

Draft Minutes

8:30 am – 12:15 pm, Friday, October 14, 2022

Participants

Forest Genetics Council of BC: Pat Martin, Domenico Iannidinardo, Annette van Niejenhuis, Bevin Wigmore, Bob Johnson, Dan Mazerolle, Gord Chipman, Juergen Ehling, Katherine Spencer, Keith Thomas, Kona Van Diest, Shannon Jonasson.

Regrets: Jeff Mycock,

Guests: Brian Barber, Rod Willis, and Dr. Sally John (SelectSeed); Joe Dolling (Tolko); Michael Postma (Tree Seed Centre); Andrew Snetsinger, Forest Sciences, Planning and Practices Branch (FSPPB); and Dr. Hayley Tumas (UBC).

Proceedings

This meeting was held in person Kalamalka Forestry Centre and via MS Teams video conference. The meeting was followed a field tour to several seed orchards and the Centre in the Vernon and Armstrong area. Agenda and meeting materials were posted on [FGC's Secure Access webpage](#) Password required.

Summary of Motions

Motion: The minutes of the FGC meeting held June 15, 2022 are hereby approved. Bob/Dan. Carried.

Summary of Actions

| Person(s) | Actions | When |
|-----------------------------|---|------------|
| Bevin | Share information about self-leveling lifts with other seed orchard managers | ASAP |
| Kat | Share learnings from MoF cone harvest ladder safety audit with other seed orchard managers. | ASAP |
| Juergen & Brian | Schedule GCTAC extension meeting winter 2022/23. | ASAP |
| Domenico | Convene a meeting of FGC Industry reps to discuss policy and process for nominating industry positions by the end of October. | ASAP |
| Brian | Share the draft terms of reference for the tree improvement priority matrix project with Keith, Kat and Annette. | ASAP |
| Keith, Annette, and Juergen | SelectSeed Director Terms Sub-committee - to examine proposed changes to SelectSeed director terms and bring recommendation to Council. | Jan 2023 |
| Keith, Kona, Bob and Pat | SelectSeed Director Appointments Sub-committee - to report to Council periodically and bring recommendations to Council. | March 2023 |
| Brian | Issue Doodle Poll for next business meeting to be held in Jan 2023 | ASAP |

1. Welcome, Intro & Agenda

There being adequate notice served and a quorum of members present, Domenico, Industry Co-chair, called the meeting to order, confirmed participants and guests, and confirmed the agenda.

Agenda

| # | Time | Min | | Topic | Presenters |
|----|-------|-----|---|---|-----------------------|
| | 8:00 | | | <i>Coffee and snacks available, video check</i> | |
| 1 | 8:30 | 5 | | Welcome, Intros, Agenda, | Pat/Domenico |
| 2 | 8:35 | 5 | | Recap of Oct 13 Field Tour | All |
| 3 | 8:40 | 15 | A | Minutes and Actions from June 15 Meetings | Brian |
| 4 | 8:55 | 5 | | Safety Updates | All |
| 5 | 9:00 | 10 | B | FGC and SelectSeed Dashboards | Brian |
| 6 | 9:10 | 20 | C | 2022 Cone Crop Update | Michael Postma |
| 7 | 9:30 | 10 | | TAC Chair Updates | Kat, Annette, Juergen |
| 8 | 9:40 | 20 | D | FGC Memberships & SelectSeed Directors | Pat |
| | 10:00 | 20 | | <i>Coffee</i> | |
| 9 | 10:20 | 30 | E | Landscape Genetic Diversity Project Update | Dr. Haley Tumas |
| 10 | 10:50 | 10 | | Tree Improvement Priority Matrix Project | Brian |
| 11 | 11:00 | 20 | F | BC visit to Grande Prairie Alberta | Brian/Kat |
| 12 | 11:20 | 5 | | News and Announcements | All |
| 13 | 11:25 | 5 | | Next Meeting | Brian |
| 14 | 11:30 | 30 | | In Camera Session | Pat/Domenico |

Motion: The Agenda for this meeting is hereby approved. Annette/Kat. Carried.

Dan was congratulated on his recent appointment as Director General, Pacific Forestry Centre. Gord was also congratulated for his recent appointment as General Manager, BC Federation of Woodlot Associations.

Kat acknowledged the in-person meeting was being held on the traditional territories of Syilx Okanagan peoples, whose communities form the [Okanagan Nation Alliance](#).

2. Recap of Oct 13 Field Tour

The annual FGC fall field tour was held in the Vernon and Armstrong areas the previous day. Approx. 30 persons participated. Field stops were hosted by the Vernon Seed Orchard Co., Ministry of Forests, Tolko Industries and PRT Growing Services. Morning and afternoon refreshments were sponsored by VSOC and PRT, respectively. The lunch and dinner, which followed, were sponsored by SelectSeed.

