

**FGC** 

Forest Genetics Council  
of British Columbia

**STRATEGIC PLAN**  
2004–2008



## National Library of Canada Cataloguing in Publication Data

Forest Genetics Council of British Columbia. Strategic plan. -- 2004/2008-

Quinquennial.

ISSN 1710-3614 = Strategic plan (Forest Genetics Council of British Columbia)

1. Forest Genetics Council of British Columbia - Periodicals. 2. Forest genetics - British Columbia - Periodicals. 3. Forests and forestry - Research - British Columbia - Periodicals. I. Title. II. Title: Forest Genetics Council of British Columbia strategic plan.

SD399.5.B74

354.5'5'0971105

C2004-960033-8

Cover Photos:

Douglas-fir flowers at the stage of pollen receptivity

*Jack Woods*

Lodgepole pine orchard at Vernon Seed Orchard Company

*Don Carson*

Western redcedar female cones at the stage of pollen receptivity

*Annette van Neijenhuis*

## Table of Contents

<b>FGC Strategic Plan 2004–2008 Statement of Purpose .....</b>	<b>1</b>
<b>Background .....</b>	<b>1</b>
<b>Policy and Legislation .....</b>	<b>2</b>
<b>FGC Objectives .....</b>	<b>3</b>
<b>Structure and Membership .....</b>	<b>6</b>
Society and SelectSeed Company Ltd. ....	7
<b>Business Planning .....</b>	<b>8</b>
FGC Business Plan Development .....	8
<b>Strategic Issues .....</b>	<b>9</b>
<b>Principles of Cooperation .....</b>	<b>9</b>

## List of Tables

Table 1 Council membership structure .....	6
--	---

## List of Figures

Figure 1 Actual and forecast gain in volume (GWg) of orchard seed used (1995–2020) .....	3
Figure 2 Actual and forecast select seed use in British Columbia (1995–2020) .....	4
Figure 3 BC Forest Genetics Society and SelectSeed Company Ltd. organizational structure.....	7
Figure 4 Committee structure and development of the annual FGC Business Plan .....	8

---

## FGC Strategic Plan 2004–2008

### Statement of Purpose

Forests are the most important natural resource in British Columbia. Indigenous forest trees are the foundation of this resource, and the conservation and management of their gene pool is fundamental to all activities concerned with the use of forests.

The Forest Genetics Council of BC (FGC) leads a provincial forest gene resource management program that encompasses the conservation, controlled use, and enhancement of the genetic resources of forest tree species.

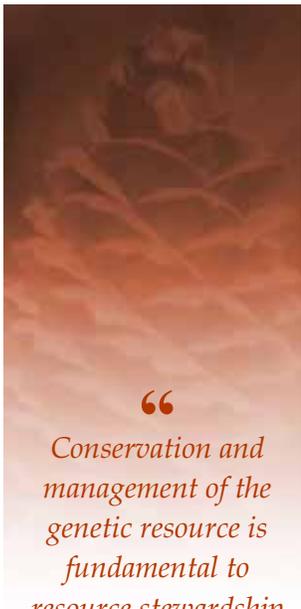
This Strategic Plan sets out objectives, business planning structure, and cooperative principles for the program coordinated and delivered by the FGC.

---

## Background

Forest gene resource management (GRM) in British Columbia is a shared responsibility between the Ministry of Forests and forest companies operating on Crown lands. GRM has historically been coordinated through cooperative Councils, beginning with the Plus Tree Board in the 1960s. The Forest Genetics Council of BC (FGC) provides a forum for policy development, business planning, and coordination among agencies and companies concerned with forest management.

Under present international treaty obligations for biodiversity and sustainability, the genetic resource is recognized as a basic element that allows all processes at the ecosystem and landscape levels to exist. The genetic resource is, therefore, beyond commercial value, and an essential element of biodiversity. Knowledge acquisition and management to understand and conserve the genetic resource will help ensure the long-term biological viability of a commercial forest industry. In addition, breeding and the production of improved germplasm will enhance commercial values and contribute to the maintenance of genetic diversity and adaptability.



