

## Coastal Technical Advisory Committee

Minutes November 5, 2007

**Members:** Annette van Niejenhuis, Patti Brown, Charlie Cartwright, Tim Crowder, Diane Douglas, John King, David Reid, John Russell, Michael Stoehr, Chang-Yi Xie, Dave Kolotelo, Joe Webber, Alvin Yanchuk

**Guests:** Don Piggott, Brian Barber, Bevan Wigmore, Leslie McAuley, Brian Saunders, Keith Thomas, Jack Woods, Susan Zedel, Carolyn Lohr, Lisa Hayton, Jodie Krakowski

**Regrets:** Sally Aitken

**Committee Membership:** Annette van Niejenhuis (Chair)  
 Patti Brown  
 Charlie Cartwright  
 Tim Crowder  
 Diane Douglas  
 John King  
 Dave Kolotelo  
 David Reid  
 John Russell  
 Michael Stoehr  
 Sally Aitken  
 Joe Webber  
 Chang-Yi Xie  
 Alvin Yanchuk

**Chair:** Annette van Niejenhuis

**Minutes:** Keith Thomas

*Chair called meeting to order 1020hrs*

### 1) OTIP Eligibility Review

Insect Management removed from all species list as PMTAC deals with this. Better communication is required between PMTAC and CTAC.

The OTIP Eligibility list for 08/09 call for proposals was modified as follows:

- a) Fdc: add Seedlot Rating protocol for SPU 1 (and 19)
- b) Cw: SPU2 add deer resistant work to category 330. SPU27 remove induction in natural stands.
- c) Yc: add grafting, holding grafts, induction, and improving seed production.
- d) Hw: SPU3 add 321, 322, 323, 326 and 350 pollen contamination. SPU24 add 326.
- e) Ba: remove induction and high elev. orchard trial
- f) Bg: no change
- g) Ss: remove male gamete contribution
- h) Pw: add 350 selfing/MGR pollen study, and 350 male gamete contribution.
- i) Coastal Broadleaves: Chang-Yi Xie

Provided and update on Septoria musiva pathogen in the nursery. It is becoming more of a problem. Dan Carson wanted Chang-Yi to bring this up with CTAC. Broadleaf reports will be coming soon.

**Motion:** to endorse eligibility list changes as discussed and presented

**Moved:** Dave Kolotelo

**Second:** Joe Webber

***Motion Carried***

**2) Ramet Allocation Discussion Paper - Annette van Niejenhuis**

Annette provided an overview of the issue and a decision should be made so that orchardists can decide what to do about scion collection and distribution. This is a two part issue:

Part 1: Who should receive scion or grafts from forward selections?

**Motion:** to endorse Option A:

Any interested party demonstrating that they will deploy seed in British Columbia, and willing to sign MFR Agreement, may request and expect to receive scion or grafts from forward selections where limited scion supply is a concern.

**Moved:** Tim Crowder

**Second:** Patti Brown

***Motion Carried***

Part 2: Where insufficient numbers of scion or grafts are available, how should the limited numbers be distributed?

**Motion:** to endorse Option A

Approved orchards with a known interest in the forward selections will be invited to confirm their interest in each specific clone, and will receive an equal share of the scion or grafts available

**Moved:** Patti Brown

**Second:** David Reid

***Motion Carried***

**3) State of the Forests Report – Tom Niemann**

Tom Niemann gave a presentation highlighting the latest State of the Forests Report. Based on a number of indicators of Sustainable Forest Management. The scope covers environmental, economic, social and governance, long-term trends (>3yrs), and addresses the whole Province. It is science based, credible, highlights outcomes and not outputs, and highlights information gaps. The report is not about marketing, it has no sugar coating, and is void of politics. There are 24 indicators approved, 12 of which have been done and the remaining 12 planned.

**ACTION ITEM:** Tom would like a *Genetic Diversity* indicator ‘leader’ to come forward from either TIB or RB to update the Genetic indicator as required.

**4) Coastal Forest Action Plan (CP and CLRS) – Brian Barber\Alvin Yanchuk**

Brian Barber provided a brief update.

