

AGENDA

**9:00 am – 3:30 pm
Thursday, March 12, 2015**

Location:

Sandman Signature, 10251 St Edwards Dr, Richmond, BC
Phone:(604) 278-9611
(Jack's cell 250-715-6285)

Time	Length (min.)	#	Item	Presenter
8:30			Coffee available	
9:00	5	1	Review agenda	
9:05	15	2	Membership, minutes, old business and action items from Dec. 17, 2014	Jack / Brian
9:20	15	3	Extension program; Chair retiring and program direction	Lee Charleson
9:35	15	4	Subcommittee report on seed production and sales for non-THLB use	Jack for Domenico
9:50	10	5	Update on climate-based seed transfer project	Lee Charleson
10:00	10	6	Summary of 2014/15 FGC LBIS budget expenditures	Darrell Wood
10:10	20	7	Technical presentation on Fdc realized-gain trials	Michael Stoehr
10:30	15		Break	
10:45	75	8	2015/16 LBIS Tree Improvement Program budget	
			- Overview	Jack
			- Tree Breeding	Michael, Annette, Stephen
			- OTIP	Darrell Wood
			- Genetic Resource Decision Support	Lee Charleson
			- Seed and Cone Pest Management	Stephen
12:00	45		Lunch – to be provided	
12:45	40	8	Budgets continued	
			- Seed Transfer / Genecology	Lee Charleson
			- Genetic Conservation	Jack for Pia Smets
			- Applied Tree Improvement and Biotech	Jack
			- Final budget allocation and recommendation	all
1:25	20	9	SelectSeed Business Plan	Jack
1:45	15	10	Update on interior seed orchard capacity needs; changes with timber supply and climate-change adjustments	Jack
2:00	15		Break	
2:15	60	11	FGC Strategic Plan for 2015-2020: Subcommittee presentation of draft	Brian / Raoul / Annette / Mark Tamas
3:15	5	12	Succession planning	Brian / Jack
3:20	10	13	New business	
3:30			Adjourn	

Conference call planned for June 18, 2015
FGC meeting plus BC Forest Genetics Society and SelectSeed AGMs

Agenda item 2 - Old business, minutes, action items from Dec. 17, 2014

Membership

Gerry MacDougall is welcomed to Council. Gerry is Regional Executive Director for the FLNRO Cariboo Region in Williams Lake.

Action Items

Responsibility	Action	Action taken
Stephen	Lead a review by ITAC members of sowing factors currently used in species plans.	In progress - to be presented
Jack	Assist Stephen with an ITAC review of sowing factors, incorporate new sowing factors and seed orchard production profiles in the supply/demand analysis, and update the " <i>Interior seed demand and supply</i> " report for review at the March, 2015 FGC meeting.	In progress - to be presented
Brian, Lee, Jack	Seek input from all TAC chairs on extension needs and develop options for FGC discussion prior to the March 2015 meeting.	Done
Domenico (chair), Scott, Annette, Stephen (Jack to support)	Develop principles for the sale of Class A seed for use outside the timber harvest land base in BC for discussion at the March, 2015 FGC meeting.	Report prepared
Jack	Include both CBST and succession planning on the agendas of all future FGC meetings.	Done
Jack	Initiate the process of finding a new Industry Co-Chair for Council with the intent that a new person will be in place before June, 2015.	In process
Jack	Conduct a Doodle Poll to find a date for the March, 2015 meeting within the range of March 11th to 20th.	Done

A resolution approving minutes from December 17th is needed.

3. Extension planning

A survey was conducted by Lee Charleson and Jack to gather input on how extension can be delivered and on whether a specific Extension Technical Advisory Committee is needed. Lee will present the results.

4. Subcommittee report on seed production and sales for non-THLB use

Domenico chaired a committee to review this issue. A report will be presented (to be sent as a separate file).

5. Update on the Climate-Based Seed Transfer Project - Lee Charleson

Lee Charleson will provide an update on progress

6. Summary of LBIS Tree Improvement Program expenditures to date - Darrell Wood

Darrell will provide an overview of expenditures to date across all subprograms for the year ending March 31, 2015.

7. Coastal Douglas-fir genetic realized-gain trials - Michael Stoehr

Michael will present results from Fdc genetic realized-gain trials. These trials estimate volume gains on a per-hectare basis with select seed relative to wild seed. Four stand spacings are also included. Results are very encouraging. An extension note on these trials is available at:

<http://www.fgcouncil.bc.ca/Factsheet2-DFir-13Apr11-Web.pdf>

8. LBIS Tree Improvement Program budgets by subprogram

Breeding (Michael, Annette, Stephen)

Breeding Subprogram budgets for 2015/16 were presented to the CTAC and ITAC by FLNR Tree Improvement Branch breeders responsible for each species. The following budgets are recommended by the CTAC and ITAC.

Reduced budget options were discussed. Given the number and complexity of projects, however, there is general agreement that any reductions should be applied to the total allocation by the FGC and management of the reductions should be done by TIB management and breeders. As a result, only the full amount requested is shown here.

