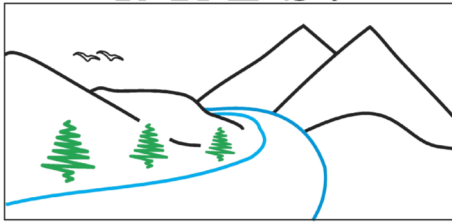


NRESi



"Our environment is our future"

## RESEARCH COLLOQUIUM SERIES

### Dr. Kathy Lewis

Chair, Ecosystem Science & Management  
UNBC



**Friday**

**Nov. 20, 2009**

**3:30 - 4:30**

**LECTURE THEATRE**

**7 - 152**

LIGHT REFRESHMENTS  
SERVED AT 3:20 PM

### Red band needle blight — the canary in the forest health coal mine

Red band needle blight, caused by the fungus *Dothistroma septosporum*, is a foliar disease of native lodgepole pine in North America, and occurs globally on a wide range of pine species. In the southern hemisphere it causes serious damage to exotic pine plantations, but in the northern hemisphere, the disease has caused little damage until recently. Within the past decade, *Dothistroma* has become the most serious pathogen of young lodgepole pine in BC, and has resulted in plantation failures. The situation in BC is unique because the pathogen is attacking a native tree species, and because unlike populations in the southern hemisphere, the fungus in BC has the ability to reproduce sexually. Several explanations for the sudden change in disease severity and extent exist, and include relatively recent introduction of the fungus to a population of trees that have not developed resistance through co-evolution, development and spread of a particularly virulent strain of the fungus, and climate that is more conducive to disease development than in the past. This presentation will explore each of these explanations and build an argument that the current outbreak of *Dothistroma* is a not-so-early warning of impending dramatic change in the health of our forests.