



# NRES WEEKLY NEWS

## January 16 - 20, 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

Jan. 20, 2012

**Dr. Bill McGill**

Professor, Ecosystem Science & Management  
UNBC



#### Are Ecosystems Fragile?

One hears much about loss of diversity and fragile ecosystems both in the scientific literature and the more accessible media. Energy is directed to protecting fragile species, communities and areas to prevent global catastrophe. What do these terms mean and is the current discussion informative?

This colloquium explores the meaning and evidence for the term "fragile ecosystem" and associated or derivative terms. It provides evidence around: 1) concepts of fragility; 2) methods of measuring fragility, diversity and their connection to ecosystem productivity; 3) indicators of decline in biodiversity; and, 4) problems with estimation of species extinctions. This leads to some heuristic questions such as "why are alien species ecologically bad?", "if some parts of the globe have more generalist species and others have more specialized species why is it undesirable if the range of generalist species increases?", "are ecosystem dynamics being conflated with fragility?", "is fragility even a useful concept"?

In light of the foregoing questions, examples are presented that suggest ecosystems and nature are not fragile, that human activity has generated new and currently desired ecosystems, and that changing suites of organisms over the last 3 billion years have driven the most profound changes on earth including atmospheric oxygen, global glaciations (snowball earth) and development of the Phanerozoic. It is concluded that we may protect against global catastrophe by directing our energies to globally significant planetary scale processes and boundaries rather than local processes for which there is no evidence of global scale thresholds.

Friday, January 20, 2012

3:30 - 4:30 pm

Room: 7-152

Jan. 27, 2012

**Brad C. Hawkes, PhD (ret - RPF)**

Fire Research Officer, Natural Resources Canada  
Canadian Forest Service



#### When it's hot, it's hot . . . or maybe it's not! Thirty Years of Forest Fire Research — a Personal Reflection

The last thirty years of Canadian fire research has resulted in a better understanding and prediction of fire behaviour and effects, fire regimes, interaction of natural disturbances, prescribed burning, fuel dynamics, and fire risk and mitigation. This research has been a collaborative effort involving federal, provincial, and territorial agencies, universities and colleges, forest industry, and the private sector. Over the last 35 years, first as a graduate student and then as a fire researcher with the Canadian Forest Service, I have had the privilege of participating in some of this interesting research, both in BC and YK, and across the country. This talk is a personal reflection of my "hot and 'cool'" research experiences and results; the interesting and the inspiring people I have worked with; and some lessons learned. A grade 8 student shared the following with me after I gave a "forest fire" talk in his class: "I did not know there was a career path for someone who liked to play with matches as a kid".

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**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: [keenm@unbc.ca](mailto:keenm@unbc.ca)**

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

## ELSEWHERE

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GLOBAL FRIDAYS  
ROOM 1079 - SENATE  
12:00 - 1:30 pm

January 20, 2012

José Pablo Baraybar, Executive Director, EPAF (Peruvian Forensic Anthropology Team) and Adjunct Faculty Member, Geography Program, UNBC

“Forensic Jurisprudence: An Overview of Forensic Evidence of Human Rights Violations in Court”

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## CONGRATULATIONS

**Jane Young**, Angela White (Encana), Cathy MacKay (Environmental Dynamics Inc.) and Brian Wolf (Prophet River First Nation) are recipients of the Collaborative Research Award (sponsored by UNBC) which is one of the Northern British Columbia Business and Technology Awards. This award celebrates a UNBC-Industry collaboration which fosters economic diversification and innovation. The research project was entitled “Communicating Traditional Ecological Knowledge: Prophet River First Nation”.

## PUBLICATIONS

Deeks L.K., Duzant J.H., **Owens, P.N.** and G.A. Wood 2012 A decision support framework for effective design and placement of vegetated buffer strips within agricultural field systems. *Advances in Agronomy* 114 225-248

**Young, Jane P.**, Rallings, Anna, **Rutherford, P. Michael**, and **Annie L. Booth** 2012 The effect of NaCl and CMA on the growth and morphology of *Arctostaphylos uva-ursi* (Kinnikinnick). *Journal of Botany* vol. 2012 Article ID 789879, 8 pages doi:10.1155/2012/789879

## TRAVEL / RESEARCH / CONFERENCES

**Ellen Petticrew** and **Phil Owens** attended a Fraser Basin Regional Workshop in Quesnel on January 11<sup>th</sup>. Petticrew presented a talk highlighting activities and plans for the Quesnel River Research Centre. The workshop was held to discuss opportunities for future collaborations among stakeholders and agencies in the watershed given the upcoming closure of the Fraser Salmon and Watersheds Program.

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

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