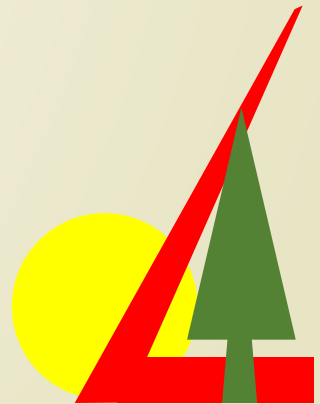


Operational Lidar Inventory (OLI) 6th Annual Meeting

Jacob L Strunk

2021



Meeting Host: Jacob Strunk

Current

- Statistician, FIA, USFS PNW Research Station
- Vegetation Monitoring and Remote Sensing (VMaRS) team
 - Sampling, remote sensing, forest modeling, mapping, GNSS, etc.

Relevant Experience

- Undergrad, Graduate, post-doc work: RS / forestry / sampling related (UW, OSU)
- Consulting experience with forestry / lidar (esp. Aerometric)
- Helped Peter Gould build WA DNR Remote Sensing inventory
- Currently working with lidar, photogrammetry, spectral data as Aux. data for forest inventory and mapping



Origin of OLI – WA DNR

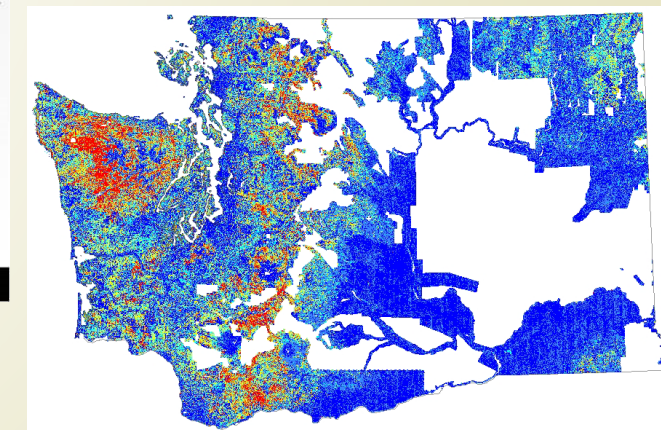
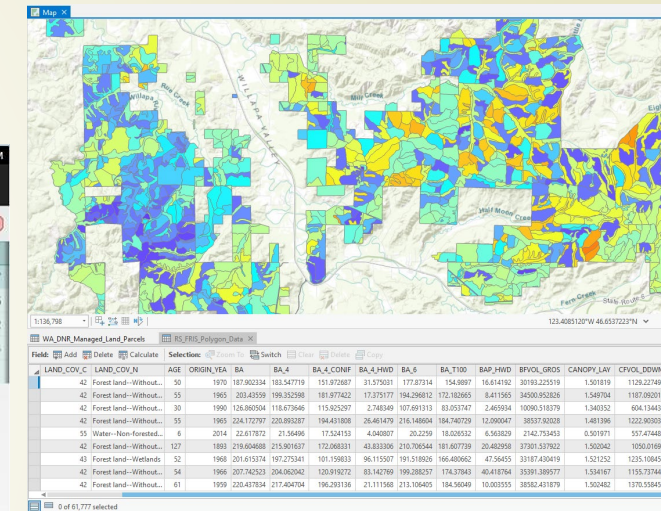
- WA DNR
 - Forest inventory reset in 2014 due to financial crisis
 - Sought more efficient inventory system
 - Remote Sensing inventory
- Lots of good (and bad) ideas
- No forum to discuss operational RS-forestry issues
- WA DNR sponsored the first meeting
- WA DNR is now operational with a RS inventory
 - Maps, GIS tools, data collection apps, UAV toolchain
 - DAP + lidar dtms
 - 2.7 million acres DNR lands
 - 27.3 million acres total
 - Version 3
 - Semi-annual inventory updates
 - Full re-measurement (not growth projection)

DNR Data Recorder
RIU: 42589, Plot: 1

#	NO	CNT	PTY	SPP	DBH	HT	AGE	NOTES	TPA
1	1	2	DF	12.5					23.47
2	1	2	WH	11.6	45	12			27.25
3	1	2	DF	13.5	120				20.12
4	1	2	WH	14.5					17.44
5	1	2	DF	22.5					7.24