Purpose:

- Increase cost competitiveness and investment in coast forest industry
- Facilitate transition from old growth to second growth stands - due to economic and environmental constraints
- Explore options – tenure, AAC partitions, silviculture

Terms of Reference:

- Determine productive capacity of the coastal THLB using BAI.

- Determine potential volume and economic gains thru Tree Improvement, Fertilization and other treatments.
- Develop options for intensively managing second growth stands (with a positive ROI).
- Develop a transition strategy from current second growth stands to some future desired state.

Results and Direction:

- **\$400k/yr** FIA funds approved for at least 3 yrs for incremental TI activities.
- To be used in support of coast strategy objectives.
- Administered by TIB - in accordance with a “FGC strategy”.
- Funding and expenditures to be tracked and reported separately from other MoFR and FGC programs (e.g. OTIP).
- Can be used for increasing capacity (e.g. salaries) as well as operations.
- Projects delivered by RB and TIB.
- Administered by TIB.
- There are a number of outstanding policy issues that will be addressed.

RB Projects:

- RB was already at capacity and needed extra capacity to meet new demands so Jody was hired.
- Michael is working on Fdc to develop a nucleus breeding population.
- John is working on Cw to develop a nucleus breeding population and working on improving the turpine and for deer browse resistance
- Charlie is developing a nucleus breeding population, and accelerated measurement of progeny trials to expedite new orchard development and improve existing seed lot Gw.

Action Item

Draft a briefing note for discussion at the next CTAC meeting on how to distribute the seed once it is produced as well as the delivery of projects in future years.

5) **GRM Progress Report** – Brian Barber

Brian Barber presented an update on the Challenge Dialogue.

**Purpose:** to have a dialogue with GRM Community of Practice (CoP) and stakeholders to create a collective vision and strategy for GRM that is consistent with sustainable forest management (SFM) and aligned with the Chief Forester’s Stewardship Framework.

**Expected outcomes**

1. Better understanding of GRM in SFM amongst the CoP and stakeholders.
2. Identification of gaps and opportunities to respond (and support) current and future issues and SFM initiatives.
3. Alignment and shared ownership of GRM vision and goals
4. Improved partnerships and strengthened leadership within and between MOFR, FGC and other key GRM stakeholders.

Actions to date

GRM COP dialogue Nov 06  
 Progress report Jan 07  
 Stakeholder and public dialogue May-June 2007  
 54 responses received  
 Progress report August 2007

**Progress report August 2007**

- Responses were a very broad representation. No National/regional ENGO's or FN responses

6 themes arose:

- 1) Clarify the scope of GRM
  - Commercial vs non-commercial
  - Exotics and biotechnology
- 2) Climate change
  - Addressing complexity and uncertainty
  - How and when to change species selection
- 3) Integrating and balancing gain, resilience and conservation – what policy mechanisms do we need to achieve this balance?
- 4) Better linkages and integration of GRM with other initiatives
  - Land-use planning
  - Provincial biodiversity strategy
  - Future Forests Ecosystems Initiative
- 5) GRM COP Roles and Responsibilities
- 6) Improved Strategic Communication

**Workshop at River Rock Casino – October 17<sup>th</sup>, 2007**

42 participants from Industry, University, Government – opened by the Deputy Chief Forester (Craig Sutherland)

Broad Representation: other provinces. Washington, Parks, Forest Sciences Board, Genome BC

Facilitators: Keith Jones and Assoc.

Workbook used

- Several sessions – breakout format
  - Structured guide to sessions
  - Includes background information

**Next Steps**

- Review workshop results
- Develop Draft Strategy and send out for comment/review Nov-Dec
- Final strategy in time for start of next fiscal (April 2008)
- This strategy will be used to inform business plans for:
  - Forest Stewardship Division;
  - Tree Improvement Branch; and,
  - Forest Genetics sections business Plan.

**Acknowledgements**

*Sponsor:*

- Craig Sutherland, Deputy Chief Forester, MFR

*Co-champions:*

- Dale Draper, Director, Tree Improvement Br.
- Alvin Yanchuk, Mgr, Forest Genetics, Res. Br.
- John Elmslie, Industry Co-chair, FGC  
(represented by Jack Woods)

*Project Management & Support*

- Jack Woods
- Michael Stoehr
- Terje Vold
- George Sranko

- Michelle Baker
- Diane Douglas
- Brian Barber
- Keith Jones

**6) Tree Species Selection Reference System – Leslie McAuley**

Shirley Mah (co-chair of the Tree Species Selection TAC) was unable to attend so Leslie provided a very brief overview. Project is in early stages and is co-lead by Forest Practices Branch and Research Branch. This project has been identified as having direct linkages with the Future Forest Ecosystem Initiative (FFEI).

