COASTAL SILVICULTURE COMMITTEE

# *Mitigating Projected Timber Supply Declines*

***2017 Winter Workshop***
***Vancouver Island University***
***February 21st 2017***

Photo Courtesy of Don Pigott

# Acknowledgements

The Coastal Silviculture Committee (CSC) wishes to thank the following people for contributing their time and efforts in organizing the 2017 Winter Workshop…

| | |
|---|---|
| - Jocelin Teron (Workshop Co-chair)<br><br>- Craig Wickland<br>- Dave Weaver<br>- Don Pigott<br>- Doug Corrin (VIU org. & booklet lead) | - Lauchlan Glen (Workshop Co-chair)<br><br>- Jack Sweeten<br>- Margaret Symon<br>- Neil Hughes<br>- Shaun Mason |

The current CSC Board of Directors would like to thank the directors that left the active board in 2016 and to express our appreciation of these folks' years of valuable contribution to the CSC:

- Bryce Bancroft
- Cosmin Filipescu
- Lisa Meyer
- Michel Vallee
- Ron Elder

The CSC would also like to thank Vancouver Island University for the venue.
On behalf of the CSC, the organizing committee would like to thank all the presenters for taking the time out of their very demanding schedules and lives to share their experience and knowledge with the rest of us.

# Mitigating Projected Timber Supply Declines

The CSC 2017 Winter Workshop will be of interest to anyone concerned about declining annual allowable cuts (AAC's) on the Coast. For various reasons the AAC has been steadily declining for over thirty years. This workshop will discuss some of the factors contributing to this decline. It will also outline how silviculture, tree breeding and other factors may mitigate the AAC downfall. For example, growth and yield assumptions form the basis of timber supply modeling, but many of these assumptions have changed over time. In some instances the changes may negatively impact timber supply, while in other instances the effect may be positive. Find out what's behind timber supply assumptions and how silviculture may mitigate the AAC decline.

# 2017 Coastal Silviculture Committee (CSC) Winter Workshop – Feb. 21, 2017
# Vancouver Island University – Building 356 Room 109/111

***"Mitigating Projected Timber Supply Declines"***

| Times | Topic Theme | Specific Topic Details | Speakers |
|---|---|---|---|
| 9:00 am | **Workshop Chair Welcome** | Introductions, Safety, Washrooms, CSC directors - retirees, Todays Agenda | **Lauchlan Glen** Chair<br>**Jocelin Teron** Co-Chair |
| 9:15 am | **Uncertainty relative to the TSR Process** | What uncertainties? Why do they exist? What are the implications? How to improve the TSR process? | **Anthony Britneff** RPF(ret) Retired FLNRO<br>**Martin Watts** RPF Consultant Analyst<br>*Intro Dave Weaver* |
| 10:00 am | **Coffee Break** | | |
| 10:30 am | **Modelling / projecting regenerated stand growth for TSR and silv. decision making** | How do our present models reflect reality? What information do we need moving forward? | **Eleanor McWilliams** RPF Consultant Analyst<br><br>*Intro Lauchlan Glen* |
| 11:05 am | **Using RESULTS Data as a "*Managed Stand Yield Table*" input** | An update on the ongoing project to develop a methodology to use RESULTS data as inputs to TASS/TIPSY for Timber Supply analysis. | **Dan Turner** RPF FLNRO RESULTS Analyst and **Dave Waddell** FLNRO FAIB Staff<br>*Intro Craig Wickland* |
| 11:40 am | **CSC Business Meeting and Awards** | Including Silviculturist of Year to Award | **Jack Sweeten** CSC<br>**Michel Valle**e VIU |
| 12:00 am | **Lunch** | | |
| 1:00 pm | **Genetic Gain Impact on TSR** | How is Genetic Gain determined/measured and how is it best built into TSR? | **Pat Martin** RPF FLNRO A/Director Tree Improvement Branch<br>*Intro Don Piggott* |
| 1:35 pm | ***"Silviculture informing Timber Supply"* - from an industry perspective** | The TSR experience in a TFL - how the modeling works, how silviculture assumptions tie into the whole picture, and highlighting the issues. | **Rick Monchak** RPF Timber West<br><br>*Intro Neil Hughes* |
| 2:10 pm | **Coffee Break** | | |
| 2:25 pm | **Forest Health Impact on TSR** | What data is used in TSR? – YSM and/or SDM 1.0 mid-rotation managed stand data? | **Stefan Zeglen** RPF FLNRO Coastal Pathologist<br><br>*Intro Craig Wickland* |
| 3:00 pm | **Final Summary Wrap and<br>Intro CSC Summer 2017** | ***Welcome to the Fraser Valley*** | **Cosmin Filipescu**<br><br>**Jack Sweeten and Lauchlan Glen** |
| 3:35 pm | ***Miller Time!!*** | | ***Everyone*** |

