

SMC Winter Nutrition TAC Meeting Minutes  
 Firstenburg Community Center, Vancouver WA  
 Febr 23<sup>rd</sup>, 2017, 9:30am – 12:30pm

Attending:

ORGANIZATION	REPRESENTATIVE(S)
Bureau of Land Management	George McFadden
Campbell Global, LLC	Dave Hamlin
Cascade Timber	John Jayne
Hancock Forest Management	Florian Deisenhofer
Lone Rock Timber Co.	Tim Drake
Oregon State University	Doug Mainwaring
Port Blakely Tree Farms	Gareth Waugh
Stimson Lumber Company	Margaret Banks
University of Washington	Jason Cross, Pranjal Dwivendi, Cole Gross, Jason James, Kim Littke and Eric Turnblom
USFS PNW RS	Eini Lowell
WA Department of Natural Resources	Kevin Ford, Peter Gould
Weyerhaeuser Company	Scott Holub, Greg Johnson, Eric Sucre

Not Attending:

ORGANIZATION	REPRESENTATIVE(S)
American Forest Management, Inc.	Jesse Saunders
B.C. Ministry of Forests	Louise de Montigny
Green Diamond Resource	Eric Schallon
Hampton Affiliates	Mark Vroman
Olympic Resource Management	Ryan Schlecht
Oregon Department of Forestry	Tod Haren
Pacific Denkmann Co.	Allen Staringer
Quinault Indian Nation	Jim Plampin
Rayonier Forest Resources	Kirk McEachern
Roseburg Resources	Tony Powell
TimberWest Forest Corp.	Shawn McLennan
University of British Columbia	Bruce Larson

9:30 AM – PCT Analysis

Eric Turnblom & Jason Cross

- Type I installations are comparing No PCT, Uniform PCT & Best Tree Selected PCT
- Will use Type I stands to understand effects of PCT
- Objective: Describe yield changes
- Large yield differential between what best tree could achieve and what was actually implemented
  - Took derivatives for all variables to calculate optimum values
    - Theoretical global maximums (from the model): Age at PCT is 9 yrs old, Remove 20%
    - Optimum planted ISPA: No PCT – 462, Uniform – 604, Best – 748 ISPA (give max yield)
  - Best Tree: Window 7-9 years
  - Thin early, lightly: max yield at 20% removed

- Next steps: Implement in TGDB
- 2 Working Papers
- Repeat in Type III's? – several expressed much interest in this, since PCTs often conducted in ~1000+ per acre stands

*10:30 AM – Sinuosity in Douglas-fir: Potential causes*

**Pranjal Dwivedi**

- Sinuosity denotes the ratio [actual path length / shortest length] (unitless)
- Genetic propensity for sinuous growth
- Can be caused by nutrient deficiencies (Cu, B, Zn, Ca) in some species
- May occur during periods of intensive, fast growth
- Leduc (2011) developed indexes of sinuosity in loblolly: [rectangular area/height] was best
- Can also estimate using destructive methods
- Propose to use vibrational spectroscopy to measure sinuosity
  - NIR or MIR
- Proposed: Type IV – 13-14 yr old trees
  - Looking at genetic gain trials (for genetic component)
  - Also looking at spacing and veg control
  - Could also look at high soil or foliar N
    - SMC Recommendations:
      - Limit scope – it is MS project
      - Have a good research question
        - Better index for quick field assessment?
        - Nutrient balance in foliage?

*11:20 AM – Type VI (Late-Rotation Fertilization) update*

**Kim Littke, Mason Patterson, Eric Turnblom and Jason Cross**

- 6 regions: WA & OR East and West, Vancouver Island, Southern BC
- Predominantly Douglas-fir
- 30-50 yr tree age
- ¼ to 1/3 acre plots
- US: 18/20 cooperators submitted stands
- 60 areas with potential stands
- Assigning plots that are not different by KS two sample test at each site
  - Oregon West – Matthew Creek – only site selected so far
  - Oregon East – Middle Fork & Molalla; 2 un-named (Weyerhaeuser)
  - WA West – Railroad Camp; Un-named (Weyerhaeuser)
  - WA East – Un-named (Olympic RM); Nisqually Dog; Conlay Road
- Timeline
  - Installed this year & next year – aim for 30 between 2 years
  - PRS Probes installed & soil sample Spring 2017
  - Still selecting stands
- Bob Feedback: Requesting maps for areas where installations are being installed
  - Keys as well
- If ~70 trees per plot, that's okay

*11:40 AM – Plantation Yield Calculator*

- Yield metrics etc. all fit & going into plantation yield calculator
- Trying to optimize solutions for 3 yield metrics simultaneously (basal area, QMD, TPA)
- Been running since Sept 19<sup>th</sup> – still going, fits looking good, but predictor set still dropping variables
- May look at new, faster fitting algorithm

*11:45 – New/Old Business*

- Policy advisory meeting – not March 2<sup>nd</sup>
  - Proposed 2<sup>nd</sup> or 3<sup>rd</sup> full week in March
  - Week of 20<sup>th</sup>? – 23<sup>rd</sup> of March (prelim consensus)
- Location of Spring Meeting possibilities (currently set for: April 20<sup>th</sup>)
  - Olympia
  - South Sea-Tac
  - Astoria ← possibilities for field trip with Greenwood (tentative preference)
  - Email membership soon about possibility for field trip, 1 vs 2 day, location preferences
- Type I Harvesting
  - Pushed back from original schedule
  - Response rate not complete for updates
  - 2018 Kitten Knob (711);
  - 2018 Forks Sorting Yard (735) [learned subsequent to meeting]
  - 2019 Mason Lake (not flexible)
  - 2020 Sandy Shore (flexible) - ORM
  - Flexibility of cooperator important for sun-setting sampling
- IRC meeting after SMC Spring Meeting (currently set for: April 20<sup>th</sup>)
  - Develop study plan for hemlock plots

*12:10 – Adjourned*