

MINUTES

Forest Genetics Council – Meeting March 19, 2014

Meeting held at the Sandman Signature, Richmond, BC

Attending: Brian Barber (Co-Chair), Larry Gardner (Co-Chair) Rob Guy, Domenico Iannidinardo, Stephen Joyce, Patti Kagawa, Joe LeBlanc, Dan Peterson, Barrie Phillips, Annette van Niejenhuis, Raoul Wiart

Regrets: Scott King, Mark Tamas, Gernot Zemanek

Others: Lorne Bedford, Lee Charleson, Neil Spendiff, Darrell Wood, Jack Woods

Action Items

Responsibility	Action Send a list of potential contractors who might provide tree breeding services to members of Council						
Annette							
Jack	Prepare a letter of thanks from Council to Dave Kolotelo for his work as GCTAC chair since 2005						
Annette, Dan, Barrie, Pia Smets, Dave Kolotelo, Jack	Form a subcommittee to review GCTAC activities and help provide direction and priorities to the genetic conservation subprogram.						
Jack	Prepare a letter by March 30, 2014, to Dave Peterson and Tom Ethier outlining the LBIS Tree Improvement Program budget allocations recommended by Council.						
Stephen	ITAC member will be informed of the issue of class-A seed sales for non THLB planting.						
Lee Charleson (TIB)	Track class-A seed sales for non THLB planting and report to Council in September, 2014.						
Jack	Refer to the Extension TAC the issue of informing seed users, particularly small licensees, of how and where to access Class-A seed.						
Jack	Put the remaining class-A seed use issues (issues 3 to 8 from the <i>Class A Seed Use Issues</i> report) on the agenda of the June or September 2014 FGC meeting.						
Stephen	The request for 2nd-generation Pli seed orchards from VSOC will be reviewed by the parties involved and then by the Interior Technical Advisory Committee and recommendations brought to the FGC.						
Jack	Distribute to FGC members the paper "Public and Private Participation in BC's Seed Orchards: Issues and Options" prepared by Woods and Barber, July 2009						
Brian	Prepare a response to the May 17, 2014 letter received from VSOC regarding 2nd generation Pli orchards.						
Jack	Distribute a copy of the community-of-practice strategic plan survey results to all people asked to complete the survey. Remove names and affiliations prior to distribution.						

Summary of Motions:

- **1. MOVED** (LeBlanc / van Neijenhuis): Minutes of the meeting held December 5, 2013 are hereby approved. CARRIED.
- MOVED (Phillips / Iannidinardo): Dr. Pia Smets is hereby appointed to a three-year term as chair of the Genetic Conservation Technical Advisory Committee effective April 1, 2014. CARRIED.
- **3. MOVED** (van Niejenhuis / Joyce): The budget recommendation shown in Table 1 is hereby accepted and will be recommended to Ministry executive members Dave Peterson and Tom Ethier. CARRIED.
- **4. MOVED** (van Niejenhuis / Gardner): The SelectSeed Business Plan for 2014/15 is hereby approved as presented in Table 1. CARRIED.



5. MOVED (Barber / Kagawa): There being no further business to discuss, the meeting is hereby adjourned. CARRIED.

Meeting called to order at 9:00 A.M. by Brian Barber (FLNR Co-Chair)

1. Agenda:

The agenda was reviewed and approved.

A letter of intent dated March 17, 2014 from VSOC to the FGC was added to the agenda under item 13; review of Chief Forester Principles governing seed orchards.

2. Minutes, old Business and Action Items from December 5, 2013

MOVED (LeBlanc / van Neijenhuis): Minutes of the meeting held December 5, 2013 are hereby approved. CARRIED.