Members shared some highlights & key learnings, which include the largest Fdi crop on record; VSOC collected 9000 sac, some of which will be extracted at its new cone and seed processing facility; continued orchard renewal to improve gains & maintain productivity; crown management to optimize and harvest crops; climate change impacts (e.g. heat dome, water, insects); genetics tests – impressive results but take time and resources; seedling nursery challenges - including supply chain, costs and balancing shareholder/customer expectations; labour shortages all round; and, the importance of listening to FN's and others (e.g. Mother Tree

Network) perspectives on reforestation and genetics – and preparing appropriate responses/messages.

Joe Dolling, Tolko’s new CF, expressed his appreciation for the opportunity to participate in the tour and learn about BC’s genetics programs. Brian was thanked and commended for organizing the tour.

3. Minutes and Action items from June 15, 2022 meetings.

AGMs of the BC Forest Genetics Society, SelectSeed were held on June 15, 2022, and followed by a general business meeting of FGC. Draft minutes were included as Attachment A. The AGM minutes will be approved at the next AGMs.

Motion: The minutes of the FGC meeting held June 15, 2022 are hereby approved. Bob/Dan. Carried.

Action Items from FGC meeting June 15, 2022:

| Person(s) | Actions | Status |
|------------------|--|---|
| Annette | Discuss pest resistance performance measure with Nick Ukrainetz for next mtg | Deferred as Nick has been away – back now |
| Brian | Discuss method to determine cubic meters of wood from select seed use with Alvin Yanchuk and Kevin Astridge. | In progress w Kevin Reviewing methodology used in past. Will prepare models for TAC and others review. Incl. Pam Matute in FSPPB |
| Pat | Nominate an additional Ministry representative to the Chief Forester | See item 8 |
| Industry members | Nominate an additional Industry representative to the Chief Forester via Pat as Ministry Co-Chair. | See item 8 |
| Brian | Share information re Huallen Seed Orchard Tour in late Sept or October. | Completed See item 11 |
| Brian | Issue Doodle Poll for fall field trip in October 2022 | Completed |
| Brian | Explore alternative video conference services due to connectivity issues with GoToMeeting. | In progress |

4. Safety Reports

Members were asked to report on any safety-related incidents or initiatives within the purview of FGC. The Ministry of Forests seed orchards were subject to a ladder training and use audit.

Mosaic rented the only two self-leveling lifts in the province for their cone harvest at Mt Newton Seed Orchards. Lifts improved safety and less risk compared to use of ladders on slopes.

Action: Kat to share learnings from MoF cone harvest ladder safety audit with other seed orchard managers.

Action: Bevin to share information about self-leveling lifts with other seed orchard managers.

5. FGC and SelectSeed Dashboard

Brian reviewed the updated dashboards, with descriptions and progress of FGC and SelectSeed initiatives. This included next steps regarding SelectSeed’s orchard renewal strategy – a report and recommendations for which will be presented at FGC’s winter meeting. Most all initiatives are ‘on-track’.

6. 2022 Cone Crop Updates

2022 was a bumper crop year for Fdi and Sx. Michael Postma, Manager, Tree Seed Centre, provided a presentation on the 2022 Cone Crop, and processing activities at the TSC. (Attachment C).

The following table includes crop forecasts with estimated kg and # of seedlings.

TSC processing 2022-23: all BC crops

| Processing 2022-23 | | | | | | 2020-22 |
|--------------------|--------------|------------|--------------|--------------------|--------------------|--------------|
| Source | hL | # seedlots | # priorities | Estim.* kg seed | Estim.* # trees | hL |
| A class | 5,720 | 68 | 24 | 3,700 | 309.2 M | 2,240 |
| B class | ~1,600+ | ~ 40+ | 2 | 1,300 | 68.3 M | 970 |
| Total | 7,300 | 108 | 26 | 5,000 | 377.5 M | 3,200 |

* Based on 5-year species averages; not actual data.

The anticipated volume of cones is 7300 hl, equivalent to 36,000 sacs. Approx. 7600 sacs have been received to-date. Processing this year’s large crop will not be complete until the new year. The amount of cones to be received and processed, and estimated seed yields are also subject to change.

The TSC’s criteria and procedures for [priority processing](#) were explained. Labour issues remain a challenge. Persons with cone collections were requested to contact the Tree Seed Centre to schedule shipments. All were invited to visit the TSC during its ‘busy’ time of year.