“  
*Conservation and management of the genetic resource is fundamental to resource stewardship and good forest management*  
”

“  
*The genetic resource is an essential element of biodiversity*  
”



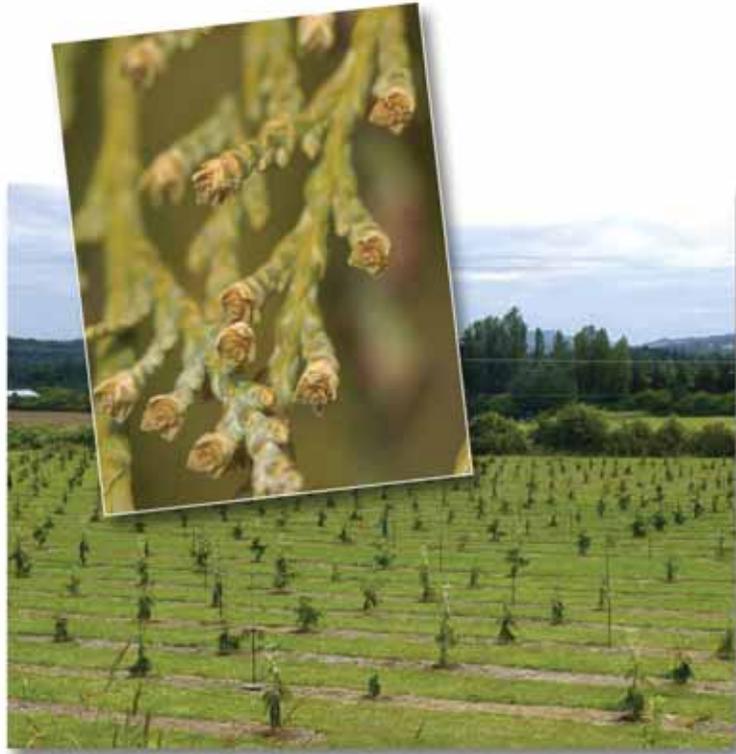
---

## Policy and Legislation

Responsibility and authority for stewardship of the forest resources of British Columbia are delegated to the Ministry of Forests by the *Ministry of Forests Act*. This responsibility includes stewardship of the genetic resource.

The *Forest Practices Code of British Columbia Act* and its associated Regulations currently govern tree seed production, registration, and use. In 2004, the *Forest and Range Practices Act*, associated Regulations, and Chief Forester Standards will govern these issues.

To deliver its obligations, the Ministry of Forests relies on, and contributes to, the broad forest gene resource management program coordinated by the FGC and implemented by cooperating organizations.



Western redcedar female flowers  
*R. Hill photo*

Western redcedar orchard, Western Forest Products Ltd.  
*Annette van Neijenhuis photo*

## FGC Objectives

### GOAL

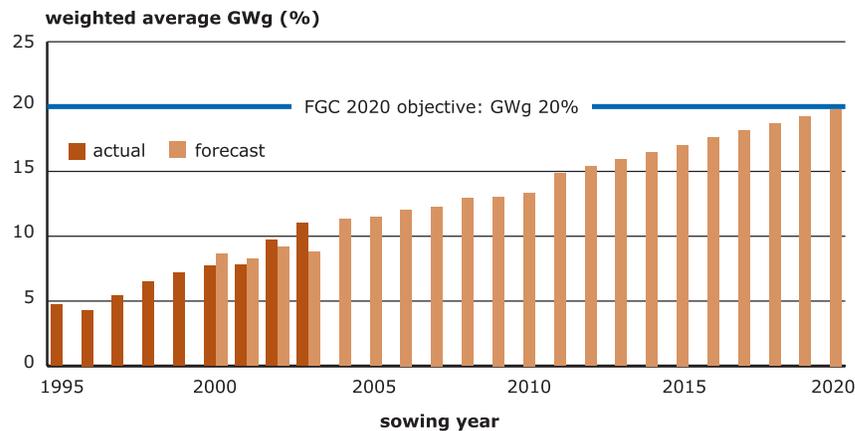
Lead the cooperative management of tree gene resources in British Columbia consistent with scientific and conservation principles