Breeding budget recommendation for 2015/16

Species	Budget recommended by TACs
Coast	
Coastal D-fir	\$ 165,000
Redcedar	\$ 261,000
Yellow cedar	\$ 37,000
Western hemlock	\$ 38,000
Sitka spruce	\$ 47,000
White pine - coast	\$ 39,500
Alder	\$ 48,000
TOTAL COAST	\$ 635,500
Interior	
Lodgepole pine	\$ 325,000
White pine	\$ 57,000
Interior spruce	\$ 158,000
Interior D-fir	\$ 112,000
Western larch	\$ 147,000
Broadleaves	\$ -
TOTAL INTERIOR	\$ 799,000
Coast + interior	\$1,434,500

Operational Tree Improvement Program (OTIP) (Darrell Wood)

The OTIP call for proposals process was unchanged from previous years. This included Species Committee and TAC recommendations on priorities and eligibility, a Call for Proposals, submission of projects, review of proposals by committees, and presentation of a recommended list of projects to the FGC. The budgets listed below are recommended by OTIP Review Committees.

OITP proposed budget options for 2015/16

Area	No. proposals received	Total requested	Total recommend by review committees	"B" option >75
Interior	46	\$477,436	\$342,406	\$331,341
Coast	20	\$167,153	\$142,025	\$130,201
Total	66	\$644,589	\$484,431	\$461,542

Genetic Resource Decision Support – Lee Charleson

The following projects were developed by Tree Improvement Branch staff, and reviewed and recommended by members of the Genetic Resource Decision Support steering committee (Chair, Buy Burdikin). All projects to be delivered through the Tree Improvement Branch.

2015/16 Genetic Resource Decision Support project recommendations.

Project	Recommended budget	B budget
A GIS (Geographic Information System) support	\$45,000	\$45,000
B Climate Based Seed Transfer (CBST) project management and facilitation	\$20,000	\$20,000
C CBST: generating project acceptance	\$20,000	\$0
Total	\$85,000	\$65,000

Seed and Cone Pest Management (Stephen)

Proposals submitted to the Pest Management TAC were evaluated by the Committee based on priorities for species and pests. Proposals for work in 2015/16 were contributed by scientists and practitioners, and developed by FLNR pest management staff in conjunction with PMTAC members. Proposals and associated budgets were reviewed by the PMTAC.

2015/16 Cone and Seed Pest Management Subprogram budget recommendation.

Project name	Project Leader	Budget recommendation	
		A	B
Adult host selection preference of spruce budworm for Douglas-fir	Ward Strong	\$1,890	\$1,890
Potential for symbiont-mediated pesticide resistance in the conifer seed pest, <i>Leptoglossus occidentalis</i>	Steve Perlman	\$25,628	\$ -
Matador and Delegate Area-Wide Trials - 2014	Jack Woods	\$20,564	\$20,564
Cone and Seed Pest Management – Operations Budget for the Ministry Biologist	Jim Corrigan	\$24,300	\$24,300
Determine if combining Matador applications and Harvest Timing Profile crop collection strategies will result in increased seed yields in an Interior Pli orchard	Gary Giampa	\$6,216	\$6,216
Cone and Seed Pest Research Lab	Ward Strong	\$5,250	\$5,250
Area-wide trials of Delegate against <i>Dioryctia</i> in Spruce	Ward Strong	\$12,852	\$12,852
Total budget		\$ 96,700	\$ 71,072

Seed Transfer and Genecology

There are two components to this subprogram; a proposal call and MFLNRO-TIB genecology project support. Two proposals were submitted to the call. They were reviewed by a committee and funding recommendations follow

2015/16 Seed Transfer TAC budget recommendations

Seed Transfer TAC budget	Option A	Option B
Ministry genecology work	\$ 408,500	\$ 347,225
External projects (2 projects in Options A and B)	\$ 73,827	\$ 73,827
TOTALS	\$ 482,327	\$ 421,052

TIB Forest Genetics Section genecology budget request

Species	2014/15	Species	2014/15
Pli	\$0	Ss	\$16,000
Fdc	\$34,000	Ba	\$15,000
Cwc	\$ 12,000	Fdi	\$55,000
Sx	\$61,000	Act	\$14,500
Hw	\$29,500	Mb	\$10,000
Bl	\$19,500	Bn	\$1,000
Lw	\$ 15,000	Yc	\$ 15,000
Bg	\$ 1,000	Alder	\$5,000
Cwi	\$19,000	AMAT	\$86,000
		Total	\$408,500

Genecology projects submitted through a call for proposals

Project Title	Project Leader	Amount Requested	"B" budget option
AdapTree: Assessing the adaptive portfolio of reforestation stocks for future climates	Sally Aitken	\$53,570	\$53,570
Identifying cedar blight resistance to develop durable and resistant western redcedar populations for future climates	Barbara Hawkins	\$20,077	\$20,077
Recommended budget		\$73,827	\$73,827

Genetic Conservation

Process:

Genetic conservation work is directed by a plan approved by the FGC in January, 2012. Activities were discussed by the GCTAC, and projects developed by the MFLNRO (led by Charlie Cartwright), the UBC Centre for Forest Conservation Genetics (led by Sally Aitken), and the Tree Seed Centre (led by Dave Kolotelo). An additional proposal to screen whitebark pine for blister rust resistance was submitted by Michael Murray (FLNRO) and is supported by the GCTAC. Detail on individual line items will be provided at the FGC meeting.