# Uncertainty relative to the TSR Process

9:15

**Name:** Anthony Britneff, RPF (ret)
**Affiliation:** None
**Position:** Engaged resident
**Responsibilities:** Advocates for the forests and animals of the B.C. Commons and promotes the rights of all life to clean air and water and to productive soil.
**Academic training:** BScF and MPA
**Previous employment:** BC Forest Service for 40 years

**Name:** Martin Watts, RPF, EP(GHG)
**Affiliation:** FORCOMP Forestry Consulting Ltd.
**Position:** Growth and Yield Specialist
**Responsibilities:** Quantification, validation and verification of forest carbon offset projects; data validation, management and compilation; statistical analysis of data; and computer programming.
**Academic training:** MScF
**Previous employment:** T.M. Thomson and Assoc.

His friends call him “Charlie”

**ABSTRACT: Uncertainty relative to the TSR Process**

The presenters will provide:

- Historical context to uncertainty in the Timber Supply Review (TSR) process;
- Explanations as to what is meant by uncertainty and why it needs to be accounted for;
- Briefing on some of their work undertaken since 2014 and on work in progress;
- Connection between uncertainty in the TSR process and investment in coastal silviculture; and,
- Identification of areas in which the TSR process needs to be improved.

# NOTES

# Modelling regenerated stand growth for TSR and silviculture decision making

10:30

**Name:** Eleanor McWilliams, RPF
**Affiliation:** Associated Strategic Consulting Experts Inc.
**Position:** Partner
**Responsibilities:** Analyst, project manager
**Academic training:** BSF, UBC Forestry, MSc Forest Biometrics, U of Minnesota
**Previous employment:**
Canfor, Forestry Canada, JS Thrower and Associates Ltd.

**ABSTRACT: Modelling and projecting regenerated stand growth for timber supply and silviculture decision making.**

Growth projections are an integral component of timber supply review and analysis of silviculture options. The reliability of the growth projections are based on both the model used and the data used to initiate the model. This presentation will provide a brief introduction to the TIPSY and TASS models currently used for projecting managed stands in BC. It will also review the key input variables required to initiate the models and the sensitivity of projected results to these inputs. This will be followed by a discussion of how to improve the collection of data required for model inputs.

# NOTES

# RESULTS Data for "*Managed Stand Yield Table*" input

11:05

**Name:** Dave Waddell, RPF
**Affiliation:** FLNRO – Forest Analysis & Inventory Branch
**Position:** Modeling Forester
**Responsibilities:** Technical Solutions
**Academic training:** BSF(82), MF(87)
**Previous employment:**
1986-present: FLNRO – Forest Analysis and Inventory Branch

**Name:** Dan Turner, RPF
**Affiliation:** FLNRO – Resource Practices Branch
**Position:** Forest Management Analyst
**Responsibilities:** Silviculture data analysis
**Academic training:** BScF UNBC 2000
**Previous employment:**
1997-1999 – Three coop positions while at school
2000-2006 – J.S.Thrower & Associates Ltd.
2006-2009 – Timberline Natural Resource Group
2009-2014 – CTQ Consultants Ltd.
2014-2015 – FLNRO - Forest Analysis and Inventory Branch

**ABSTRACT: Using RESULTS Data as a "*Managed Stand Yield Table*" input**

An update on the ongoing project to develop a methodology to use RESULTS data as inputs to TASS/TIPSY for use in timber supply analysis.

# NOTES

# Coastal Silviculture Committee
# Business Meeting Agenda
# February 21, 2017

Call to order

Additions to the agenda

1. Financial Statement (next page): January 2016 – December 2016

2. Discussion Items:
   - Ratify CSC name
   - CSC logo
   - CSC website
     - New look & feel
     - Transition & future registration
   - Open Discussion

3. Bursary Presentation to Vancouver Island University recipients

4. Confirmation of Status of Current Directors, and Election of New Directors

5. Adjourn

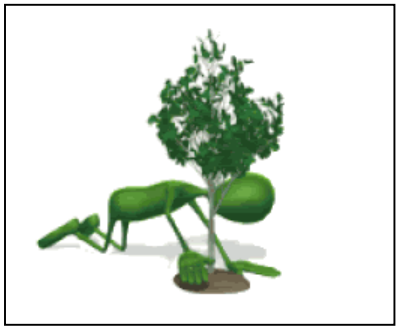
# FINANCIAL REPORT JANUARY 1 - DECEMBER 31, 2016
# COASTAL SILVICULTURE COMITTEE