The primary objectives of the project are:

- 1) Update Tree Species Selection Guidelines where new information has become available, and
- 2) Development of a web-based Reference System (decision support tool) to aid forest practitioners and decision makers in the selection of tree species for strategic and operational forest management and stewardship planning.

Recent project re-alignment has led to the hiring of a business analyst to clearly define project scope, vision and business requirements (client needs).

Business requirements gathering will be undertaken and will include:

- the identification of key project components
- client business needs
- milestones
- linkages and deliverables (e.g. information updates, web-based reference system)

Updates to tree species selection guidelines (field guides, default stocking standards) will be considered based on new and/or revised scientifically-based information. Linkages to supporting documentation, Best Available Information, will also be developed to assist practitioners in decision-making.

**7) FGC Reports and Update – Jack Woods**

- FGC membership: Larry Promnitz is the newest member
- A request for a First Nation's representative was sent to FNC. So far no response.
- 06/07 Budget within \$15k of \$5.8M budget
- Provincial performance indicator graph was presented. 119M total Class-A seed was sown which accounts for approx 50% of all seed sown. If B+ is added, total select seed accounts for over 50% of all seed sown. The average GWg of orchard seed for 2006-07 was 14%.
- We had a moderate cone year with a total crop of 604 kg which was and double 2005. This translates to approximately 88M seedlings with a value > \$2.5M.
- The 2007 crop forecast is expected to be 3 times 2006 = 240M plantables.
- October presentation on behalf of council to FIC (Woods and Thomas)
  - Good support and interest
  - Steady budget proposed (about 5.9M)
- GCTAC prepared and presented a GC plan to Council in September (Kolotelo)
  - Goal: To adequately conserve the genetic diversity of key populations of all forest tree species indigenous to BC by 2025, through a combination of *in situ*, *ex situ*, and *inter situ* conservation populations and activities
    - Objectives:
      - To adequately conserve x% of indigenous tree species / zones by year y

- To develop information on the natural patterns of genetic diversity for x% of indigenous tree species by year y
- Exchange with Forest Science Board
  - FGC provided FSB with research priorities. Two priorities were incorporated in FSB lists
    - Quantifying plant-climate relationships and estimating the future range and deployability of BC tree species and genotypes, including bioclimatic modeling....
    - Understanding the ecophysiological stress response of trees to changing environments, with linkages to species and seed zone changes
- Emerging issues:
  - CC and new seed transfer standards
  - Breeding program review
  - New strategic plan (Challenge Dialogue)

#### 8) ETAC Update – Diane Douglas

Diane provided a brief overview of activities the ETAC has undertaken this year to date

- **Booth** and handouts at SISCO (Naramata) in April and Federation of BC Woodlots (Port Alberni) in September.
- **Crown Management workshop** - Joe Webber at WFP, October 4
- **FGC Extension Note 9**, Increasing Quality Seed Production in Western Redcedar Orchards: A Synthesis of a multi-year foliar-applied gibberellin A<sub>3</sub> study - June 2007 Hak and Russell
- **Tree Improvement in BC posters** - available in multiple formats.
- **Anatomy and Morphology of Conifer Tree Seed** (The Purple Book)
- **Reproductive Diagrams colourized**
- **Whitebark Pine Workshop** - August 21-24, 2007 in Whistler.
- **Field Tour Alternative - Coastal Silviculture Committee summer workshop "'Today's Results - Tomorrow's Forests**
- **The Reproductive Biology of Western Larch** - (joint IETIC)
- **Spruce Manual for Seed Orchardists**
- **TICtalk**
- **Gene Conservation Poster and initial update of FGC display**
- **Extension note development** - contract with Don Piggott, to create a draft Whitebark pine hard copy publication and a CD outlining:

#### 9) Other Business

Dave Kolotelo

Tree Seed Workshops around the Province the week of November 26<sup>th</sup>, 2007.