7. TAC Chair Updates

Juergen, Chair, Conservation Technical Advisory Committee (GCTAC) - Last meeting in March; reviewed projects by Dr. Tongli Wang, UBC, (flying BEC zones); Dr. Haley Tumas, UNC (genetic diversity); and whitebark pine (screening for rust resistance, field testing). FIRM is working on grant to UBC and administering funds for MoF whitebark pine projects internally.

Annette, Chair, Coastal TAC (CTAC) – Last meeting held spring 2022; members assessing options for reducing impacts of phytophthora fungi on white pine orchards; several CBST alternatives requests submitted to FIRM, due to lack of Class A seed in some BEC variants; next meeting early 2023.

Kat, Chair, Interior TAC (ITAC) - Next ITAC meeting scheduled for **Jan 10-11, 2023**. Although interest in resuming in-persons meetings, this will be held on-line to reduce costs and increase participation. ITAC members recently attended Northern and Southern Silviculture Committee and Forest Nursery Association of BC meetings. Congratulations to the interior seed orchards for this year’s bumper crops!

Action: Juergen and Brian to schedule GCTAC extension meeting winter 2022/23.

8. FGC Memberships & SelectSeed Directors

The following table includes current FGC members, and their positions and terms.

| First Name | Last Name | TOR Position | Appointed Position | Employer | Term expiry |
|------------|-----------------|----------------------------|------------------------------------|---|-------------|
| Annette | van Niejenhuis, | Forest Industry | Coastal TAC Chair | Western Forest Products Inc. | 1-Nov-23 |
| Bevin | Wigmore, | Forest Industry | Coastal Seed Producer | Mosaic Forest Management | 9-Sep-24 |
| Domenico | Iannidinardo, | Forest Industry Co-chair | Industry Co-chair | Mosaic Forest Management | 17-May-24 |
| Jürgen | Ehling | University | Academia | Centre for Forest Biology, University of Victoria | 9-Sep-24 |
| Gord | Chipman, | Forest Industry | Interior Seed User - Small Tenures | BC Federation of Woodlot Associations | 15-Jan-23 |
| Jeff | Mycock, | Forest Industry | Interior Seed Producer | West Fraser Timber Co. Ltd. | 31-Oct-22 |
| Katherine | Spencer, | Ministry | Interior TAC Chair | Ministry - FIRM | 13-Dec-22 |
| Kona | Van Diest | Ministry | BCTS Seedling Services | Ministry - BC Timber Sales | 7-Dec-24 |
| Pat | Martin, | Ministry Co-Chair | Ministry Co-chair | Ministry - FIRM | 31-Oct-22 |
| Robert | Johnson, | Forest Industry | Coast Seed User | Capacity Forest Management | 9-Sep-24 |
| Keith | Thomas, | Ministry | Ministry Research | Ministry - FIRM | 1-Nov-23 |
| Dan | Mazerolle | Canadian Forest Service | Federal Government | Natural Resources Canada | 1-Nov-23 |
| Shannon | Jonasson | First Nations Perspectives | First Nations Perspectives | West Fraser Timber Co. Ltd. | 25-May-25 |

FIRM = Forest Investment and Research Management Branch

The current Ministry and Industry members were appointed to specific roles listed under the former FGC Bylaws (Appointed Positions).

The [FGC Terms of Reference](#) (TOR) approved by the CF on May 17, 2022, allows for 14 members: 2 Co-chairs, 4 MoF, 5 Industry, 1 FN, 1 University and 1 Canadian Forest Service. There are currently 13 members and one vacant Ministry position.

The terms for Pat, Kat and Jeff expire soon. Pat said Kat and his names will be put forward to the CF for reappointment, as well as a nomination for the vacant Ministry position.

It was noted Industry has one less representative under the new ToR. It was also noted that employer representation should be considered when filling positions. Engagement and participation were also identified as important nomination criteria.

Action: Domenico will convene a meeting of Industry reps to discuss a policy and process for nominating industry positions by the end of October.

In advance of the meeting, Pat shared a Backgrounder on SelectSeed Director appointments and terms with members in preparation of elections/appointments at the company's next AGM in June 2023. Three of the five current directors' two-year terms expire at that time.

Pat, Domenico, Kerry McGourlick (President) and Brian met at the end of August to discuss these topics and some proposals submitted by the Company.

Pat recommended to FGC use a similar process and timelines to identify candidates as in previous years. He also solicited volunteers to serve on an appointment subcommittee. Brian suggested a director and/or himself also serve on the committee, as per the Board's proposal. Pat affirmed the subcommittee will consult with the Board, but its recommendations will be independent of the Board's and the latter's potential biases.

