which can be used to make deductive decisions in other times and places.

Friday, September 14, 2012

3:30 - 4:30 pm

Room: 7-152

#### Don Manson

Acting Co-ordinator, Community Development Institute and Adjunct faculty, Geography Program, UNBC

#### Reflections on Community Based Research

At UNBC our foundations are our communities. Working with and in communities, we are in many respects presented with no other choice than to undertake community based research. This presentation is drawn from over a decade's experience of extensive/intense interactions with communities across northern BC.

Community Based Research (CBR) is research that is conducted by, for, or with the participation of community members. While there are gradations in any methodological approach, the central objectives of CBR are to involve community members in respectful ways and ensure that direct community benefits flow from the research process. If we request time, and other commitments, of community members during periods when they are stressed by change, our research products should honour and return in kind that time, commitment, and contribution.

I will discuss the CBR approach, the research process, preparation for the field, working in the field, and follow through once you have completed your field work. This will include methodology and issues surrounding ethics.

Friday, September 21, 2012

3:30 - 4:30 pm

Room: 7-152

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

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

We're on the web at : [www.unbc.ca/nres/newsletter](http://www.unbc.ca/nres/newsletter)



## GRADUATE THESIS DEFENCE

**Ms. Ju Zhang** is a candidate for the degree:

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

Ms. Zhang will be defending her thesis entitled:

“Treatment of Refinery Oily Sludge Using Ultrasound, Bio-Surfactant,  
and Advanced Oxidation Processes”

Supervisors: **Drs. Jianbing Li and Ron Thring**

Date: **September 18, 2012** Time: 9:15 am Room: Senate Chambers

### COMING EVENTS — ELSEWHERE

Coast to Coast Seminar Series: “*Global change impacts on biodiversity: the view from Canada*”, presented by Dr. Jeremy Kerr, Conservation Biology & Macroecology, University of Ottawa. 18 September at 11:30 - 12:30 in room 3-2024, UNBC Prince George campus. (<http://irmacs.sfu.ca/events/coast-coast-seminars>)

“*Aleza Lake Research Forest — Past Present and Future*”, presented by Mike Jull on 26 September at the Central Interior Railway & Forestry Museum, 850 River Road. Reception 6:00 pm, lecture 6:30 - 7:30 pm.

### CONGRATULATIONS

As a result of the closure of the Canadian Forest Service research cluster at UNBC, **Phil Burton** has successfully applied for and accepted the position of Associate Professor and Regional Chair for UNBC's Northwest Region. Phil is particularly interested in building the Integrated Science program offerings at the Terrace campus, and urges all UNBC faculty and grad students who might be visiting or working in the Northwest to drop by for a visit . . . or perhaps a guest lecture! He can be reached at [phil.burton@unbc.ca](mailto:phil.burton@unbc.ca), tel.: 250-615-3333, cell: 250-641-9917.

### PUBLICATIONS

Barrier, T.A. and **C.J. Johnson** 2012 The influence of fire history on selection of foraging sites by barren-ground caribou. *Ecoscience* 19: 177-188

Gerwing, T.G., **Johnson, C.J.** and C. Alstrom-Rapaport 2012 Factors influencing forage selection by North American Beaver (*Castor Canadensis*). *Mammalian Biology* 77

Gustine, D.D., Barboza, P.S., Lawler, J.P., Adams, L.G., **Parker, K.L.**, Arthur, S.M. and B.S. Shults 2012 Diversity of nitrogen isotopes and protein status in caribou: implications for monitoring northern ungulates. *Journal of Mammalogy* 93: 778-790

Hesse, G., **Rea, R.V.**, **Booth, A.L.** and C.J. Green 2012 Wildlife Sightings at Western Canadian Regional Airports: Implications for Risk Analyses. *Human Dimensions in Wildlife Management* 17: 295-300



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## TRAVEL / CONFERENCES / RESEARCH

Nitha Karanja (BPlan candidate) travelled to Toronto, ON, to attend the National Student Food Summit from 17 - 19 August. **David Connell** (ENPL) joined her by telephone to co-present a session on the challenges and opportunities that emerge in the marriage of scholarship and (food) activism. Nitha spoke about how her experiences in two courses that Dave taught provided momentum for her activism to improve UNBC's on-campus food services.

**Sybille Haeussler** and PhD student Alana Clason (supervisor: **Phil Burton**) will attend the Whitebark Pine Ecosystem Foundation Annual Science Meeting in Kimberley, BC, 13 - 15 September where they will jointly present results from their research on the ecology and restoration of whitebark pine in central and northern BC. Whitebark pine was listed as an endangered species in Canada in 2012. The first nursery-grown whitebark pine seedlings from northern BC were grown at UNBC by Linda Tackaberry and **Hugues Massicotte** and were outplanted on wildfire and mountain pine beetle-attacked sites across northern BC in 2011 and 2012.

**Staffan Lindgren** travelled to Qualicum Beach 27 - 31 August, to work with former post-doctoral fellow Niklas Björklund (Department of Ecology, Swedish University of Agricultural Sciences, Uppsala, Sweden) on several joint manuscripts.

**Staffan Lindgren** will be in Fredericton, NB, 10 - 13 September, to serve as external examiner on a PhD dissertation at the University of New Brunswick.

**Ken Otter**, Stefanie LeZerte, Marc d'Entremont and Naira Johnson attended and presented at the North American Ornithological Congress (NAOC) in Vancouver, BC, 14 - 18 August. Stefanie LaZerte was presenting work related to her receipt of the Baillie Award from the Society of Canadian Ornithologists. This is the top award of the society for a student research proposal, which she won for her PhD work on vocal adaptations to urbanization in chickadee species.

**Roger Wheate** was downunder where he attended Geocart 2012 in Auckland, 29 - 31 August, and presented on cartographic depiction of glacier changing at the High Mountain Cartography workshop in Mount Tongariro National Park, 1 - 5 September; Mt. Tongariro erupted last month for the first time since 1885. He also completed the Australian Kangaroo Hoppet Birkebeiner at Falls Creek, Victoria on 25 August.

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