

## Forintek Research on Mountain Pine Beetle Affected Wood

The mountain pine beetle (MPB) is one of the most destructive forest pests in North America. It infests mainly mature forests of lodgepole and other pines, and has decimated extensive areas. Two main factors have led to a large outbreak in western Canada. Successful forest fire prevention in BC and Alberta over many decades has created a larger land base of mature forest that is now susceptible to the beetle. Warmer weather and lack of killing frosts in the winter have enabled the beetle to extend its geographic range further north and to higher elevations than previously. Efforts to control the outbreak of the beetle in BC have failed. The beetle has spread through Rocky Mountain passes and now threatens Alberta forests.

With an impacted area comparable to approximately two-thirds the size of Sweden, the extent of the MPB outbreak in BC poses an enormous challenge to all aspects of forest management. Forintek is working along with FERIC and Paprican as well as other partners and technical experts in helping the forest industry maximize value recovery from affected trees. In terms of manufacturing, the industry in general is faced with adjusting operations to accommodate higher proportions of MPB-affected lodgepole pine logs. In many ways this is like dealing with a different wood species. From the solid wood products point of view, Forintek's role is one of technical support. The aim is to increase the proportion of MPB wood in the fibre basket, to aid processing of the wood into quality products, to diversify the product mix and to maintain market acceptance. The Canadian Forest Service Mountain Pine Beetle Initiative and BC's Forestry Innovation Investment Mountain Pine Beetle Program have been the key funding agencies for much of the research.

A list of summary information documents prepared by Forintek staff and downloadable from this site is given below. Technical reports on the research are also available.

Forintek Canada Corp. was established in 1979 as Canada's national wood products research institute. The institute's mission is *to develop scientific and technical knowledge, applications and solutions that will enhance the ongoing competitiveness of its members and the Canadian wood products sector.* Forintek has become a leader in research and development through its client-oriented strategy, and by identifying and responding to the short- and long-term needs of its industry and government members. Forintek's researchers work on developing and implementing the most advanced techniques to reduce production costs, improve productivity and to increase the quality and variety of wood products. These techniques and other research results are then transferred to industry in a number of different ways. Currently Forintek has a membership base that includes more than 290 manufacturing companies and industry suppliers. The Canadian Forest Service, British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, New Brunswick, Nova Scotia, Newfoundland and Labrador, and the Yukon Territory are also members of the Forintek partnership.



Images courtesy of Canadian Forest Service.

## Summary Publications available from Forintek or *www.Forintek.ca*

July 2003. Properties of lumber with beetle-transmitted bluestain. Wood Protection Bulletin. Forintek Canada Corp. Vancouver, BC. (also available in Japanese)

July 2005. Frequently Asked Questions about bluestain on Canadian wood products. Wood Protection Bulletin. Forintek Canada Corp. Vancouver, BC.

August 2005. An update on value recovery from mountain pine beetle affected trees. *Technote* 05-05W. Forintek Canada Corp. Vancouver, BC.

December 2005. OSB strand manufacturing conditions affect strand shape and quality. *Technote* 05-11W. Forintek Canada Corp. Vancouver, BC.

December 2005. Bluestained lodgepole pine lumber shows similar resistance to rot as non-stained lodgepole pine. *Infotech* 05-05W. Forintek Canada Corp. Vancouver, BC.

December 2005. Machine graded lumber recovery from post-mountain pine beetle wood. *Technote* 05-08W Forintek Canada Corp. Vancouver, BC.

December 2005. Drying post-mountain pine beetle lumber. *Technote* 05-09W. Forintek Canada Corp. Vancouver, BC.

### Other Links:

Canadian Forest Service Mountain Pine Beetle Home Page  
[http://www.pfc.cfs.nrcan.gc.ca/entomology/mpb/index\\_e.html](http://www.pfc.cfs.nrcan.gc.ca/entomology/mpb/index_e.html)

Natural Resources Canada, Canadian Forests Service Mountain Pine Beetle Initiative  
[http://mpb.cfs.nrcan.gc.ca/index\\_e.html](http://mpb.cfs.nrcan.gc.ca/index_e.html)

Ministry of Forests information about the mountain pine beetle in BC  
[http://www.for.gov.bc.ca/hfp/mountain\\_pine\\_beetle/](http://www.for.gov.bc.ca/hfp/mountain_pine_beetle/)

Ministry of Sustainable Development website on pests of Alberta forests  
[http://www3.gov.ab.ca/srd/forests/health/mpb\\_cond.html](http://www3.gov.ab.ca/srd/forests/health/mpb_cond.html)



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