

# 2021 Western Mensurationists Meeting

## Agenda

<b>Sunday, June 20, 2021</b>		
16:00 – 18:00 Pacific Daylight Time	Happy Hour Drop-in on Zoom	Meet old friends and make new ones – zoom breakout rooms will be available for small groups
<b>Monday, June 21, 2021</b>		
<b>MORNING</b>		
9:00 – 9:05	<b>Meeting opening and overview</b>	Bianca Eskelson
<b>9:05 – 10:30</b>	<b>IUFRO session: Linking growth models with remote sensing data</b>	<b>Moderator: Woongsoon Jang</b>
9:05 – 9:25	CanopyShotNoise – An individual-based tree canopy modelling framework for projecting remote-sensing data and ecological sensitivity analysis	Arne Pommerening
9:25 – 9:45	The effects of thinning on crown structure of Scots pine trees	Ninni Saarinen
9:45 – 10:00	Empirical growth models based on repeated laser scans in non managed area	Peter Surovy
10:00 – 10:15	Regeneration survey using inexpensive unmanned aerial systems	Adam Conrad
10:15 – 10:30	Simulating the growth of Larix olgensis and predicting the future change using 3-PGS Model	Yu Bai
<b>10:30 – 10:45</b>	<b>Coffee break</b>	
<b>10:45 – 12:00</b>	<b>IUFRO session continued: Linking growth models with remote sensing data</b>	<b>Moderator: Mathieu Fortin</b>
10:45 – 11:05	LiDAR, Stands, FVS, and Woodstock. Happy Together.	Clara Clark
11:05 – 11:25	Tree-Level monitoring of open canopy forests from UAS structure from motion data	Neal Swayze
11:25 – 11:40	Coupling LiDAR systems analysis with growth and yield models and diameter distribution models for spatially explicit projections of standing timber in fast growing Eucalyptus plantations	John Kershaw
11:40	Closing remarks for the IUFRO session & quick overview for the networking sessions	
<b>12:05 – 12:55</b>	<b>Networking sessions during lunch – Bring your own lunch!</b>	<b>See details on pages 4-6</b>

<b>Monday, June 21, 2021</b>	<b>AFTERNOON</b>	
<b>13:00 – 14:30</b>		<b>Moderator: Lara Melo</b>
13:00 – 13:20	Estimating Douglas-fir site index using a Lidar canopy height model and stand age in western Oregon and western Washington	Donald Gagliasso
13:20 – 13:40	Drivers of productivity differences between Douglas-fir planted within its native range in Oregon and on exotic sites in New Zealand	Liam Gilson
13:40 – 13:55	Crown ratio models for loblolly pine	Krishna Poudel
13:55 – 14:10	Development and testing an algorithm for estimating top height in TASS simulations	Ian Cameron
14:10 – 14:30	Hierarchical Gaussian processes for modeling stand diameter distributions from forest inventory data	Brian Clough
<b>14:30 – 14:45</b>	<b>Coffee break - Surprise! – DO NOT MISS!</b>	
<b>14:45 – 16:00</b>		<b>Moderator: Andrea Cameron</b>
14:45 – 15:00	Thinning from above or below? Maximizing financial value in Douglas-fir rotations.	Todd West
15:00 – 15:20	How good is the data?	Fred Martin
15:20 – 15:40	Regional modeling of an invasive annual grass in the intermountain Pacific Northwest	Ty Nietupski
15:40 – 15:55	Importance of image pre-processing on the analysis of the imagery acquired with small unmanned aerial systems	Sudeera Wickramarathna
15:55 – 16:00	<b>Closing remarks first day</b>	
16:00 – 18:00	Happy Hour Drop-in on Zoom	Meet old friends and make new ones – zoom breakout rooms will be available for small groups

<b>Tuesday, June 22, 2021</b>		
<b>9:00 – 10:30</b>		<b>Moderator: Peter Marshall</b>
9:00 – 9:15	Bridging sampling with covariate designs and rapid biodiversity assessment to estimate local plant species richness	Tzeng Yih Lam
9:15 – 9:35	Decision Space for Field Application of Sector Sampling	Martin Ritchie
9:35 – 9:50	Biomass estimates derived from sector subsampling of 360° spherical images	John Kershaw
9:50 – 10:10	Big trees matter most: Plot optimization for ground-based tropical forest carbon inventories at both country and project scales	Bryan Foster
10:10 – 10:30	Seeing the forest for the clumps: characterizing clumpy regeneration and ladder fuels	Justin Crotteau
<b>10:30 – 10:45</b>	<b>Coffee break</b>	
<b>10:45 – 11:55</b>		<b>Moderator: Celine Boisvenue</b>
10:45 – 11:05	Post-stratified estimation: Realized and potential efficiency in a national forest inventory	James Westfall
11:05 – 11:20	Improving Forest Sample Estimation through UAS Canopy Structure Stratification	Logan Wimme
11:20 -11:40	Enhanced Forest Inventory using LiDAR data – a hybrid approach	Kat Gunion
11:40 – 11:55	Small area estimation in operational western forest inventories	Corey Green
<b>11:55 – 12:05</b>	<b>Picture taking</b>	
<b>12:05 – 12:15</b>	<b>Plans for future years Announcements &amp; Closing Remarks</b>	Bogdan Strimbu Bianca Eskelson

### **Networking sessions for the Monday lunch hour: 12:05 – 12:55**

The idea of the networking sessions is to give students and young professionals the opportunity to meet some of the other attendees, which may not be as easy in this year's virtual format as it used to be during in-person meetings. The hope is that folks show up in the sessions they are interested in, ask questions, and then move to other breakout rooms for small group or one-on-one discussions.