### OBJECTIVE 1

Increase the average volume gain of select seed used for Crown land reforestation to 20% by the year 2020

Gains in commercial traits require effective tree breeding programs and the coordination of breeding with seed orchard operations<sup>1</sup>. Success is highly dependent on the following elements, all of which will be supported through FGC planning and programs:

- expert human resources in Ministry of Forests breeding programs
- stable, long-term program support
- systems for the implementation and maintenance of long-term trials and records
- breeding arboreta, gene archives, and other resources required for long-term program delivery
- consistent and stable policy.



**Figure 1**

Actual and forecast gain in volume (GWg) of orchard seed<sup>2</sup> used (1995-2020)

<sup>2</sup> Seed orchards are the predominant means for producing select material in British Columbia; however, vegetative production systems are not intended to be excluded.

<sup>1</sup> "Select" describes seed and vegetative material having a level of genetic gain (GW>0). All seed and vegetative lots derived from orchards and production facilities (genetic Class A) and superior provenances (genetic Class B+) are considered to be select.

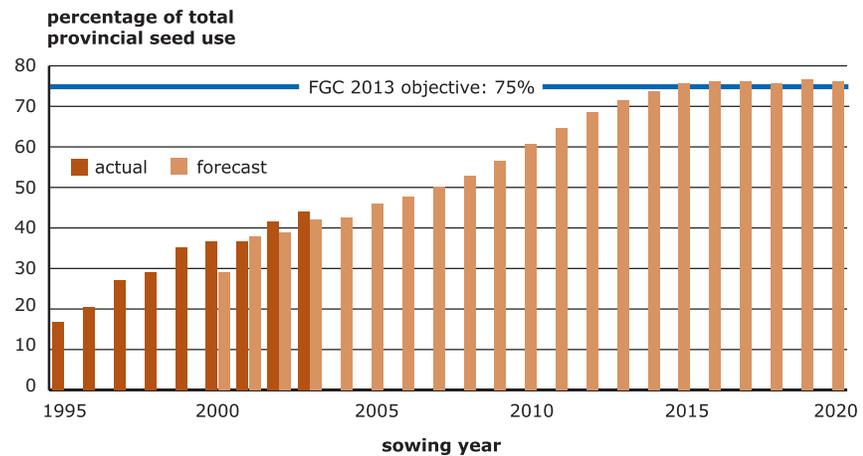
**OBJECTIVE 2**

Increase select seed use to 75% of the provincial total sown by 2013

Select material developed through breeding programs attains value only through operational deployment. The FGC will support seed orchard programs through business planning and policy development to ensure:

- adequate production capacity
- coordination with breeding programs
- development and sharing of technical information
- development of information systems for seed inventory, ordering, and marketing
- support for a viable seed market.

**Figure 2**  
Actual and forecast select seed use in British Columbia (1995-2020)



**OBJECTIVE 3**

Support gene conservation research and the cataloguing of indigenous-tree genetic resources

Effective gene conservation requires knowledge of population and conservation genetics, a comprehensive inventory of the forest-tree genetic resource, and the systematic identification of priority species and populations for conservation. The FGC will support policy development with government agencies, and where forest tree gene resources are at risk, will initiate appropriate conservation activities.

**OBJECTIVE 4**

Coordinate stakeholder activities and secure resources to meet Business Plan priorities

By setting clear strategic goals and objectives and by annual business planning, the FGC will:

- anticipate resource needs and act to ensure that these needs will be met
- seek needed resources
- develop program structure and resourcing to minimize reliance on annual program funding sources
- strive for programs increasingly self-financed through seed sales.