| | | | | |
|---|---|---|---|---|
| **JANUARY 1 2016 BALANCE** | | | | **21298.60** |
| | Coast capital savings | | 4180.59 | |
| | VIU account | | 17118.01 | |
| **CSC BUSINESS COSTS** | | | | |
| | post office box | | -163.80 | |
| | Minister of finance | | -50.00 | |
| | | | | -213.80 |
| **BURSARIES/FINANCIAL SUPPORT** | | | | |
| | VIU Perpetual (April 30/16) | -5000.00 | | |
| | UBC (December 14/16) | -2200.00 | | |
| | BCIT | -1200.00 | | |
| | CFI National Forest Week (April 14/16) | -500.00 | | |
| | | | | -8900.00 |
| **WINTER WORKSHOP** | | | | |
| Income | | | | |
| | Registration | 10970.80 | | |
| | | | 10970.80 | |
| Expenses | | | | |
| | catering, A/V rental, gratuity/extension services/MC,Visa | -4362.70 | | |
| | printing costs | -472.60 | | |
| | presenters costs & gifts | -107.80 | | |
| | | | -4943.10 | |
| | | | | 6027.70 |
| **SUMMER WORKSHOP** | | | | |
| Income | | | | |
| | Registration | 13366.51 | | |
| | | | 13366.51 | |
| Expenses | | | | |
| | room rental/catering, gratuities/presenters gifts/awards | -6663.12 | | |
| | snacks | -480.47 | | |
| | bus/van/BC park fees | -2094.35 | | |
| | award | -50.85 | | |
| | participants gifts | -1047.20 | | |
| | printing costs | -721.60 | | |
| | Extension Services/ MC, VISA charges | -257.66 | | |
| | | | -11315.25 | |
| | | | | 2051.26 |
| **OTHER** | | | | |
| | bank interest | | | 18.59 |
| **December 31 2016 BALANCE** | | | | **20282.35** |
| SUMMARY | | | | |
| | balance in Coast Capital | 7723.61 | | |
| | balance in VIU account | 12558.74 | | |
| | | 20282.35 | | 0.00 |

# Genetic Gain Impact on TSR

1:00

**Name**: Patrick Martin
**Affiliation**: FLNRO
**Position**: A/Director, Tree Improvement Branch
**Responsibilities**: FLNRO's tree improvement and genetic resource management program
**Academic training**: BSF, UBC 1988
**Previous employment**:



**ABSTRACT: Genetic Gain Impact on TSR**

In this presentation, I will:

1. discuss some aspects of tree improvement and forest yield that are particularly relevant to silviculture in BC;
2. briefly review how tree improvement is handled in TSR;
3. offer a few comments on the interplay between a high-yielding forest, a high-performing tree improvement program, and a high-profile TSR process; and
4. conclude with a discussion of the contribution of tree improvement to mitigating timber supply declines.

# NOTES

# *"Silviculture informing Timber Supply"*
# Industry Perspective
1:35

**Name:** Rick Monchak, RPF
**Affiliation:** TimberWest
**Position:** Operations Forester
**Responsibilities:** Making trees grow
**Academic training:** BSF
**Previous employment:** Fletcher Challenge, BCFP

Rick has been involved with operational silviculture since 1980. He still remembers the carefree days of no paperwork and government paid programs. Previous work locations include South, West and East Vancouver Island and the Mainland Coast from Jervis Inlet to Rivers Inlet.

As a young forester

What he looks like todav

**ABSTRACT:** ***"Silviculture informing Timber Supply"*** **- an industry perspective**

Silviculture on the coast has the potential to have a significant positive impact on timber supply. Historically, most silviculture related inputs to timber supply have been assumptions, not reality. In many cases, these assumptions are conservative. When an effort is made to quantify these silviculture inputs, rather than use assumptions, it is most often found that actual performance surpasses the assumptions.

Achieving a timber supply forecast that is anchored on actual silviculture performance is a tremendous opportunity. What is needed is an improved understanding by forest professionals of the silvicultural factors that influence timber supply and the role they have in affecting these factors. Once this is achieved, what can be done to encourage silviculture performance that is "above the bar"?

# NOTES

# Forest Health Impact on TSR

2:25

**Name:** Stefan Zeglen, RPF
**Affiliation:** BC MFLNRO
**Position:** Forest Pathologist
**Responsibilities:** Dead trees
**Academic training:** B.Sc.(For.), M. S.
**Previous employment:**
1994 to present – regional forest pathologist, Nanaimo
1989 to 1994 – regional forest pathologist, Smithers

Self portrait

**ABSTRACT: Forest Health Impact on TSR**

Currently there are three typical ways that pest damage can be accounted for in timber supply reviews – as non-recoverable loss estimates, operational adjustment factors (OAF) and as landscape-level or catastrophic loss estimates. Each of these is derived differently and influences timber supply in its own unique fashion.
Examples are provided as to how each method has been incorporated into the TSR process and how pest impacts might be better accounted for in the future. Some discussion of the value and limitations of forest model inputs and the value of mid-rotation monitoring for quantifying forest health damage will be provided.

# NOTES

# 2017 CSC Winter Workshop Registrants