



## NRES WEEKLY NEWS

October 22 - 26, 2007

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

**TOMORROW.....**

**Dr. Daniel A. Herms, Assoc. Professor**  
**Dept. of Entomology, Ohio State University**



**“Emerald Ash Borer: the beginning of the end of ash in North America”**

Emerald ash borer (EAB, *Agilus planipennis*) has killed millions of ash (*Fraxinus* spp.) trees since its accidental importation from Asia, and is now known to occur in Ontario, Michigan, Ohio, Illinois, Maryland, and Pennsylvania. Congeneric relatives endemic to North America only colonize stressed trees. However, EAB is killing healthy trees on high quality sites, creating a wood-borer outbreak of unprecedented intensity. As it continues to spread, EAB clearly has the potential to functionally eliminate ash from North America with impacts reminiscent of chestnut blight. EAB is rare in Asia and infestations appear restricted to stressed trees. Thus, EAB seems to act in Asia as its congeners do in North America. This seminar will review the current status of the EAB invasion, diagnostics and host impacts, and management options, as well as research on ecological impacts of EAB on forest and communities and EAB / host interactions from a coevolutionary perspective. Why is EAB such an aggressive killer of North American ashes? Why are native buprestids restricted to severely stressed hosts? How do deciduous trees resist phloem-feeding wood-borers? How does stress affect the expression of these resistance mechanisms? What impact is wide-spread gap formation caused by EAB-induced ash mortality having on forest communities?

**FRIDAY, OCTOBER 19, 2007**

**3:30—4:30 PM**

**LECTURE THEATRE 7-150**

**LIGHT REFRESHMENTS SERVED AT 3:20 PM**



**Dr. Laurie Chan**

**BC Leadership Chair in**  
**Aboriginal Environmental Health**

**Professor, Community Health Science Program, UNBC**

**.....NEXT WEEK**

**Ecosystem Health Research: A Toxicologist's Approach**

Increasing global industrialization, especially in the last 50 years, has caused pollution of all of the world's ecosystems. This has left First Nations and Inuit at particularly high risk for environmental contaminant exposure because of their subsistence lifestyle and traditional diet. Primary health concerns for contaminant exposure are cancer, neurological development, immune function, diabetes, anemia, kidney and bone function, and reproduction. The talk will discuss how we have developed a research program on Environmental Health issues from a toxicology perspective.

**FRIDAY, OCTOBER 26, 2007**

**3:30—4:30 PM**

**LECTURE THEATRE 7-150**

**LIGHT REFRESHMENTS SERVED AT 3:20 PM**

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

**PLEASE EMAIL ALL INFORMATION AND MATERIAL to**  
**Elissa Zemlak: [zemlak@unbc.ca](mailto:zemlak@unbc.ca)**

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

## Coming Events



The NRESi welcomes all to a regular Wednesday coffee break in the Institute room (4-312)  
Bring your own coffee, and engage in discourse.

Team refreshments are welcome - some may be provided if Art has a Betty Crocker moment on the Tuesday night.

**NRESi Wednesday Coffee Break**  
**October 24th 10am-10:30am, Room 4-312**

### NEW GRANTS

In collaboration with the West Moberly, Halfway River and Saulteau First Nations and Treaty 8 Association **Annie Booth** received a \$75,000 grant from the Canadian Environmental Assessment Agency to study effective engagement of First Nations in the environmental assessment processes.



**Annie Booth**, Associate Professor, ESM, pictured with two new research assistants, Chuck and Deb.

### The Northern Sustainable Landscape Initiative

<http://www.web.unbc/sustainablelandscape>

*"A collaborative partnership to increase our knowledge and understanding of sustainable landscaping"*

### OCTOBER 2007 CITY SITES UPDATE:

#### Danson, CN & Beverly Settling Ponds

Weed Inventories were conducted in 2006 and 2007. Data is now being prepared for analysis. The livestock (goats) trials began in Spring 2007 with on-going monitoring of weed consumption. The Danson site was accidentally mowed July 2007. We abandoned the Beverly site after one of the goats was attacked and killed by a neighbourhood dog. The goats have been sent to their wintering grounds. We have kids, six at last count. With sufficient funding, we will continue livestock trials in 2008.

#### Studio 2880

Trellis and beds installed 2005, planted 2006. Plants removed in 2007 as site was sold. Trellis and bed remain. Demonstration Garden plans commissioned and abandoned when site was sold. Plants have been relocated to the City Cemetery and to the Ministry of Forestry Building parking lot.

Watch for more City Sites updates in next week's newsletter...

### PUBLICATIONS

**Gustine, D.D., K.L. Parker, and D.C. Heard.** 2007. Using ultrasound measurements of rump fat to assess nutritional condition of woodland caribou in northern British Columbia, Canada. *Rangifer* 17:249-256.

**Otter, K.A., Atherton, S.E. & van Oort, H.** 2007. Female food-solicitation calling, hunger levels and habitat differences in the black-capped chickadee. *Animal Behaviour* 74: 847-853

**Robertson, S.J., W.B. McGill, H.B. Massicotte and P.M. Rutherford.** 2007. Petroleum hydrocarbon contamination in boreal forest soils: a mycorrhizal ecosystems perspective. *Biological Reviews*, 82: 213-240.

**Rutherford, P.M., W.B. McGill, J.M. Arcena and C.T. Figueiredo.** 2007. Total Nitrogen. Chapter 22 in M.R. Carter and E.G. Gregorich (eds), *Soil Sampling and Methods of Analysis*. 2nd Edition. CRC Press. pp 239-250.

Romón, P, J.C. Iturrondobeitia, J. Legorburu, K. Gibson, **B.S. Lindgren**, and A. Goldarazena. 2007. Quantitative association of bark beetles with pitch canker fungus and dose - dependent and species - specific effects of verbenone on their semiochemical communication in Monterey pine forests in Northern Spain. *Environ. Entomol.* 36: 743-750.

**Coxson, D.S. and S.K. Stevenson.** 2007. Growth rate responses of *Lobaria pulmonaria* to canopy structure in even-aged and old-growth cedar-hemlock forests of central-interior British Columbia, Canada. *Forest Ecology and Management* 242: 5-16.

**Stevenson, S.K. and D.S. Coxson.** 2007. Arboreal forage lichens in partial cuts - a synthesis of research results from British Columbia, Canada. *Rangifer* 17: 155-165. Available at:  
<http://wetbelt.unbc.ca/publications.htm>

**Jones, E.S., M.P. Gillingham, D.R. Seip, and D.C. Heard.** 2007. Comparison of seasonal habitat selection between threatened woodland caribou. *Rangifer* 17: 111-128.