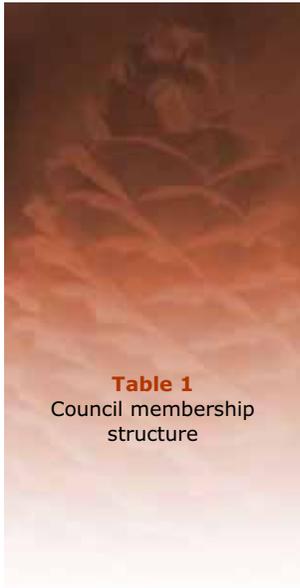
**OBJECTIVE 5**

Monitor progress in gene resource management activities

Business planning will include systems for monitoring and annually reporting progress by performance indicators at the provincial and project levels, and evaluating effectiveness on the landbase.



Controlled pollination of Douglas-fir  
*Jack Woods photo*



**Table 1**  
Council membership structure

## Structure and Membership

The Forest Genetics Council will be formally structured, with bylaws to govern membership, meetings, and decision-making. Membership on Council will be balanced among stakeholder groups, including seed producers and seed users.

Stakeholder	Members
<b>Co-chairs</b>	
- Industry	1
- Ministry of Forests	1
<b>Ministry of Forests</b>	3
<b>Industry</b>	
- Interior seed producer	1
- Interior seed users (north and south)	2
- Coast seed user	1
- Coast seed producer	1
<b>Coastal and Interior TAC Chairs</b>	2
<b>University</b>	1
<b>Canadian Forest Service</b>	1
<b>FIA (non-voting)</b>	1

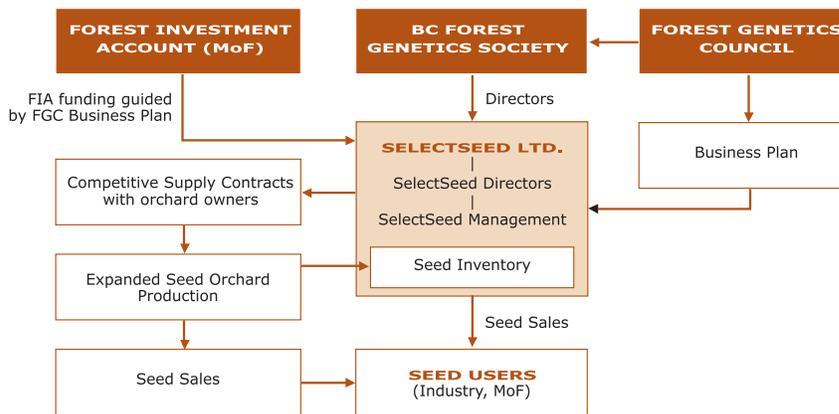
15



Douglas-fir flowers at the stage of pollen receptivity  
*Jack Woods photo*

### Society and SelectSeed Company Ltd.

Provincial seed production objectives require sufficient seed orchard capacity. This was recognized in Council’s 1998 Strategic Plan, and resulted in establishment of the BC Forest Genetics Society (Society) and SelectSeed Company Ltd. (SelectSeed). Figure 3 shows the relationship between Council, the Society, SelectSeed, and the Forest Investment Account (FIA).



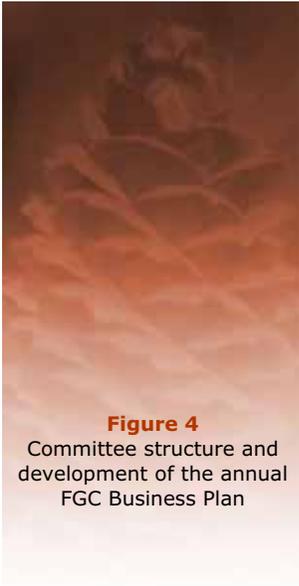
**Figure 3**  
BC Forest Genetics Society and SelectSeed Company Ltd. organizational structure

