

The meeting commenced at 9 am with a review of the agenda. A series of technical presentations were then given, as follows:

Topic	Speaker
<i>In situ</i> conservation cataloguing project	Andreas Hamann and Pia Smets
Genetic diversity and spatial population structure: Implications for gene conservation	Washington Gapare
Whitebark pine genecology and inbreeding depression	Andy Bower

Discussion of Cataloguing Project

Now that analyses have been completed by SPU on current levels of protection, thresholds by which to evaluate whether current protection is adequate are needed. The committee agreed that Andreas Hamann, Alvin Yanchuk and Sally Aitken should recommend these standards based on the best available scientific knowledge.

Action item: Andreas, Alvin and Sally will finalize recommendations for *in situ* conservation thresholds as part of a strategic plan for gene conservation.

Discussion of New Projects:

A discussion of new project areas ensued. The CFGC's business plan as approved 4 years ago needs an update: some projects are finished, some are continuing, and there is room for new projects to address new concerns. Two projects are proposed.

1. *Minor species project.* Have a new graduate student initiate work on another minor species. The workshop on prioritizing minor species resulted in a species list, which we are using to develop new project ideas. Potential species, as identified at the minor species workshop, include: Arbutus, dogwood and Garry oak. There is a need to update our limited knowledge of species with different reproductive biology than that of conifers. Such a project can also tie in with gaps (in information or protection status) which we have discovered in the cataloguing project. Some preliminary work has already been done on each of these species: seed collections of Arbutus (project put on hold as graduate student of Y. El-Kassaby's started a project on this species); stands of dogwood were located and incidence of flowering and anthracnose recorded by undergraduate NSERC student Megan Harrison; and some family collections of garry oak acorns were completed in the fall of 2003 by Mike Meagher.

2. *Gene conservation and climate change.* Have Andreas Hamann shift his time and interest to work on genetic and biogeographic aspects of climate change. The timing for

this is relevant: we are the first to do such work, we have the skills, and it ties together with the NSERC/BIOCAP Canada Strategic Grant project on climate change that Tongli Wang is working on.

Some concerns were expressed about financial aspects of these new projects. Jack Woods asked to take into account budget cuts of 10 to 15% to 2003 budgets. In the light of such cuts, Dale Draper suggested focusing on the essential.

Sally indicated that Andreas' work on climate change would not require much additional funding. The "Cataloguing/documenting protection" project would continue with help of Pia under supervision of Andreas. The "Markers" project (Wellman/Ritland) is close to completion and may not need all of the funds originally earmarked for it. The "Minor species" project would then have just enough money to fund one student.

Jack Woods asked if follow-up work on Washington Gapare's work will be carried out? Mohammed Iddrisu's study on bigleaf maple (not currently funded by the CFGC) may complement this work more. Leslie suggests studying a small, peripheral species (to continue Washy's work), and Jack Woods suggests even lodgepole pine on its fringe could be studied. No final decision (on exactly which minor species to be studied) was reached, since a project in this area would depend on the specific interests of prospective graduate students.

Dale Draper asked if extension, beyond publications in refereed journals or the CFGC website, should get more effort so that findings and guidelines are ultimately transferred into something that can be used by forest management. It was pointed out that extension is already in the CFGC mandate, but that there are limits to releasing results prior to publication in scientific journals. The CFGC website receives, on average, 90 new, unique visitors per month and is a good vehicle for extension. Jack Woods argues that extension is achieved when guidelines are incorporated into policy or put into operation, and that this is already occurring. That depends not only on making the information available in written form, but also ensuring oral presentations in a public setting.

Alvin Yanchuk emphasized the importance of doing the climate research because currently not even in the ecology program, is doing it. If we take the lead in this area, it should stimulate interest from other quarters.

Motioned by Dale Draper (Jack Woods, second):

"The GCTAC supports that CFGC should start 2 new projects:

- the climate project, with an estimated budget for 2004 of \$15,000
- one minor species project, with an estimated budget for 2004 of \$30,000

The motion was carried unanimously.

Projected Budget for 2004-05

Jack Woods indicated that there will likely be a budget cut of 10-15% from 2003-04 to 2004-05 levels, and final commitments (e.g. to new students) should not be made before the budget is approved.

Gene Conservation Goals in the FGC Strategic Plan

Jack discussed wording of gene conservation objectives of the CFGC for the FGC Strategic Plan. CFGC commits to cataloguing all species, but it is not feasible to commit

to protecting all species, so the FGC will commit only to protecting the commercial species. The objectives need to be combined with performance indicators to measure progress towards objectives, such as: number of species catalogued, \$ leveraged from other sources, etc., Sally points out the risk when an indicator such as 'funds leveraged' becomes a target that must be met and will likely inflate in the future. Should a score also be given for technical reports, aside from scientific papers? As long as it does not become priority, such reports certainly deserve credit.

Role of BCMOF TSC Seed Bank in gene conservation

Dave Kolotelo summarized the seed and information available in the province's seedbank and expressed concern that this resource receives little attention. It was set up for gene conservation, but isn't actively managed. It contains some 7000, many of them older seedlots, several of which may represent populations no longer present (logged or otherwise disappeared). A discussion ensued on how to get better value out of the seedbank. It was decided that information on the seed in storage should be integrated into the ex situ component of the gene conservation cataloguing project by Andreas. He can then use information on seed origin to determine the importance of different collections. These data can then be used to determine where seedlots are important, redundant or missing, and where necessary seedlots can then be culled, new collections made or current seedlots regenerated.

Although Don Pigott was unable to attend the meeting, he provided input by email. He raised concerns on behalf of the BC Tree Seed Dealers Association regarding the sampling of commercial seedlots for gene conservation without compensation to the owners. It was felt that this is an issue between the BCTSDA and the Ministry of Forests. Dale Draper indicated that there is an open dialogue between these two parties underway on this topic.

Action Item: Dave will outline the steps he considers necessary to evaluate the conservation value of seedlots in storage; distribute these to the GCTAC; and work with Andreas to combine the databases.

Grand Fir Gene Conservation

Don Pigott reported in his email on the status of grand fir stands that were previously recommended to be set aside for gene conservation, one at Waterloo Creek just south of the Denman Island ferry landing, and the other on the UBC Experimental Farm at Oyster River. The Waterloo stand on Crown land now has a Mapping Reserve Notation approved by District Manager Cindy Stern. It cannot be harvested without consultation with Research Branch. There should be further communication to encourage UBC to protect the Oyster River stand.

The meeting was adjourned at approximately 2 pm and a brief OTIP site visit of CFGC facilities ensued.