Responsibility	Action	Action taken			
Brian, Barrie, Raoul, Annette + Jack and Alvin	Follow-up on the genomics lab action item from the October 18, 2013 FGC meeting	Ongoing communication with CWFC and FPInnovations			
Brian, Raoul, Annette, Mark	Follow up on the FGC Strategic Plan development item from the October 18, 2013 meeting	Done - discussed later in this meeting			
All FGC members	Provide comments to Jack if they want the Strategic Planning Subcommittee to consider any stakeholder engagements or items for the new strategic plan	Done			
Annette, Stephen	Put the species selection tool/CBST linkage on the winter 2014 ITAC and CTAC agendas	Discussed at ITAC; pending for CTAC (spring meeting)			
Brian, Annette, Stephen	Follow-up on linkages between the species selection guidelines and CBST and report to the FGC at the March, 2014 meeting	Underway; stakeholder workshop planned by FLNR			
Brian, Terje Vold	Prepare an executive summary and cover letter for the SelectSeed Review report prior to sending it to Tom Ethier and Dave Peterson.	Done			
Barrie	Work with TIB Forest Genetics Section staff to complete a succession plan, and make the plan available to Jack to pass along to the SelectSeed Board (no specific date set, but it is understood that this will be completed soon so as to not lose momentum with the current dialogue between the SelectSeed Board and Minister Thomson).	Plan passed along to SCL board; SCL board sent a 2nd letter to Minister Thomson			

The following action items from December 5, 2013were reviewed

Discussion took place on options to meet breeding needs in the absence of a functioning breeder succession plan within the FLNR. More use of consultants to provide this service was suggested.

ACTION: Annette will send a list of potential contractors who might provide tree breeding services to members of Council (CHECK WITH DARRELL AND ANNETTE ABOUT THIS)

3. Genetic Conservation TAC Chair

A resignation announcement from Dave Kolotelo was accepted with regret. Dave has held this position since March 2005 and has been key to the development of this important subprogram area. Council sincerely thanked Dave for his leadership and work in this role.

ACTION: Jack will prepare a letter of thanks from Council to Dave Kolotelo for his work as GCTAC chair since 2005

The GCTAC put forward the nomination of Pia Smets to replace Dave as GCTAC chair. Council thanked GCTAC for the nomination and accepted the recommendation.

MOVED (Phillips / Iannidinardo): Dr. Pia Smets is hereby appointed to a three-year term as chair of the Genetic Conservation Technical Advisory Committee effective April 1, 2014. CARRIED.

Jack summarized an email received from Dave Kolotelo that outlined his views on future directions for the GCTAC. These include:

- 1. For genetic conservation to become integrated and properly delivered, a full-time FLNR person is needed to work on this program area.
- 2. The genetic conservation catalogue is a foundation, but there are currently no plans or dedicated resources to keep it updated.
- 3. Cataloguing is a key component of work needed.
- 4. The purpose of genotyping work needs to be well defined and projects need to support this purpose.

Council supports the work being undertaken by the GCTAC and wishes to provide them with additional direction and resources if needed. To this end a subcommittee was struck.

ACTION: Annette v., Dan P., Barrie P., Pia Smets, Dave Kolotelo, Jack Woods. Form a subcommittee to review GCTAC activities and help provide direction and priorities to the genetic conservation subprogram.

4. BC Seed Orchard Association meeting support request

A letter was received from the Tia Wagner, representing the BC Seed Orchard Association, requesting \$4,000 support to assist with meeting costs for a June, 2014 meeting in Salmon Arm. This item was deferred until after the budget discussion, later in this meeting.

5. Update on climate-based seed transfer

Lee Charleson provided an overview of activities and progress in the FLNR-led climatebased seed transfer (CBST) project. This work is progressing, but has been held up by bottlenecks in government system-resource allocations. Lee believes that the FGC 2020 objective for climate-based seed transfer provincially is still realistic. Prototype development of systems that will allow user-access to CBST information is underway.

Council stated that this work is very important and should be a high priority.

6. Summary of LBIS Tree Improvement Program expenditures to date for 2013/14

Darrell Wood provided an overview of LBIS spending to date. It is estimated that about \$2.55 of a \$2.86 million budget will be spend. About 60% of the under-spending is due to breeding

programs not being able to proceed with some of the planned work. Other program areas were also down, including OTIP and Extension.

