



# ALBERTA FOREST GENETIC RESOURCES COUNCIL

*Forest genetic resources:  
Conserving diversity, enhancing productivity*

## Council Overview

The Alberta Forest Genetic Resources Council was created by the Provincial Government in the year 2000. It brings together representatives of the scientific, government and industrial communities in dialogue around how to maintain natural genetic diversity in Alberta's forests, as well as how to increase productivity in growth and yield, wood quality and pest resistance where appropriate.

Trees, like all living things, express long-term patterns of evolution and adaptation to changing environments. Their individual growth habits also show quite rapid responses to improvements in management or influences such as insect and disease outbreaks. All of these responses are influenced by genetic traits determined by their breeding history and parental lineage.

We must know how to preserve the diversity of Alberta's trees, and their genetic capability to adapt to changing environments, if we are to maintain the beauty, vitality and utility of the forests we enjoy today.

Council plays a central role in this work by providing review of provincial policy, monitoring activities in Alberta and nationally, and facilitating the sharing of information between all interested stakeholders.



## Forest Conservation

National criteria for Sustainable Forest Management have been established by the Canadian Council of Forest Ministers. One of these criteria is the level of genetic diversity maintained in provincial forests. Our performance is measured against indicators such as the maintenance of genetic diversity in reforestation, preservation of "wild" (unselected, unbred) populations within the forest, and conservation of wild seed and progeny in carefully managed facilities.

The Alberta Forest Genetic Resources Council takes an interest in and provides input to a number of strategic activities that support progress under this criterion. These activities include:

- A strategy for the conservation of forest genetic resources
- Annual reporting on the status of tree improvement activities in Alberta
- A national survey of policies and processes used in forest genetic resources management programs
- Development of criteria and indicators for genetic diversity





## Forest Productivity

Society has a stake in maintaining diverse, productive and healthy forest ecosystems. They provide renewable forest products that in turn provide us with jobs and tax revenues that sustain our way of life.

Members of the Alberta Forest Genetic Resources Council have an interest in the genetic characteristics of deciduous and coniferous forests that will maintain this sustainability in uncertain future environments.

Many industries (such as infrastructure, energy, agriculture and tourism) require ever-increasing access to the forest, and this could potentially put limits on the landbase available for the forestry sector. Trees with superior genetic traits are needed if the same level of production is to be achieved on a constrained landbase. Selection of "superior" parents and controlled breeding programs are providing Albertans with trees that can outperform their ancestors on public land—and even offer income alternatives for farmers and ranchers when trees are grown on private land.

As another example, uncertainties about future climatic conditions means many of our common tree species in urban and forested areas might need a helping hand with genetic adaptation to new environments. Breeding and species selection programs are powerful tools currently available to help us meet this and other challenges.

The Alberta Forest Genetic Resources Council focuses on these and other areas with a number of current and planned activities relating to forest productivity, including:

- Input to Standards for Tree Improvement in Alberta
- Review of policies to do with research and data sharing
- A genetic resources strategy addressing climate change
- Incorporation of genetic information into growth and yield models
- Research advocacy



## Sharing Knowledge

The Alberta Forest Genetic Resources Council is committed to the principle of increasing scientific information, and the sharing of that information, for the benefit of all Albertans.

The Council is engaged in a number of knowledge-sharing activities related to these goals:

- Technical workshops in conjunction with partners
- Annual report and summary of activities
- Fact sheets to assist media and members of the public
- Participation in open houses, & field tours
- Communication with government at all levels

## Council Members

The Council consists of a total of 13 members as follows:

Council Chair:	one member
Scientific Community:	three members. Scientific Community represents a balance, comprising expertise in forest genetics, tree improvement and forest management policy.
Industry Sector:	five members
Alberta Forest Products Association (AFPA) Representatives:	one for each of the following: Hardwood Sector, Softwood Sector, Scientific Expert, Co-operators (companies that contribute to the Provincial program), Non-AFPA Representative
Government Sector	three members from Alberta Sustainable Resource Development's Land and Forestry Divisions: Scientific Expert, Policy Expert, Forest Management Expert
Biological Sector	one member appointed to represent the non-fibre interests of the forestry and wildlife community

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Updated March 2008



Brochure:  
MediaMatch West  
Communications Inc., 2004