SPP: DF

DF	MA	RA	RC
WH	AC	AF	AS
BC	BR	CA	CH
DG	ES	GF	HW
LL	LP	MD	MH
NF	NONE	OA	OC

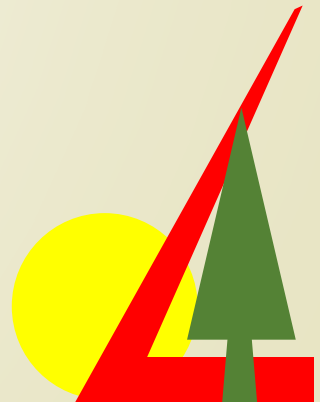


Origin of OLI



Recognized need for operational remote sensing & forest inventory venue

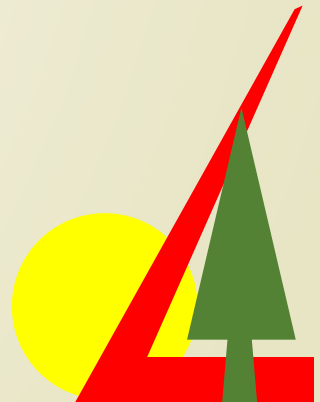
- Operational forestry venues
- Operational lidar / remote sensing venues
- **Research** remote sensing / forestry venues
- **Operational** remote sensing & forestry venue



OLI “Mission”

Link remotes sensing forestry research with operational forest inventory

- 1) Tech transfer
- 2) Operationally relevant research objectives
- 3) Cooperative advancement (private, public, research, consultants)
- 4) Social engagement between cutting edge operators (WA DNR, MN DNR)
- 5) Identify knowledge, methodological gaps
- 6) Help identify solutions – hopefully 😊



OLI New Home : **Western Forestry and Conservation Association**

- New website, etc.
 - Mensurationist.net
 - Westernforestry.org
- Mailing lists
 - WFCA
 - <https://groups.google.com/g/oli2>
- **Technical issues**
 - **Add to chat box**



Richard Zabel




Melinda Olson

Breakout Room Instructions & Options

Self-selecting a breakout room

You will be able to enter and leave breakout rooms freely. There will be 5 breakout rooms (Room A, B, C, D, and E) that will open all day. The Lunch Discussion room will be reserved between 12-12:30pm.

Note: Participants not joined with the desktop or mobile app (version 5.3.0 or higher) will not be able to self-select a breakout room. The host will need to facilitate moving these participants manually, please send a note to Melinda Olson in the chat box and ask to be moved into a specific breakout room.

