

**December 10, 2010 minutes**

Location: Provincial Tree Seed Centre – Surrey

**Attendees:** Dave Kolotelo (chair), Sally Aitken, Brian Barber, Lee Charleson, Jodie Krakowski, Don Pigott, Tory Stevens, Diane Douglas, Tongli Wang, Jack Woods. By phone – Andreas Hamann, Scott Green, Alex Woods

1. **Welcome and opening remarks:** Heather Rooke welcomed everyone to the Seed Centre and provided an overview of Seed Centre activities.

2. **GCTAC section on FGC website:**

**Action:** remove password protection (Jack)

3. **Membership:**

Alex Woods resigned his position on GCTAC, citing lack of time to devote to the needs. Alex was thanked for his participation and contribution.

**Action:** Dave will send a thank-you letter to Alex Woods on behalf of the GCTAC.

Discussion ensued on finding a new person who can bring a forest health perspective. Alan Carroll from UBC and Jennifer Burleigh from the MFML (MNRO?) were suggested.

**Action:** Sally will contact Alan Carroll and request his participation on GCTAC.

If Alan is unwilling to join the GCTAC, Jennifer Burleigh will be asked to join.

In addition, it was agreed that a MFML or MNRO pathologist should be on GCTAC to bring a provincial perspective on forest health. It was agreed that Michael Murray would be contacted (first choice), and if Michael is not able to join GCTAC, Harry Kope would be approached

**Action:** Dave will contact Michael Murray and request his participation on GCTAC.

4. **Genetic Conservation plan:**

Discussion took place on priorities and how these are set out in the 2007 Genetic Conservation plan. Currently-used performance indicators (matrix of species x SPU and conservation status), suggests that little work is needed. This needs to be re-visited, as the indicators do not well reflect the needs that are there.

**Moved** that GCTAC will re-visit the 2007 Genetic Conservation plan and recommend updates to the FGC (Jack / Jodie). CARRIED

5. **Activity and budget updates:**

Dave requested support for a reallocation of \$1,786 to the *ex situ* collection component from the seed bank and big leaf maple allocations. Supported.

Sally provided an update on projects at the UBC Centre for Forest Conservation Genetics. Projects are on budget and on schedule.

Jodie overviewed her projects. Her work and projects were restricted by current provincial government travel and contracting limitations. Brian pointed out that this should improve next year, and that the process for contract approvals needs to start now based on a projection of similar funding in 2011/12 so they're ready at the beginning of the fiscal year.

**6. Genetic conservation and climate change – Tongli and Sally:**

Tongli presented work done on the interpolation of climate models to better understand ecosystem and species shifts, and introduced the new features in ClimateWNA. The question was raised as to how we address genetic conservation under shifting climates and species ranges. This suggests the need for a more strategic approach to prioritizing *ex situ* collections incorporating risk assessment. It was also suggested that any response by this group and others will be tied to the tools available to effect a result (i.e. policy, operational planting, *ex situ* collections, etc.). As these tools apply differently to each species, it would be useful to categorize species and strategies according to the tools available to impact genetic conservation status.

Scott suggested including a baseline case “hands-off” scenario to assess potential for adaptation in order to better understand the relative effects of proposed management options and potential efficacy of natural selection under rapid climate change. I.e. effects of microsite can play an important role at northern limits; shifting composition across the landscape of forested and non-forested ecosystems. Emphasized the importance of monitoring.

**7. Whitebark pine:**

Dave provided an overview of whitebark pine (Pa) activities. The recent COSEWIC recommendation to list Pa under the Species at Risk Act (SARA) was discussed, and it was suggested that sending a letter of support for listing Pa under SARA should be written and recommended to the FGC .

**Action:** Jodie will prepare and distribute a letter of support to the Director General of the Canadian Wildlife Service for listing Pa under SARA, as recommended by COSEWIC.

**Action:** Jack will put the GCTAC recommendation on the FGC agenda for December 15<sup>th</sup>.

Don Pigott provided an overview of the non-profit society the Whitebark Pine Ecosystem Foundation (WPEF) of Canada. This new society is similar to the US-based WPEF, and is chaired by Randy Moody with a 5-member board. Activities are beginning with various groups, including workshops. FGC membership in the WPEF was discussed.

**8. Whitebark pine genetic conservation strategy – Jodie:**

Jodie's report, entitled “*Genetic conservation strategy for whitebark pine in British Columbia*” was discussed. Sally suggested that this become a “living document”, meaning that we will undertake activities as we can and update it regularly. Obtaining seed is the first and most important step.

**Moved** that the *Genetic conservation strategy for whitebark pine in British Columbia* prepared by Jodie is accepted and activities will be incorporated into annual business plans as funding and time allow (Sally / Lee) CARRIED.

**Moved** that at least 100 viable seeds from each of 10 trees per population will be maintained for the *ex situ* conservation collections, and seeds in excess of this minimum will be considered surplus for other uses. Decisions regarding the use of excess seeds will be made by a subcommittee of the GCTAC to be set up by the GCTAC Chair (Jack / Lee) CARRIED.

To reduce the potential for time-consuming and resource-intensive stratifying and growing at the TSC, it was discussed that TSC give allocated surplus seed right out of storage with an information sheet on collecting, stratifying, growing, and storing seed. The requester would be responsible for subsequent activities and outcomes.

**Action:** Diane and Jodie will look into setting up a workshop, to be supported by the Extension TAC, on the collection of Pa seeds and on planting Pa.

**9. 2010 *ex situ* seed collections – Don Pigott:**

- 2010 was an excellent collection year for Pa. Other species collected included limber pine, juniper, yew, dogwood, and subalpine larch – many of these collections were obtained due to partner and volunteer support.
- The WPEF has found some support from Teck Cominco for restoration work. This might be a source of support for a number of different genetic conservation activities.
- Don was thanked for his work making collections in 2010 and his report
- It was suggested that 10+ trees from a population 50+ m apart be considered the minimum for a GC collection, including the possibility of collecting over multiple years where there are not enough trees to meet the criteria in a given year. No objections were raised.

**10. Species priorities and review - Sally:**

Sally provided an overview of the 2002 process for determining species to include in GC activities and the method for setting priorities among species.

**Moved** that the species priority list will be reviewed in 2011 (Lee / Jack) CARRIED.

**11. Ground truthing - Jodie:**

Jodie presented results from her 2010 work ground-truthing conservation status predictions from the cataloguing process. In general, species with broad distributions and large populations (primarily commercial species) are well predicted by the cataloging process and species with small ranges that are dispersed or clumped in their distribution are poorly predicted. In part, this reflects the status of inventory data for commercial vs. non-commercial species. Limitations include:

- Sparse data for non-commercial and uncommon species
- Older inventory plots have many anomalies or no spatial reference
- Map scale too small to support inferences on species' distributions for a given area
- BEC versions and mapping scale are inconsistent across the province
- VRI data quality and availability varies across the province
- Habitat data are patchy

Future directions should include:

- Maintain the current version of the existing GC catalogue, but recognize its limitations

- Continue to develop species-specific data on the geographic distribution of genetic diversity using model species based on life history traits

Dave Kolotelo, Heather Rooke and Seed Centre staff were thanked for hosting the meeting.

**The meeting was adjourned at 5:30 PM**

Minutes prepared by Jack Woods