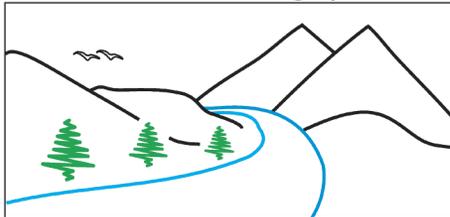


**NRESi**



"Our environment is our future"

For **Eluminate** information and link to the webcast: [http://www.unbc.ca/nres/nresi\\_webcast.html](http://www.unbc.ca/nres/nresi_webcast.html)

## **RESEARCH COLLOQUIUM SERIES**

### **Dr. Celia Boone**

Postdoctoral Fellow  
Ecosystem Science & Management Prog.  
UNBC



**Friday**

**Nov. 25, 2011**

**3:30 - 4:30**

**LECTURE THEATRE**

**7 - 158**

## **CONSTRAINTS ON BARK BEETLE POPULATIONS**

Bark beetles are most renowned as major disturbance agents during outbreaks in coniferous forests worldwide. However, these herbivores remain at low density, endemic levels in weakened, nutrient depleted resources for decades and only intermittently erupt into ecologically and economically damaging population densities. To transition from endemic to outbreak densities, bark beetles must surpass a series of biotic and abiotic constraints, such as host plant defenses, natural enemies, interspecific competition, and weather. Once each threshold is breached they no longer restrict herbivore progress. I will discuss my research investigating interactions among some of these constraints, and mechanisms that allow bark beetles to breach these thresholds to colonize robust, well-defended resources and ultimately cause landscape level disturbances.