Genetic Conservation subprogram budget recommendations

Project	Budget recommendations	
	Option A	Option B
UBC Center for Forest Conservation Genetics	\$170,950	\$147,500
Tree Improvement Branch - Forest Genetics Section projects	\$45,000	\$35,000
Tree Improvement Branch - Tree Seed Center project	\$46,000	\$39,000
S. Int. Region (FLNRO) Whitebark pine blister rust screening	\$21,970	\$17,470
Total	\$283,920	\$238,970

Applied Tree Improvement and Biotechnology - Jack

This subprogram provides funding to technical proposals that support FGC objectives but do not fit other categories. A steering committee reviews proposals submitted and makes budget recommendations to the FGC. Three proposals were submitted for FY 2015/16. Two proposals were rejected prior to review as they were unsolicited and would not have been feasible within the limits of FLNRO contract administration. One proposal is a continuation of 2014/15 work. The single proposal will be reviewed by the steering committee on March 9th. The results of the review are not available at the time of writing, but will be available for the March 12th FGC meeting.

2014/15 Applied Tree Improvement and Biotechnology budget recommendations.

Project title	Budget request	Recom- mendation	Option B
Cone yield and seed shortfall: Unravelling the contribution of pathogenic fungi to seed shortfall in lodgepole pine and developing practical cone induction methods for lodgepole pine and Douglas-fir (2015/16) W. Hintz and L. Kong (U. Vic)	\$ 189,324	\$139,050	\$125,550

Summary of 2015/16 LBIS – Tree Improvement Program budget recommendations

The expected allocation from the Land Base Investment Fund to the Tree Improvement Program is \$2.5 million. The following table summarizes budget recommendations from FGC advisory committees. Note that the level of risk management (if any) the TIB is willing to take has not yet been determined. An updated version of this table will be presented at the March 12th meeting.

Subprogram	2014/15 approved	Requested amount	2015/16 A	2015/16 B
Genetic Conservation	\$ 222,391	\$ 283,920	\$ 283,920	\$ 238,970
Tree Breeding	\$ 1,223,265	\$ 1,434,500	\$1,434,500	\$1,291,050
Operational Tree Imp. Prog.	\$ 512,274	\$ 644,589	\$484,431	\$461,542
SelectSeed Ltd.	\$ -	\$ -	\$0	\$0
Extension and Communication	\$ 12,000	\$ -	\$0	\$0
Cone and Seed Pest Mgt.	\$ 80,670	\$ 96,700	\$96,700	\$71,072
Genecology and Seed Transfer	\$ 325,000	\$ 482,327	\$482,327	\$421,052
Decision Support	\$ 115,000	\$ 85,000	\$85,000	\$65,000
Tree Imp. Branch administration	\$ 10,000	\$ 10,000	\$10,000	\$10,000
Applied Tree Impr. and Biotech.	\$ 159,400	\$ 189,324	\$139,050	\$125,550
Subtotal	\$ 2,660,000	\$ 3,226,360	\$3,015,928	\$2,684,236
TIB risk mangement	\$ 160,000	\$ 160,001	\$160,000	\$160,000
TOTAL	\$ 2,500,000	\$ 3,066,359	\$2,855,928	\$2,524,236
Deficit		\$ (566,359)	(\$355,928)	(\$24,236)

9. SelectSeed Business Plan

The SelectSeed Business Plan was sent as a separate document.

SelectSeed develops and manages orchards through contracts to meet objectives set by the FGC, and provides management services to Council. This plan was approved by the SelectSeed Board of Directors on March 5, 2015.

The full set of activities and a budget are described in the Business Plan. No LBIS funds are requested through the SelectSeed Multi-Year Agreement. SelectSeed anticipates spending \$242,600 on FGC business and support, including \$100,000 for an interior breeder, on a total budget of \$870,800. Seed sales and other income for the fiscal year ending March 31, 2015 are forecast to be \$612,000.

10. Update on interior seed orchard capacity needs; changes with timber supply and climate-change adjustment - Jack

A report on interior Fdi, Pli and Sx seed supply and demand expectations was presented at the December meeting. Further work has been done to refine nursery factors and orchard production expectations. This work is ongoing and a final report will not be available until the June meeting. An update will be presented.

12. Strategic Plan for 2015-2020 - Strategic Planning Committee

A draft Strategic Plan was distributed for review. Process and the current draft will be presented by Committee members (Brian, Annette, Raoul, Mark T., Jack)

13. Succession planning (Brian / Jack)

SelectSeed Ltd. is providing funding to the Tree Improvement Branch to hire an interior breeder. Interviews were held the week of March 2nd. An update will be provided.

Conference call planned for June 18, 2015
FGC meeting plus BC Forest Genetics Society and SelectSeed AGMs