Pat also introduced the Board's recommended changes to the Director terms. These included increasing term length from 2 to 3 years, and limiting the number of terms served to 3, with some exceptions. Rod Willis explained the rationale for these proposed changes, including the time required for new directors to get up to speed. Pat recommended a separate subcommittee be struck to review the proposed changes.

Brian pointed out a special resolution to amend the Company's Articles would be required to change the Directors' terms. This should be done in advance or immediately prior to holding elections at the next AGM.

These two SelectSeed topics were revisited during the *in camera* session, at which time the subcommittee members were also confirmed. See agenda item 14.

9. Landscape Genetic Diversity Project

Dr. Hayley Tumas, Postdoctoral Research Fellow, Department of Forest and Conservation Sciences, UBC Forestry, provided a Year 2 progress report and updates on this project via video. See Attachment E for presentation.

This project, supported by the Ministry, Genome BC, WFP, Mosaic and others, aims at assessing the impacts of selective breeding, deployment of seed orchard seed and reforestation practices on genetic diversity at the landscape level. Genomics and other methods will be used to evaluate the genetic diversity of natural and wild seedlots, and in regenerated stands – and their implications in consideration of climate change. Preliminary results indicated seed orchard seedlots have higher effective population sizes than estimated, due in part to pollen contamination. Members were very interested in how this project could help inform seed orchard and reforestation practices.

10. Tree Improvement Investment Priority Matrix Project

BC's [Tree Improvement Investment Priority \(TIIP\) Matrix](#) was last updated in 2013 by Jack Woods. Over the past decade, CBST was introduced, and seed production supply and demand have changed significantly.

Brian explained an update matrix could assist tree breeders and seed orchard managers with prioritizing the allocation of their limited resources. Brian proposed engaging Stephen Joyce under contact to review the TIIP model, update its criteria, methodology, and grouping options (e.g. ranked by species, BEC zone and/or management unit). Stephen can commence work in December and present initial drafts to the Coastal and Interior TACs in the new year. A committee could also be established to inform and guide the project.

Members were interested in pursuing, with the expectation rankings would not fetter independent business decisions. Andrew also requested involvement of FSPPB staff.

Action: Brian to share the draft terms of reference for the tree improvement priority matrix project with Keith, Kat and Annette.

11. BC visit to Grande Prairie, Alberta

On October 4, SelectSeed's directors and staff, and several Ministry of Forests staff visited the Western Boreal Aspen Company's test site at Grovedale, AB and the Huallan Seed Orchards, located west of Grande Prairie, Alberta.

Brian, Kat and Sally John shared a presentation with photos and key learnings from this informative field tour and exchange. See Attachment F.

12. News and Announcements

The following meetings were held in June:

1. Challenges to our Future Tree Seed Supply, Vancouver Island and Greater Vancouver, June 22-27. Hosted by Dave Kolotelo, Victoria Lee, Don Pigott, and Melissa Spearing.
2. BC Seed Orchard Association (BCSOA), Vernon, June 28-29, followed by field tour of research trials at Skimikin, hosted by the Ministry, CFGA and WFGA

On Sept 9, SelectSeed announced the appointment of Frederik Vroom, MSc, as Manager, Seed Orchards, effective October 17. Frederik will assume the duties of SelectSeed's part-time staff, Hilary Graham and Jack Woods. His office will be in Salmon Arm.

On Sept 21, Tia Wagner, VSOC, hosted a stop during the Northern Silviculture Committee's fall field tour at its VSOC Quesnel seed orchards. + 60 people in attendance.

ITAC annual extension and business meetings will be held Jan 10-11, 2023. Suggestions for topics and speakers to Kat Spencer.

The joint Canadian and Western Forest Genetics Associations' scientific conference will be held in Vernon the week of July 10, 2023. First Call for Abstracts will be issued in December.

Brian will include the above news and photos from the recent Alberta and FGC field tours in an upcoming FGC newsletter. Members are encouraged to forward other news and announcements for inclusion.

13. Next meeting.

Action: Brian to issue Doodle Poll for next business meeting for January 2023.

14. In camera session

In camera session for FGC members only. Guests were asked to leave at this time.

Motion: Move to meeting *in camera* for FGC members only. Bevin/Keith. Carried.

Action: SelectSeed Director Terms Sub-committee, consisting of Keith, Annette, and Juergen, to examine proposed changes to SelectSeed director terms and bring recommendation to Council for its January 2023 meeting.

Action: 2023 SelectSeed Director Appointments Sub-committee, consisting of Keith, Kona, Bob and Pat, to report to Council periodically and bring recommendations to Council for its March 2023 meeting.

Motion: Move to meeting out of *in camera*. Kat/Keith. Carried.

Adjournment

Motion: The meeting is hereby adjourned at (time)

Draft Minutes by B. Barber Oct 20, 2021