7. Land-Base Investment Strategy overview

Lorne Bedford, Deputy Director of Harvesting and Silviculture Practices Branch, outlined the programs and budget process for the LBIS. The provincial Tree Improvement Program is about \$2.5 million of an expected \$64 million budget allocation. At this time, the \$2.5 million allocation to the LBIS Tree Improvement Program is not confirmed.

In the 2013/14 fiscal year, the expectations placed on LBIS by the provincial government were expanded, but the funding was not. This created pressure and reductions in some program areas. Tree Improvement remained relatively stable. The overall LBIS budget is expected to remain at about \$64 million for two years and to increase in 2016/17.

Lorne also outlined expected planting through the Forests For Tomorrow program. This is expected to rise from 25 million this year to about 28 million per year after 2016. Tree improvement and seed production supports this program.

8. Subprogram budgets and business planning for 2014/15

Prior to reviewing subprogram budgets Council discussed appropriate levels of risk management. There was no risk management in 2013/14, but the Tree Improvement Branch (TIB) did risk manage some \$100 to \$150 thousand in previous years. It was agreed that some risk management within TIB is appropriate. Jack pointed out that SelectSeed could remove risk by guaranteeing that any risk-managed amount over the total LBIS allocation could be covered by SelectSeed if actual spending exceeded \$2.5 million. This would allow TIB to take on a larger risk-managed amount with less concern of over-spending.

More information on subprogram budgets is provided in material distributed in advance of the meeting. Table 1 shows budget proposals by subprogram. Subprogram budgets were discussed individually, but decisions on funding allocations were deferred until after all subprogram budgets had been reviewed. The following capture points raised for each subprogram.

Tree Breeding:

Annette and Stephen presented CTAC- and ITAC-approved budget recommendations for coastal and interior breeding programs of \$733,200 and \$896,500, respectively. These are for operational activities only and include no FLNR salary costs. This is an increase of >25% over the current fiscal year.

It is expected that reductions to this budget will be necessary, as it is over half of the total expected LBIS allocation. Barrie stated that he will have to work with breeders to bring forward a reduced budget that removes lower-priority work.

Operational Tree Improvement Program:

Darrell Wood presented the call-for-proposals process used and the outcomes of coast and interior proposal submissions and reviews. Proposals totaling about \$625,799 were received. The total for projects recommended by review committees is \$163,214 for the coast and \$349,060 for the interior (\$512,274 total). A second option would remove lower-ranked proposals, resulting in a total budget of \$482,483.



Extension

Jack reviewed the Extension TAC budget process and recommendations on behalf of Diane Douglas. It was suggested that the request for \$4,000 funding support from the BC Seed Orchard Association be considered under this subprogram. It was noted that the Extension subprogram has under-spent it's budget the last 2 years. Support for conferences was questioned, however, others felt that conferences are important and support is well spent as it allows more people to attend.

Genetic Resource Decision Support subprogram

Lee Charleson presented the budget recommendation from the Genetic Resource Decision Support TAC (DSTAC) on behalf of Guy Burdikin, DSTAC chair. All projects support the development of tools and policy linked to climate-based seed transfer.

Cone and Seed Pest Management:

Stephen presented the budget recommendation put forward by the Pest Management TAC. This budget includes 7 projects, all of which focus on seed orchard pests or on developing data in support of the registration of new pesticide options in seed orchards.

Genecology and Seed Transfer

Lee Charleson presented the budget recommendation from the Seed Transfer TAC. The callfor-proposals component of this budget includes 4 projects for the "A" budget and 3 projects for the "B" budget. A budget for the Forest Genetics Section of the Tree Improvement Branch was also presented. It was noted that the Forest Genetics Section genecology budget is closely linked to the tree breeding budget, as the same people do the work and some trials have both a genecology and breeding function.

