

News from the Co-editors

Alan Wiensczyk, Ecosystems and Stand Management Extension Specialist, and Julie Taylor Schooling, Corporate Publications Specialist

The unprecedented magnitude of the current mountain pine beetle (MPB) outbreak in British Columbia has raised many questions about the effects that the infestation and resultant salvage harvesting will have on the environment and on the socio-economic fabric of the province. Seeking answers to these questions has been the focus of many provincially and federally funded research projects over the past 5 years. In addition, a number of projects and strategies have been co-ordinated by the three Beetle Action Coalitions and the First Nations Mountain Pine Beetle Initiative.

The goal of the Mountain Pine Beetle: From Lessons Learned to Community-based Solutions Conference was to highlight and share significant “lessons learned” from both First Nations and non-First Nations perspectives that have been attained through 5 years of research and other initiatives directed at the biological, environmental, and socio-economic questions and challenges associated with the MPB infestation.

This issue of *JEM* presents a combination of synthesis papers inspired by conference thematic sessions as well as abstracts and popular summaries from the plenary and poster sessions. Synthesis papers cover the following thematic areas: Stand Dynamics; Biodiversity and Habitat; Watersheds; Socio-economics; First Nations’ Cultural and Societal Values; Silviculture Treatments and Restoration Options; Fibre Opportunities and Manufacturing; and Fuel Loading and Fire Behaviour. Poster popular summaries and abstracts encompass all these and two additional themes: Mountain Pine Beetle Biology and Population Dynamics; and Range Values.

Conference organizers consciously chose to include a wide range of thematic areas at the conference to emphasize the interconnectedness between the various topic areas. How lodgepole pine stands respond to the MPB infestation and to any subsequent natural (e.g., fire, windthrow) or human-induced (e.g., salvage harvesting) disturbances will ultimately determine the goods, services, and values available from these forests. This, in turn, will affect the long-term social, cultural, spiritual, and economic well-being of the First Nations and non-First Nations communities that depend on these forests. It is critical that people involved in the different facets of addressing the mountain pine beetle infestation (biophysical, socio-economic, and management) have knowledge about the issues and challenges faced by the other areas as well as have access to and be able to discuss the latest knowledge and information from these other sectors.

The first three thematic sessions covered the effects of MPB as a disturbance agent on the landscape as well as the influence of this disturbance on other landscape-level disturbances such as fire. Also included here were human responses to this outbreak from a forest management perspective.

Kathie Swift, who led the Stand Dynamics concurrent session, uses an ecological “theatre” metaphor in her synthesis contribution to examine and discuss some of the possible development pathways lodgepole pine stands killed by MPB may follow in the absence of salvage harvesting.

The effects of MPB on fuels and fire behaviour was the topic of the session led by Brad Hawkes. In his synthesis paper, he summarizes our knowledge of immediate and long-term effects of MPB on fuel characteristics, fire environment, and behaviour; the changes in annual burn rate following past MPB outbreaks; experimental burning projects; the use of fuelbreaks in stands affected by MPB; the B.C. Ministry of Forests and Range's fuel management program; and impacts of MPB on First Nations communities.

Allan Powelson and Kelly Osbourne, facilitators of the Silvicultural Treatment and Restoration Options session, provide insight into the Forests for Tomorrow program, which is aimed at applying silvicultural treatments to stands within the timber harvesting land base yet outside of forest industry obligations.

The next two concurrent sessions explored how MPB affects other forest values.

Todd Redding, who led the discussion in the Watersheds thematic session, presents a summary of the key hydrologic changes expected as a result of the MPB and highlights the results of research to quantify the changes in hydrologic processes (e.g., water yield, peak and low flows, slope and channel changes) and potential effects at the stand and watershed scale as a result of MPB-related stand mortality and salvage harvesting. He provides some general recommendations as well as sources for further information.

Doug Lewis facilitated the Biodiversity and Habitat thematic session. His synthesis for this theme presents and discusses the effects of the MPB outbreak itself as well as the effects of resultant salvage harvesting on wildlife and biodiversity.

Finally, the remaining three thematic sessions describe the economic and social implications of the MPB.

The Socio-economics thematic session was led by Dan Orcherton. His synthesis paper explores the strategies that have been developed to address social, community, and cultural stability, as well as the long-term economic challenges and issues that have been experienced by many of the communities in the province affected by the MPB.

The First Nations thematic session consisted of a panel discussion on the First Nations' cultural and societal values affected by the MPB. The synthesis paper, prepared by Gina Thomas, includes a discussion on the impacts of the MPB on First Nations' communities and non-timber forest products as well as the role of the First Nations Forestry Council in addressing these impacts.

The third thematic session in this group covers the Fibre Opportunities and Manufacturing topic area. In his synthesis, Rob Parisotto, provides an overview of the Forestry Innovation Investment program, which was given accountability for wood products research and development, as well as a synthesis on the latest research to address the technological challenges faced when processing MPB fibre in a primary lumber manufacturing facility. The synthesis also outlines the work done to develop new engineered and composite wood products that utilize MPB-attacked fibre.

In the face of change and the challenges posed by the scale of the MPB infestation, we must synthesize and share our knowledge—we trust that these proceedings will contribute to our collective understanding and that an ongoing dialogue will help us respond adaptively to “the beetle.”