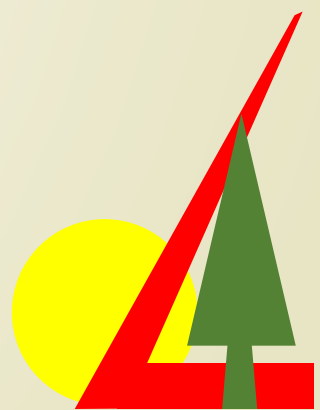
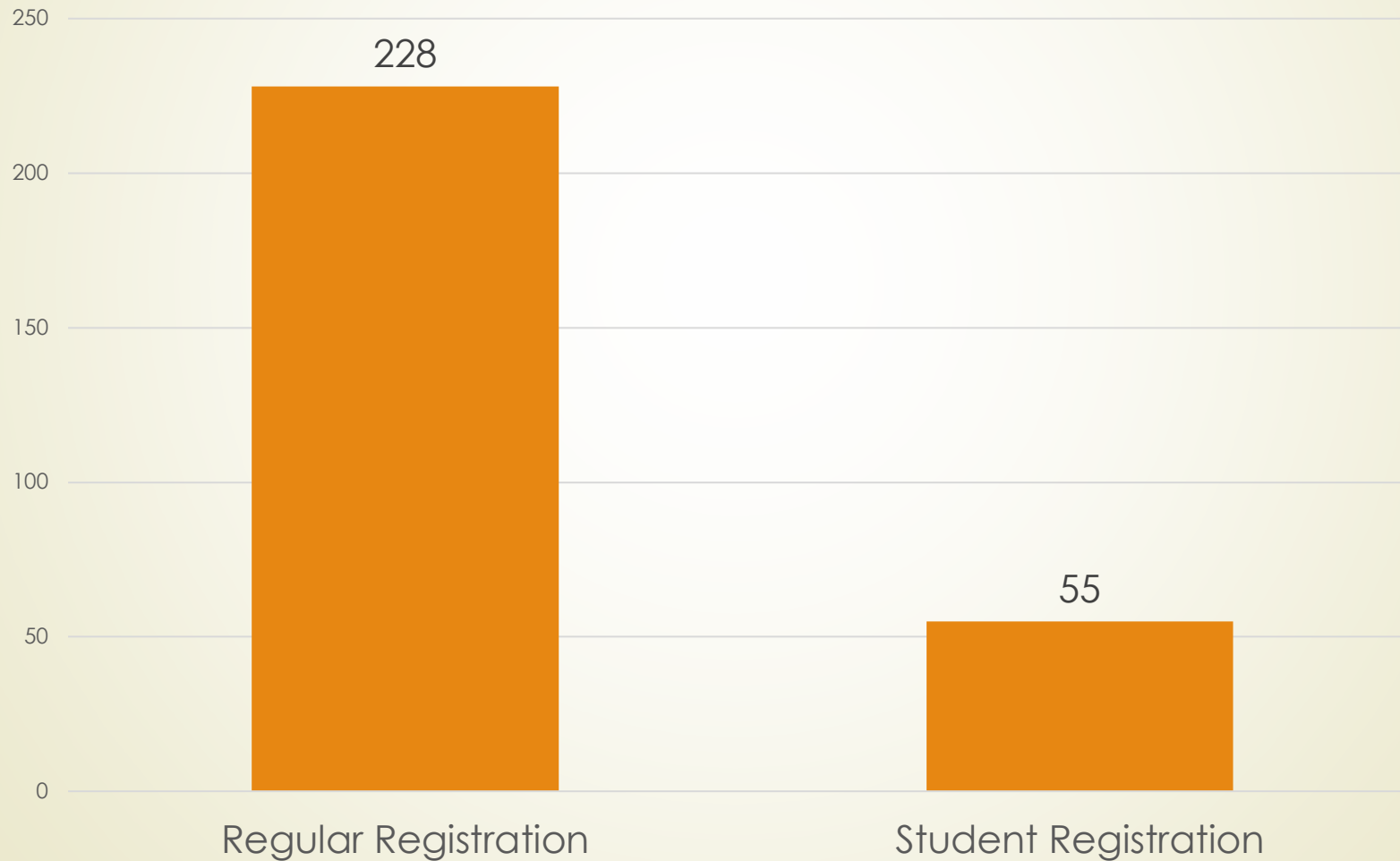
1. Click **Breakout Rooms**  in your meeting control button, most commonly found at the bottom of your screen. (This will display the list of open breakout rooms.)
2. Hover your pointer over the number to the right of breakout room you wish to join, click Join, then confirm by clicking Join.
3. Repeat as necessary to join other breakout rooms, or click Leave Room to return to the main session. You can return to main session at any time.

