

## **Mountain Pine Beetle in Alberta – Assessing and Managing Impacts**

### ***Joint Workshop: The Mountain Pine Beetle EcoHydrology Project and The TRIA Project (Mountain Pine Beetle System Genomics)***

Monday, April 30, 2012; 9:00 – 4:00  
University of Alberta: Edmonton Clinic Health Academy (ECHA) 2-140  
Lunch to be provided

This full-day, joint workshop will present the results from research conducted under two research programs and provide an opportunity for discussion between researchers, industry and government on how results can be applied to assessing and managing impacts and risks associated with effects of Mountain Pine Beetle (MPB) attack on Alberta's forests.

#### ***Opening remarks, Keith McClain (Foothills Research Institute) (9:00 – 9:05)***

#### ***Mountain Pine Beetle EcoHydrology Project (9:00 – 12:00)***

*Overview.* In an experimental study conducted near Robb, Alberta we simulated MPB attack and examined responses of vegetation, below-ground ecology and hydrology. The results provide the foundation for assessing risks associated with effects of MPB on hydrology, vegetation succession and ecosystem function post-MPB attack.

#### *Preliminary agenda*

9:05 – 9:15	Introduction: The unknown risks and impacts when MPB enters AB
9:15 – 10:15	Is MPB “red attack” a threat to the hydrologic regime of these forests?
10:15 – 10:30	Questions/discussion
10:30-10:45	Coffee break
10:45 – 11:15	How resistant are vegetation, fuels, and below-ground dynamics to different levels of “red attack”?
11:15-11:30	Questions/discussion
11:30 – 12:00	Discussion – Implications for adaptive management, where do we go from here?

#### ***12:00 – 1:00 Lunch (provided)***

#### ***The TRIA Project (13:00 – 16:00)***

*Overview.* In this interdisciplinary study, we are examining how genetic and environmental factors influence MPB in Alberta. One key objective is to determine whether genetic attributes of MPB or pines should be considered in forest management planning aimed at the current or future outbreaks. Outcomes of this research are being used to inform MPB Risk Assessment processes and development of risk models. We are also generating genetic markers and genetic insights about lodgepole pine, jack pine and their hybrids that can be applied to tree improvement and deployment programmes.

*Preliminary agenda*

13:00 – 13:05	Introduction
13:05 – 13:15	Knowledge gaps about the current MPB outbreak from a risk modeling perspective
13:15 – 14:00	Interactions of mountain pine beetle and their fungal associates with pine hosts in Alberta
14:00 – 14:30	<i>Coffee break</i>
14:30 – 15:00	Population analyses of MPB and pine hosts, and implications for outbreaks
15:00 – 15:30	Using TRIA outcomes to inform risk assessment
15:30 – 15:45	Paving a path to adaptive forest management
15:45 – 16:00	Summary and session close

**Remote participation options:** We will be providing the opportunity to participate via remote connection. Please indicate your preference:

- Video-Conference (requires computer with high-speed internet connection)
- Audio connection only (teleconference) with presentations provided ahead of time as PDFs (for those with dial-up connection only)