There are 5 networking sessions set up in the following breakout rooms (see more details on each session below):

- Provincial Government Session
- Natural Resources Canada Session
- United States Agency Session
- Industry & Consultants Session
- University Session

While we organized for some folks to specifically attend these sessions to be available for students and young professionals for discussions, please join the session that you fit in and participate. Once folks introduced themselves small groups can move into other breakout rooms as needed.

#### **Provincial Government Session:**

In this session, several employees from the British Columbia and Alberta provincial government introduce their groups within the government, talk about their job responsibilities, and discuss what skill sets they are looking for in new hires.

**Woongsoon Jang**, Research Scientist, Forest Fertilization and Nutrition, Resource Practices Branch, BC FLNRORD – *session moderator*

**Catherine Bealle Statland**, Team Lead, Stand Development Modelling, Forest Analysis and Inventory Branch, BC FLNRORD

**Tim Salkeld**, Manager, Forest Inventory, Forest Analysis and Inventory Branch, BC FLNRORD

**Chris Butson**, Team Lead, Remote Sensing & Geospatial Applications, Forest Analysis and Inventory Branch, BC FLNRORD

**Gary Johansen**, Team Lead, Productivity and Sample Data, Forest Analysis and Inventory Branch, BC FLNRORD

**Katrina Froese**, Resource Analyst, Reforestation, Inventory and Biometrics Section, Forest Stewardship and Trade Branch, Government of Alberta

**Chris Bater**, Forest Management Specialist (Remote Sensing), Reforestation, Inventory and Biometrics Section, Forest Stewardship and Trade Branch, Government of Alberta

**Darren Aitkin**, Manager, Reforestation, Inventory and Biometrics Section, Forest Stewardship and Trade Branch, Government of Alberta

### **Natural Resources Canada Session:**

In this session several research scientists from Natural Resources Canada introduce their group, what they do in their position, and how young researchers can prepare themselves to successfully apply for positions with Natural Resources Canada.

**Celine Boisvenue**, Research Scientist, Pacific Forestry Centre, Natural Resources Canada – *session moderator*

**Joanne White**, Research Scientist, Forest Inventory and Analysis, Natural Resources Canada

**Jim Stewart**, Research Scientist, Silviculture and Fibre Production, Natural Resources Canada

**Mathieu Fortin**, Research Scientist, Canadian Wood Fibre Centre, Natural Resources Canada

### **United States Agency Session:**

Do you want to work for a US agency? In this session, several US agency employees introduce their group and provide tips on how to succeed in landing the agency job that you dream of!

**Bianca Eskelson**, University of British Columbia – *session moderator*

**Martin Ritchie**, Research Forester, Pacific Southwest Research Station, Ecosystem Function and Health

**Andy Gray**, Research Ecologist, Leader of the Inventory, Monitoring, & Analysis Team, Forest Service, Pacific Northwest Research Station

**Erin Smith-Mateja**, Forest Biometrician, Forest Vegetation Simulator, United States Forest Service

**Peter Gould**, Data Scientist/Forest Biometrician, Washington State Department of Natural Resources

### **Industry & Consultants Session:**

In this networking session, analysts working in industry or as consultants talk about their job responsibilities, their companies/groups, and the skill sets they are looking for in new hires.

**Eleanor McWilliams**, Forest Biometrics Analyst, J&E McWilliams & Associates Ltd. – *session moderator*

**Cam Brown**, Strategic Planning Forester / Manager, Forsite Consultants Ltd.

**Sean Garber**, Forest Biometrician, Rayonier

**Donald Gagliasso**, Forest Analyst, Mason Bruce & Girard Inc.

**Theresa Marquardt**, Forest Resource Analyst, Green Diamond Resource Company

**Greg Johnson**, Director, Advanced Forestry Systems, Weyerhaeuser NR Company

**University Session:**

In this networking session academics from different universities provide some insights about their careers. Join this session and ask questions about how to succeed in graduate school, land a tenure track job, or how to succeed once you landed that university job.

**Peter Marshall**, Professor, University of British Columbia – *session moderator*

**Valerie LeMay**, Professor, University of British Columbia

**Temesgen**, Professor, Oregon State University

**Samantha Gill**, Professor, Cal Poly

**Leah Rathbun**, Assistant Professor, North Carolina State University

**John Kershaw**, Professor, University of New Brunswick