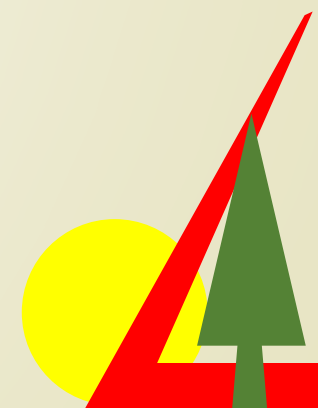
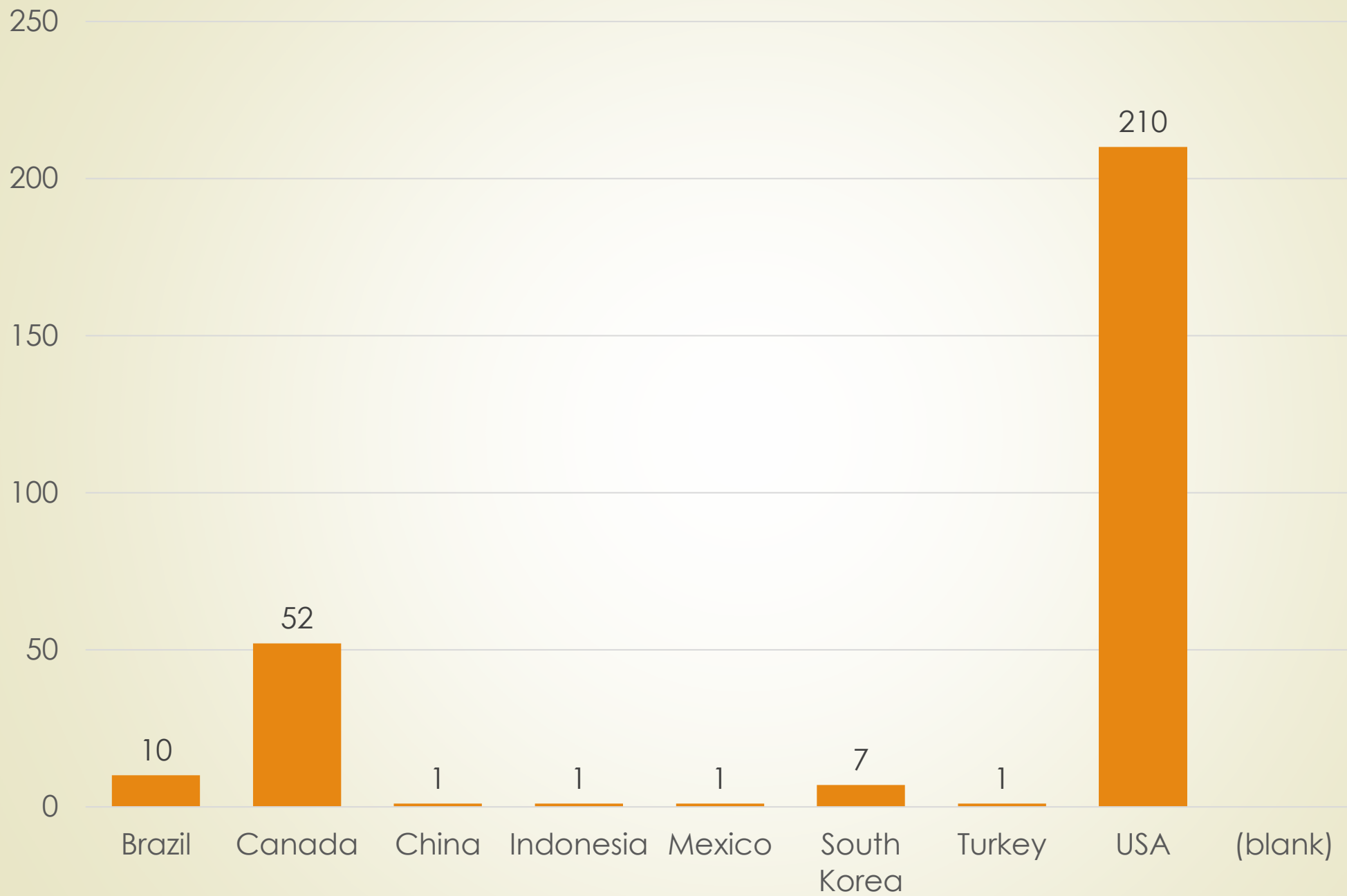
Chat Box