### SELECTSEED MISSION STATEMENT

*SelectSeed supports FGC objectives for the development of seed orchard facilities to meet the provincial demand for high quality, ecologically adapted tree seed through investments, cooperative work with FGC members, and effective program management.*



Interior spruce cones at Vernon Seed Orchard  
Jack Woods photo

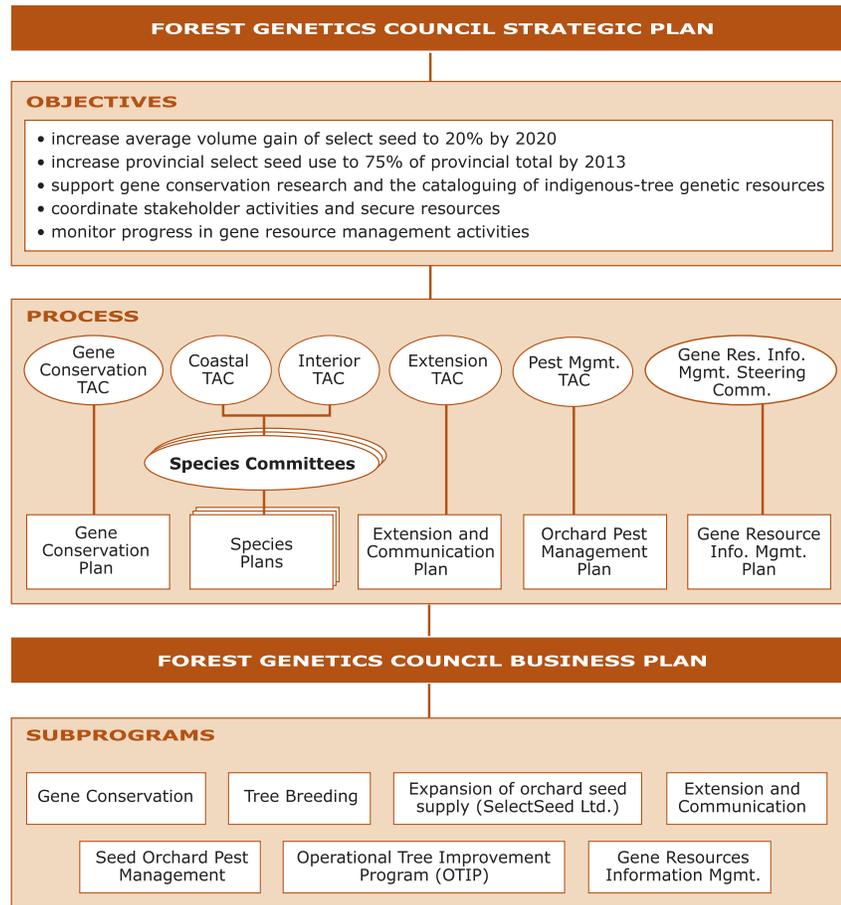


**Figure 4**  
Committee structure and development of the annual FGC Business Plan

## Business Planning

### FGC Business Plan Development

Council will annually develop a Business Plan, and report on progress using performance indicators. Figure 4 illustrates the relationship among Council, subcommittees, and Business Plan development.



---

## Strategic Issues

Changing circumstances result in challenges to the ongoing development and management of a provincial gene resource management program. From time to time, issues may arise that impact the ability of Council to meet stated objectives.

The Forest Genetics Council is positioned to act as a stakeholder forum for discussing and responding to strategic issues. Therefore, Council will maintain and support a standing Strategic Issues Committee that will identify challenges, develop background information, and lead discussion on responses at the Council level.

---

## Principles of Cooperation

The willingness of participants to work together has facilitated the success of the Forest Genetics Council and gene resource management in British Columbia. As cooperation is key to future success, Council will adhere to cooperative principles in all deliberations and program delivery.

“  
*Council will maintain a standing Strategic Issues Committee to identify challenges and lead discussion among stakeholders on strategic issues*  
”



Western larch cones  
*C. Walsh photo*

Picking cones in a western larch orchard  
*Chris Walsh photo*

