



Mountain Pine Beetle & Midterm Timber Supply

THE MOUNTAIN PINE BEETLE (MPB) EPIDEMIC IS ONE OF THE MOST significant forest management challenges the province has ever faced. In 2003, the infestation had affected 4.2 million hectares. However, by 2009, the provincial aerial overview survey indicated that the cumulative area affected by the MPB infestation had increased to 16.3 million hectares with 675 million cubic metres of pine projected to be killed (red, grey and green attack) within the timber harvesting land base. It was clear the challenges would be many and difficult. The ministry's 2003 and 2007 reports, "Timber Supply and the Mountain Pine Beetle Epidemic" highlighted some of those challenges.

While the infestation initially progressed faster than the ministry projected in areas where pine is dominant and the terrain flat, it has moved slower in areas where pine is less dominant and the terrain is mountainous. Initial projections indicated that 80 percent of the pine within the timber harvesting land base (THLB) (1.35 billion cubic meters) would ultimately be killed when the infestation was over. This has been revised to 67% or 900 million cubic metres of pine mortality—about 175 million cubic metres less than initially projected.

I think there are two main focal points in responding to the challenges created by the mountain pine beetle epidemic. The first is to gain an increased understanding of the true nature of those challenges. The second is to reduce the potential negative impacts on people and ecosystems. By maintaining a sharp focus on these two points, we will ensure long-term sustainability.

One way I have attempted to reduce the negative impacts associated with the infestation is to increase allowable annual cuts to facilitate the salvage and reforestation of pine dominated stands. Licensees have responded to the infestation by focusing harvest activities in pine dominated stands and for the most part have continued to maintain the focus despite poor market conditions and deteriorating quality of dead stands. (See the 2009 Forest Analysis and Inventory Branch report titled "Monitoring Harvest Activity Across 29 Mount Pine Beetle Impacted Management Units.")

In a more recent attempt to reduce the negative impacts, I reduced the uplifts somewhat and introduced partitions in the Prince George and Quesnel timber supply areas (TSAs). A partition is a portion of the allowable annual cut that is attributable to certain types of timber or terrain. In both cases with Prince George and Quesnel, the partition is aimed at maintaining the opportunity to continue salvaging pine while protecting non-pine stands needed to support mid-term harvest levels. Coupled with the partitions that limit harvests in non-pine, the *Forest Act* was amended and regulations introduced to allow the Minister to implement these partitions at the licence level if necessary.

The allowable annual cut (AAC) uplifts, which were designed in part to promote the rehabilitation of MPB-damaged stands and protect timber supply for the mid-term, have been complemented

by the Land Base Investment Strategy. Funding under the strategy has been focused in areas impacted by the beetle and has included activities such as rehabilitating stands, improving the inventory information for impacted stands and the application of fertilizer in younger non-pine stands to make them available for harvest sooner to support mid-term timber supply.

In 2010, given the projected mid-term decline in timber supply and associated effects on jobs and local economies, the Union of BC Municipalities (UBCM) passed a resolution asking the Minister of Forests, Mines and Lands to undertake a cost/benefit analysis of management constraints that limit timber supply in areas affected by pine beetle. UBCM wants to mitigate potential shortfalls in timber supply, but not at significant expense to other forest values such as wildlife habitat and visual quality. UBCM requested the analysis to ensure communities and decision-makers are fully informed on what the options are.

In response, the Minister asked me to undertake an analysis providing information on how changes in management practices could increase mid-term timber supply availability in MPB-affected areas. These analyses are underway and expected to be complete during summer 2011. Activities being examined include harvest potential in marginally economic forest types and flexibility and innovation with respect to meeting non-timber forest management objectives.

In closing, while it is clear that the infestation will have significant impacts on mid-term timber supply, it is my firm belief that we should keep focused on opportunities available to us. Opportunities to better understand the challenges as the real scope and nature of the infestation become clearer and to mitigate the social, economic and, where warranted, environmental impacts.

Mitigating impacts will require continued activities on the ground to rehabilitate sites and promote faster growth. Mitigation will also continue to require innovative ideas for achieving balance between important social values during the time leading up to recovery of forests from the infestation. If markets continue to improve, licensees continue to focus on harvesting pine and all forest practitioners look for opportunities to improved timber supply, the outcome of the infestation may not be as bad as first thought. 🍌

Jim Snetsinger, RPF, is BC's chief forester and his main duties include allowable annual cut determinations, setting forest stewardship policy, establishing standards for practices and providing leadership to the Stewardship Division. Jim joined the BC Forest Service in 1986 after working with BC Hydro as a forester for about five years. He graduated from the University of Toronto in 1979 with a BSc in Forestry before starting his career with a Prince George forestry consulting firm. Jim currently resides in Prince George and also spent a number of years living and working in Smithers.