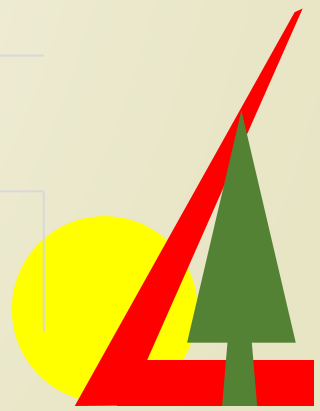
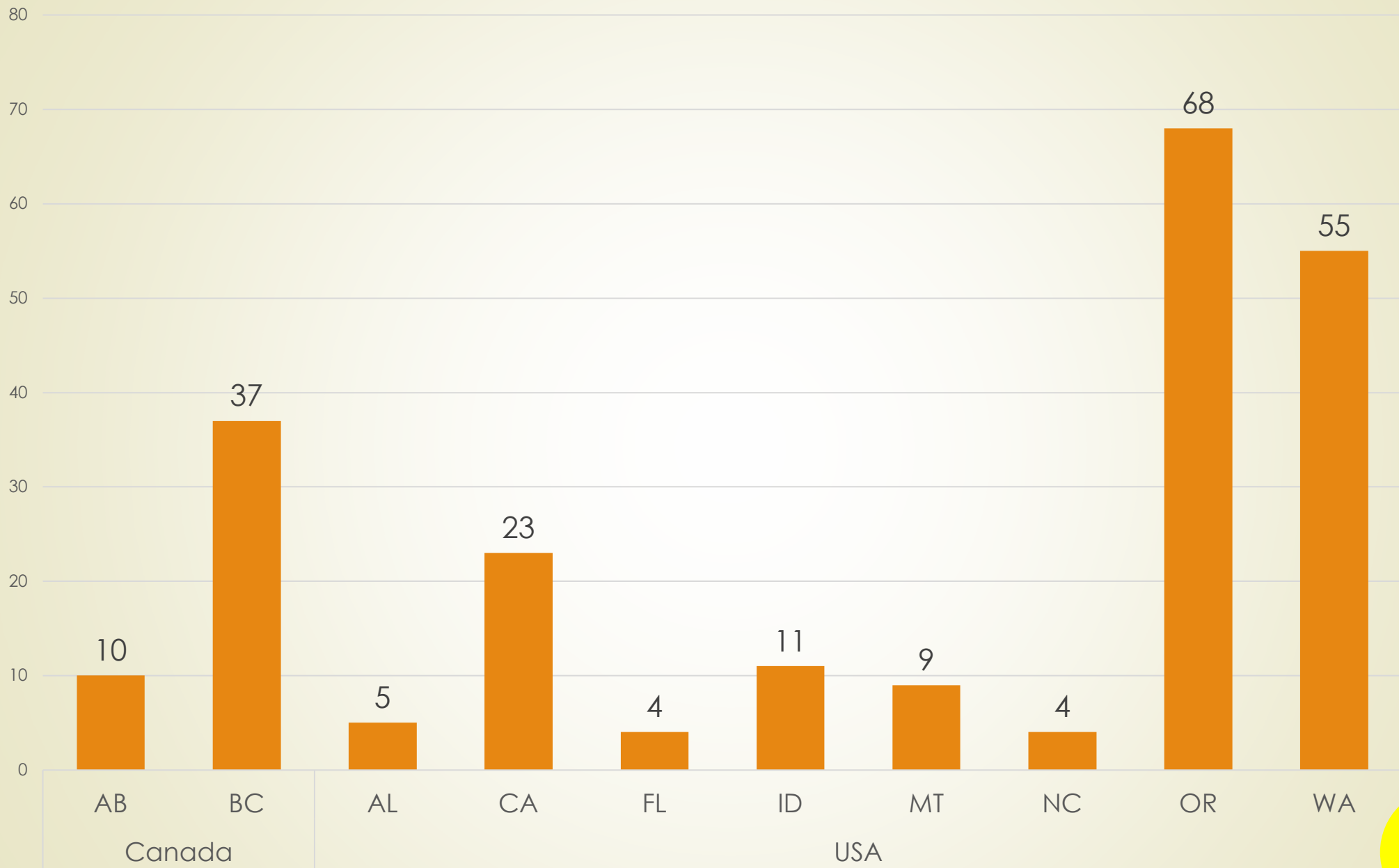
The chat box is set-up so you can message one individual attendee, or everyone. To send a personal message use the dropdown menu in the chat box to review the attendee list, select the individual you'd like to message, enter your message and click enter to send it.



OLI Registrants Summary (283 total)