Genetic Conservation:

On behalf of Dave Kolotelo, Jack provided an overview of the budget process followed by the Genetic Conservation TAC (GCTAC). Projects were approved for 4 groups (UBC Center for Forest Conservation Genetics, FLNR TIB Forest Genetics Section, FLNR Tree Seed Center, and the FLNR for whitebark pine blister rust screening (Michael Murray). It was recognized that the bulk of the UBC budget supports the ClimateWNA climate modeling work led by Tongli Wang and that this climate modeling work is a cornerstone to all forest climate-change work being done provincially for genetics projects and for other applied projects that are not directly related to the FGC-led provincial program.

Applied Tree Improvement and Biotechnology subprogram

Jack presented the budget recommendation from the Applied Tree Improvement and Biotechnology Steering committee. One proposal for \$189,000 was submitted to the Steering Committee. The committee worked with the proponent to streamline this proposal, and a final budget recommendation from the Steering Committee for \$159,400 was put forward.

Budget discussion and recommendation

The total of all budget requests summed to \$3,272,677 on a budget of \$2,500,000. Substantial discussion ensued regarding options for budget reductions. Risk management was considered important to increase budget efficiency and to allow implementation of more projects. As the FLNR cannot undertake risk management at the LBIS budget level, any risk management will have to be undertaken at the TIB level. The opportunity is available for SelectSeed to take on overspending risk on the total \$2.5 million budget. This will allow TIB to increase its risk management amount, knowing that SelectSeed can cover any overruns if

they occur. Budget recommendations are shown in Table 1. It is recognized that TIB will have to adjust these numbers to remove risk managed amounts prior to a recommendation going forward to LBIS and Ministry Executive, but the adjustments will not impact the intended allocations under the budget in Table 1.

Subprogram	2013/14	2014/15 TAC recommen- dations		"B" option	""	"C" option		FGC recommendation		
Genetic Conservation	\$ 251,940	\$	253,671	\$222,391		\$203,421	\$	222,391		
Tree Breeding	\$1,265,000	· .	1,629,700	\$1,466,730		1,222,275	Ψ	\$1,223,265		
Operational Tree Imp. Prog.	\$524,449		\$512,274	\$492,274	Ļ	\$492,274		\$512,274		
SelectSeed Ltd.	\$0		\$0	\$0)	\$0		\$0		
Extension and Communication	\$18,000		\$16,000	\$12,000)	\$12,000		\$12,000		
Cone and Seed Pest Mgt.	\$124,950		\$128,207	\$80,670)	\$53,240		\$80,670		
Genecology and Seed Transfer	\$386,785		\$419,825	\$351,940)	\$300,895		\$325,000		
Decision Support	\$65,000		\$115,000	\$95,000)	\$65,000		\$115,000		
Tree Imp. Branch administration	\$40,000		\$10,000	\$0)	\$0		\$10,000		
Applied Tree Impr. and Biotech.	\$182,173		\$189,000	\$159,400)	\$159,400		\$159,400		
Subtotal	\$2,858,297	\$	3,273,677	\$2,880,404	\$	2,508,505	\$	2,660,000		
TIB risk maangement			\$250,000	\$250,000)	\$250,000		\$160,000		
TOTAL	\$2,858,297	\$	3,023,677	\$2,630,404	\$	2,258,505		\$2,500,000		

Table 1. FGC budget requests and recommendations by subprogram.

MOVED (van Niejenhuis / Joyce): The budget recommendation shown in Table 1 is hereby accepted and will be recommended to Ministry executive members Dave Peterson and Tom Ethier. CARRIED.

ACTION: Jack will prepare a letter by March 30, 2014, to Dave Peterson and Tom Ethier outlining the LBIS Tree Improvement Program budget allocations recommended by Council.

9. SelectSeed Ltd. business plan

Jack presented a business plan for SelectSeed Ltd that was approved by the SelectSeed Board of Directors on March 11, 2014. SelectSeed anticipates total revenue of over \$842,000, which is sufficient to pay for both SelectSeed costs and for FGC management costs. There is no funding request for LBIS funds.

