

GCTAC Conference Call Minutes (Feb. 1/07)

On-line: Sally Aitken; Brian Barber; Scott Green; Andreas Hamann; Dave Kolotelo; Greg O'Neill; Tongli Wang; Jack Woods; Alvin Yanchuk

Absent: Alex Woods

Defining GCTAC Mandate

1. To provide guidance and recommendations to the FGC on gene conservation issues of indigenous forest trees.
2. To provide guidance to the Centre for Gene Conservation and receive reports.
3. Make recommendations to approve budget requests for genetic conservation of indigenous tree species.
4. To lead development of genetic conservation strategies and programs.
5. To bring together a wide range of expertise to address issues in genetic conservation.
6. Develop genetic conservation measures.

We decided that it is not practical or reasonable to complete a gene conservation plan for the March 14th FGC meeting. Initially it was felt that March was a critical budget point for resourcing the gene conservation plan. The entire process of having resources allocated to genetic conservation activities is realistically estimated at one year. There does not seem to be justification to rush the planning part as this will form the backbone of the entire process. The probable process is that GCTAC will forward a plan with recommendations to FGC, then FGC will forward a request for gene conservation resources to Jim Snetsinger and then there is the challenge of finding the right person. It was indicated that the obvious gaps appear to be in three areas with a requirement for different skill sets.

1. A person to fill in our gaps in either information (ground-truthing) or 'solving' some of the most critical genetic conservation issues. Very much a field-oriented set of duties.
 2. A person to maintain and update the large database(s) that have been used in the cataloguing process. This may initially stay at UBC. The location of the database (i.e. LRDW with government) was also suggested. We discussed the need to have annual/biennial updates and larger updates (rerunning everything) could be done at 10-year intervals indicating 2011 as a potential timeline for re-running the entire analysis based on new data.
 3. A person dedicated to extension and liaising with other genetic conservation initiatives to represent tree genetic conservation. Someone with a good technical background and with the appropriate skill set (excellent writing and oral presentation skills).

We also discussed what we need to specifically state scope of genetic conservation (indigenous forest trees) and that it should be presented in the context of the Chief Forester's vision for Sustainable Forest Management.

Performance Measures

Surprisingly, Jack raised the issue of performance measures. This led into a discussion and brief status report of the cataloguing project. There was agreement that **at least** one of the performance measures would center on the cataloguing project.

There were a variety of measures or ideas brought forth:

1. The percentage of Species*BEC zone combination in which genetic conservation is considered adequate (STATUS)
2. A reporting of activities to increase genetic conservation of indigenous trees..
3. Whether we need different measures for commercial and non-commercial species

We also discussed that specific projects could have specific performance measures, but there is a need for an overarching genetic conservation Performance Measure.

Genetic Conservation Responsibility Matrix

Based on our discussions we revised the matrix. Below is a summary of our discussions. <<Gene Conservation Responsibility Matrix.doc>>

Cataloguing As a very brief review the cataloguing project will be divided into two major chapters. The first will review the in-situ conservation status of the 49 BC tree species investigated across the biogeoclimatic zones. The second will focus on our commercial species (those with designated Seed planning Units). In addition to in-situ reserves on an SPU basis, information from the ex-situ seed bank and inter-situ reserves will also be incorporated into chapter 2. The amount of ex-situ and inter-situ reserves for non-commercial species is limited. Chapter 2 delivery is dependant on contributions from Dave (ex-situ details) and Alvin (inter-situ details).

There are certain technical issues that need to be addressed? How much is enough? If a species is well –represented in several BEC zones, but only spills over into a small portion of another zone is it really a big concern in that secondary or tertiary zone. The report will integrate all available information into an assessment of the conservation status of the individual cell (Species*BEC or SPU) as inadequate, adequate or questionable (needing ground-truthing or other verification). The inadequate and questionable cells would form a framework for some of the operational genetic conservation activities.

There exists other reserves (i.e. old growth reserves) and areas in which logging is limited that are not currently included in the cataloguing project. Genetic conservation of trees can also benefit from efforts in other species. An example is the Gulf Islands National Park which will assist in the conservation of species that currently have inadequate protection. Available information on minor species has been used to set research priorities not conservation priorities.

Climate Change We discussed the dichotomy of climate change work at the CFGC. The work that deals with evaluating the ability of reserves to maintain population diversity under climate change scenarios was considered core to the CFGC mandate. Other

projects appear more operational in nature such as Pia Smets growth chamber work on seedlot response curves to climate change and work on transfer guideline adjustment and seed source selection under climate change scenarios. These operational projects are not solely funded through FGC as the NSERC Strategic grant and other funds (MOFR with Dave Spittlehouse, [????](#) Coops)

Climate BC was discussed in terms of improvements by removing the ‘scattered’ predictions of the flying BEC zones enabling specific variant to be predicated as a two-dimensional unit. The Climate BC was also used operationally to forecast the appropriate seedlots to select for the UBC research forest over a 50-year planning timeframe. Climate change direction will likely be influenced by the Future Forest Ecosystem Initiative that is meeting today (01/02/07) . This is generally viewed as the Chief Foresters umbrella initiative for this vision of Sustainable Forest Management. The Climate Impacts Consortium was also indicated as a good group to link with. Greg indicated a project he initiated with Ministry of Education using Climate BC as a school exercise. A great idea and I think we’d all like to see this. Greg, could you please forward additional information to GCTAC. Thank you.

Pests Some of the work on pests and threat indices have a long history in BC such as the threat index for SS and the terminal weevil. We thought that this was the logical place for MPB issues. A larger comprehensive threat index indicating potential problem increases with climate change was part of this item. Alex, you may want to expand this concept to the group as you visualize it. Thank you.

Genetic Conservation Strategies and Activities

A general agreement on the indicated activities. It was noted that there about 1400 Sx lines in storage, but unfortunately no SS.

Extension There was general agreement that this is extremely important and not currently adequately resourced in the MOFR. I took the liberty of inserting this into the skill set requirements in which we currently have gaps for.

Policy We didn’t specifically discuss this, but with Brian on GCTAC we should be kept updated on any policy developments regarding genetic conservation and areas in which GCTAC may play a role.

Leftovers

Whitebark pine Workshop We decided that the earliest possible reasonable date for a whitebark pine workshop would be August/07. Diane Douglas will resurrect this initiative.

Extension Item – currently there is some ETAC money ear-marked for a genetic conservation of trees poster. It does not seem reasonable to complete a poster before fiscal end or even before we complete our genetic conservation plan. It appeared that an FGC Extension Note is worthwhile to pursue. There was some differences in opinion on whether a) we needed to complete the cataloguing work before this initiative b) whether we could produce this after Chapter 1 of the cataloguing project is complete or c) whether the extension item is more general to the basis of extending information on tree genetic diversity and possibly its ‘maintenance’ under current forest management activities. Your comments are warmly welcomed.

Dave Kolotelo, RPF

Cone and Seed Improvement Officer