TSC is celebrating 50<sup>th</sup> year anniversary.

Don Piggott

CSC January 29-30<sup>th</sup>, 2008 in Downtown Cowichan Bay

Tim Crowder

Communication needs to be improved for BV changes in SPAR. Notification did not occur for some species. Orchardists will now go and check for updates and notification procedures will be addressed.

Annette van Niejenhuis

Pollen contamination and its effect on GW needs to be discussed at a future meeting.

**David Reid - Seed Orchard Conference in Umea Sweden**

David Reid, recently attended a seed orchard conference in Umea Sweden at the end of September 2007. Umea, at 64 degrees latitude (Prince George is at 54 degrees) is the home of the Swedish University of Agricultural Sciences. The conference was organized by Professor Dag Lindgren and his rationale for organizing the conference was:

The conference was attended by 90 participants from 27 countries. Thirty-six lectures and 17 posters were presented at the conference. Proceedings from the conference are being developed and will be available in the future.

Details can be found at the conference web site: <http://www-genfys.slu.se/staff/dagl/Umea07/Umea07.htm>  
Background of Treebreedex can be found at their web site:  
<http://treebreedex.mediasfrance.org/pages/body/homePage.jsp>

**IUFRO Business Meeting**

Another important business matter arising from the conference was the re-genesis of the International Union of Forestry Research Organizations (IUFRO) Working Party for Seed Orchards. A business meeting was held and the delegates voted overwhelmingly to re-establish the working party (W.P.). The WP will be established in Division 2 and the number will be 2.09.01 and will be entitled "Seed Orchards". Directors were nominated and voted upon at the meeting.

The Director is:

Dr Kyu-Suk Kang of the Korea Forest Research Institute, ([kangks@foa.go.kr](mailto:kangks@foa.go.kr).)

The Deputy Directors are:

Dr. Dag Lindgren, Prof., Swedish Univ. of Agric. Sci. ([Dag.Lindgren@genfys.slu.se](mailto:Dag.Lindgren@genfys.slu.se))

Nebi Bilir, Süleyman Demirel Üniv., ISPARTA, Turkey ([nebilir@orman.sdu.edu.tr](mailto:nebilir@orman.sdu.edu.tr))

David Reid, Manager, Seed Production ,BC MFR, Canada ([David.Reid@gov.bc.ca](mailto:David.Reid@gov.bc.ca))

The last IUFRO meeting where a working party on seed orchards was involved: 1986; Weir B et al. (editors). The proceedings contain 17 papers with reference to seed orchards, it seems likely the proceedings from the current meeting will contain more papers.

It was proposed at the business meeting that a formal Working Party meeting should be held every two years so the next formal meeting will be in 2009 and that the location could be either Turkey or Greece – and the rationale for Greece would be to see first hand how seed orchards are helping reforest after the devastating fires of 2007.

The IUFRO World Congress will meet in Korea in 2010, and it was also voted that the Seed Orchard Working Party should also convene there either prior to or just after the World Congress even though it will have met in 2009. The biennial interval will then be re-established with the next meeting being in 2012.

It was also voted on at the meeting to update the publication "Seed Orchards" that was printed in 1974 and edited by Roy Faulkner of Scotland under the old IUFRO WP # 2.03.3. The Director and Deputies will be updating the table of contents and then will be looking for volunteers to undertake responsibility for the content of those chapters.

**IUFRO Division 2 – Physiology and Genetics: Background:**

Division 2 includes research on the physiology of forest trees as a whole and more specifically on xylem, stem, canopy and roots; on sexual and vegetative reproduction; on breeding and genetic resources of conifers and hardwoods in virtually all regions of the

world; on quantitative and biological genetics of trees and tree populations, including molecular and cellular genetics; and finally on seed physiology and technology.

For more information, please go to the IUFRO web site: [www.iufro.org](http://www.iufro.org)

**10) Meeting Adjournment – 1600hrs**

Motion to adjourn

Moved: Charlie Cartright

Second: Tim Crowder

***Motion Carried***

**Next Meeting Date:** Annette will send out optional dates

DRAFT