MOVED (van Niejenhuis / Gardner): The SelectSeed Business Plan for 2014/15 is hereby approved as presented in Table 1. CARRIED.

10. A-class seed use issues

Lee Charleson began the presentation of a report on the following seed-use issues:

- 1. Class A seed sales for non-THLB planting (carbon offset projects)
- 2. Access to class A seed from Ministry, private, and SelectSeed orchards
- 3. Request to use Class A seed on high site index sites only
- 4. Small class A seedlots in SPAR what to do with them
- 5. Multi-lot selection for climate-based seed transfer



- 6. Increasing the average genetic worth of seedlot use on Crown land
- 7. Single seed per cavity sowing for Class A seed in short supply
- 8. Direct seeding

Issue 1: Class A seed sales for non-THLB planting (such as carbon offset projects).

Action: This issue will be referred to TIAC members by Stephen for awareness.

Action: TIB will track seed use of this type and report to Council in September, 2014.

Issue 2: Access to class A seed from Ministry, private, and SelectSeed orchards:

Council deemed this to be primarily an extension issue, with information needs most needed for small seed users such as woodlot licensees or community forests to help them better understand how and where to access seed.

Action: This issue will be referred to the Extension TAC for consideration.

Due to limited time, discussion on the remainder of the issues referred to in the report presented by Lee will be deferred to a future meeting.

Action: Jack will put the remaining class-A seed use issues on the agenda of the June or September 2014 FGC meeting.

The authors of the report, Lee Charleson, Leslie McAuley, and Susan Zedel, are thanked for providing a thorough and useful summary.

11. Forecasting future seed supply

Larry provided an overview of seed need analyses undertaken by Vernon Seed Orchard Company partners. This suggests some significant demand drops for some seed planning units. Jack provided an overview of the current seed-need planning system used for species plans.

Following MPB impacts, particularly in central BC, there is strong evidence that seed demand will fall and that this information must be factored into seed orchard planning decisions.

A letter to the FGC dated March 17, 2014 from Dan Gaudet, Manager Vernon Seed Orchard Company, was tabled. This letter request that the 2010 Chief Forester Principles for Seed Orchard Management be respected and that VSOC be given consideration for the receipt of genetic material for 2nd- generation lodgepole pine seed orchards. In particular, VSOC is interested in orchards for the PG, CP and BV seed zones.

It was agreed that VSOC should receive access to material, but not necessarily exclusive access. Further, Council would like requests for new orchards to be reviewed by the Interior or Coastal Technical Advisory Committees.

Action: The request for 2nd-generation Pli seed orchards from VSOC will be reviewed by the parties involved and then Interior Technical Advisory Committee and recommendations brought to the FGC (Stephen).

Action: Respond to the March 17th, 2014 letter received from VSOC (Brian).

12. Chief Forester Principles for governing seed orchards

The document "Guiding Principles Respecting Public and Private Seed Orchard Management in BC" was briefly reviewed by Jack. This document was completed in 2010 and was



developed from a "Guiding Principles" document prepared in 2009 by Jack and Brian. These documents are still relevant.

Action: Jack will distribute to FGC members the paper "Public and Private Participation in BC's Seed Orchards: Issues and Options" prepared by Woods and Barber, July 2009.

13. FGC Strategic Plan development and survey results

An overview of results from the community-of-practice survey on genetic resource management was presented by Jack. It was generally agreed that these results do not suggest that any significant change in FGC strategic direction is needed. The Strategic Plan Review Committee will continue to the next stage of stakeholder input and discussion.

Action: Jack will distribute a copy of survey results to all people asked to complete the survey and will remove names and affiliations prior to distribution.

MOVED (Barber / Kagawa): There being no further business to discuss, the meeting is hereby adjourned. CARRIED.

Meeting adjourned at 4:20 PM.

Next meeting: June 2013 – Date to be determined – conference call

Minutes prepared by Jack Woods and Darrell Wood