

Seed Use Efficiency Meeting

Langley, BC July 30 & 31, 2008

Brian Barber, MA, RPF

A/Director, Tree Improvement Branch, BC Forest Service

Policy and Genetic Resource Management Directions: or *Who moved my seed?*

There are a number of provincial issues and policies influencing – or will influence - seed use in BC. These include state of the BC forest sector, the mountain pine beetle (MPB) epidemic, climate change and policy responses to them.

A weak US housing market, strong Canadian \$, increased energy costs have reduced softwood lumber sales in 2007 (-24% compared to 2006, and -36% to 2003). As a result, only 80% of the provincial annual allowable cut (AAC) of 80 million m³ is being harvested. Reduced harvest levels equates to fewer areas being reforested. Seedlings requested for planting in 2007 was 270 million. However, seedling requests for sowing in 2008 were only 214 million seedlings. Reforestation of areas denuded by the MPB and planting for increased fibre production through government funded programs such as Forests for Tomorrow are, however, expected to increase planting and seed use over the next five years. Issuance of new tenures, to communities and First Nations, are also increasing the number and diversity of seed uses. As a result, there will be continued demand for seed of high quality - but with increased pressure to reduce costs and optimize seed use efficiency.

The BC Government has introduced aggressive greenhouse gas emission (GHG) reduction targets. They have also committed to achieve *net zero deforestation* (conversion of forestland to other uses, e.g. housing) in B.C. by 2012. The role of forests in offsetting GHG emissions under a regional cap and trade system has yet to be determined. Managing forests for carbon storage and biofuels is being considered and these will likely become new forest values.

Managing forests in response to climate change (adaptation) is also a focus of the Ministry of Forests and Range (MFR) under the Future Forest Ecosystem Initiative (FFEI). http://www.for.gov.bc.ca/hts/Future_Forests/. Changes to species selection guidelines and seed transfer standards are being examined so planted forests may be better adapted to future climates. Research in assisted migration is underway with the intent of introducing a new climate-based seed transfer system within 3-5 years (see O'Neill's summary). In the interim, minor changes to the elevational transfer limits for several species are being considered for the fall of 2008. Information and updates regarding changes to seed transfer will be posted at: http://www.for.gov.bc.ca/hti/climate_change/index.htm

Changes to species selection and seed transfer will have significant impacts on seed supply and use over the coming years. Increasing species diversity in plantations may increase seed demand for broadleaf species. Tree breeding programs and seed orchards may need to shift focus – and locations – as the climate warms. Seed crops in orchards and wild stands may also face increased incidence of insect and disease damage. Seed ownership and inventories will also need to move as the seed suitable for one operating area shifts over time. The utility of some seed sources will increase and the utility of others will diminish.

Seed Use Efficiency Meeting

Langley, BC July 30 & 31, 2008

Brian Barber, MA, RPF

A/Director, Tree Improvement Branch, BC Forest Service

Policy and Genetic Resource Management Directions: or *Who moved my seed?*

In response to the state of the forest industry, MPB, climate change and other drivers, the Forest Genetics Council of BC (FGC), Tree Improvement Branch and Research Branch undertook at *Challenge Dialogue™* with members of the genetic resource management (GRM) community of practice and stakeholders in 2006-08. The purpose of this dialogue was to create a collective vision and strategy for managing and conserving BC' forest tree genetic resources. This goal was accomplished and objectives for the 3 main components of GRM (Conservation, Resilience and Value) were identified. The final GRM report can be downloaded at:

http://www.for.gov.bc.ca/hti/grm/grm_dialogue.htm

This report will guide the establishment of the FGC's next 5-year strategic plan, which will include performance measures for the identified objectives.

In changing times and climes, seed demand and use will continue to change. To avoid surprises, take note of the sage advice offered by Stephen Johnson in his parable *Who moved my cheese?*

Change happens - *they keep moving the seed.* **Anticipate change** - *get ready for the seed to move.* **Monitor change** – *check the seed often so you know when it is getting old.* **Adapt to change quickly** - *the quicker you let go of old seed, the sooner you can enjoy new seed.* **Change** - *move with the seed.* **Enjoy change!** - *savor the adventure and enjoy the new seed!* **Be ready to change quickly and enjoy it again & again** - *keep moving the seed.*

Congratulations to the Tree Seed Centre in celebrating 50 years of excellence in cone and seed services.