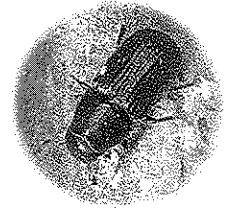


The view from ground zero

By Michael Pelchat, RPF



We are witnessing an unprecedented and humbling natural phenomenon in the pine forests of British Columbia. Supported by record warm winter temperatures and fuelled by vast tracts of mature and over-mature pine forests, the mountain pine beetle is living up to its role as a primary disturber of this forest ecosystem.

Along with wild fire, the mountain pine beetle is one of the main agents that initiate forest renewal in the interior of the province. This is a natural process that the forests have adapted to over thousands of years. The difference today is man's influence. In the interior, fire suppression has resulted in a significantly larger and older pine dominated forest while the global warming trend has greatly reduced the incidence of cold winters, the main control mechanism for the beetle.

The result is explosive population expansion and the mortality of large tracts of pine dominated forests. Infestations of immature stands are starting to appear as the preferred host of larger diameter mature pine is eliminated from the landscape, further impacting future timber supplies for forest dependent communities and habitat for many species.

Near Quesnel, the evidence is clear to anyone who ventures into the forest. The rate of expansion has stunned both forest professionals and lay people. From a modest beginning of some 2,600 hectares in 1994, the beetle's territory has expanded rapidly—at rates sometimes exceeding 400 per cent—to infest more than 1.3 million hectares and 56 million cubic metres of timber in the Quesnel timber supply area (TSA). While there is an expected short-term boom as government and industry gear up to salvage as much value as they can from this dying timber resource, the beetle epidemic causes one to pause and reflect. What will the forest look like in 20 years, and what will be the impacts on forest dependent species and communities?

The pre-beetle allowable annual cut for the Quesnel TSA was about 2.3 million cubic metres, a level that was sustainable for some 70 years before slightly declining to the long-term harvest level. This robust timber supply was a reflection that lodgepole pine comprised 85 per cent of the

timber inventory. Two increases in annual cut have occurred in response to the beetle outbreak, resulting in a current annual harvest level of 5.3 million cubic metres. This level will continue for the next 15 years to support a major salvage effort. However, this rate is unsustainable. The post-salvage harvest level will hover between 1.3 and two million cubic metres for 60 years before recovering to the long-term harvest level of 2.2 million cubic metres as second growth stands become available.

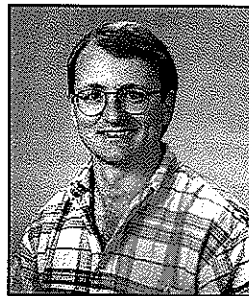
It will be a challenge to adjust to a sudden drop in the timber supply, and it is easy to feel overwhelmed by the magnitude of the event and the potential impact on our communities and ecosystems. However, this is not the time to panic or give up. This is the time for forest professionals to think strategically about forest resource management. Forest management is easy and forgiving with a robust timber supply; decisions become more critical and far-reaching when every cubic metre of growth potential is at stake. Strategies are needed to assist communities in the transition to a lower timber supply. Well planned and implemented treatments are required to enhance the mid-term timber supply (20 to 50 years) and lessen the impact of declining harvest levels. Accelerated reforestation with improved genetic stock, along with treatments to maximize tree growth, will be needed to

enhance the mid-term timber supply and shorten the transition to the long-term harvest level. This is not a time to accept mediocre performance or to be satisfied with achieving minimum standards; the people of BC deserve better from forest professionals after entrusting the forest resource to their care.

The same treatments that improve timber supply will also enhance ecosystem recovery and support forest dependent species. There will be tension between timber access and retention to support biodiversity as the timber supply drops. Treatments that enhance the mid-term timber supply and shorten the recovery period will ease the pressure to trade off biodiversity for economic and community stability.

While the beetle has caused unprecedented damage to the forest, it has also created an unprecedented opportunity to shape the new forest. How we respond to these challenges—through our salvage actions and silviculture decisions—will impact on whether we create a new forest that is more resilient and robust in the face of climate change and forest health agents, or a forest doomed to repeat the current cycle we are witnessing.

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