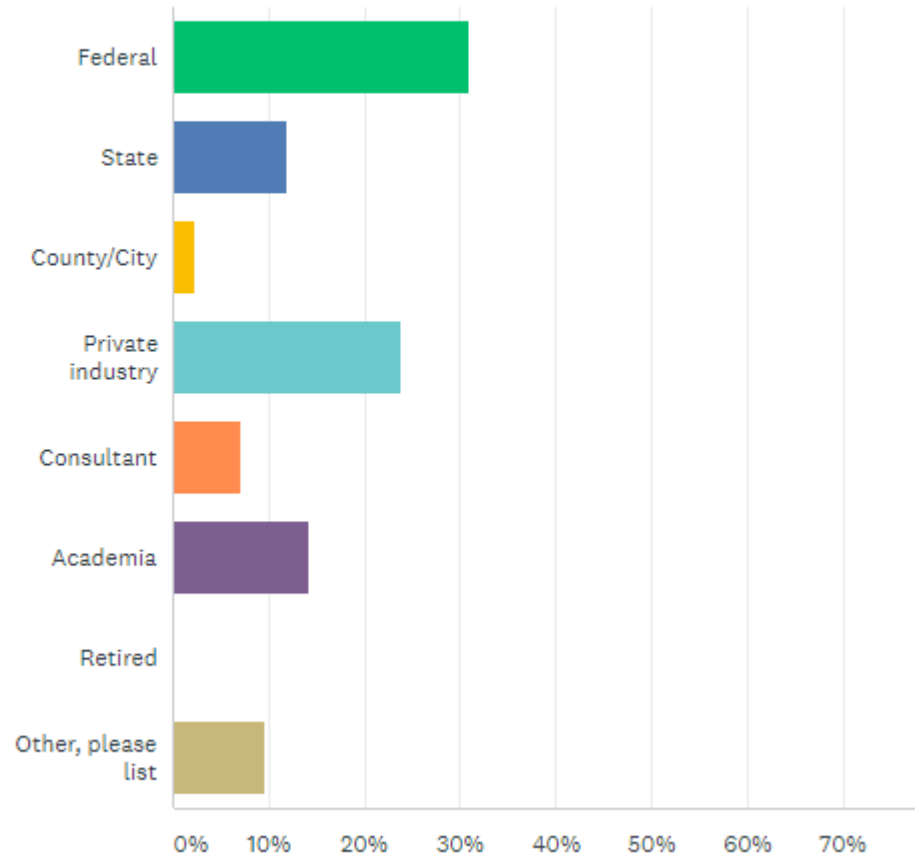




Poll Results (84 out of 283 registrants)

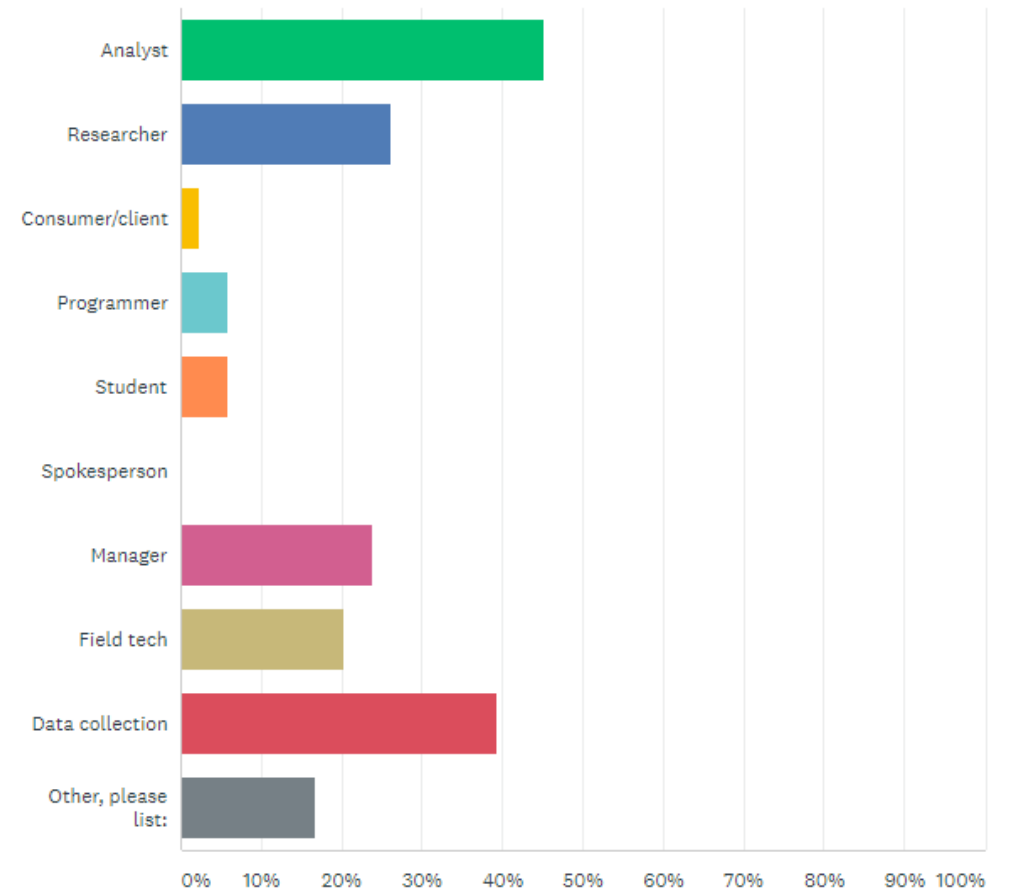
Indicate the category of your organization:

Answered: 84 Skipped: 0



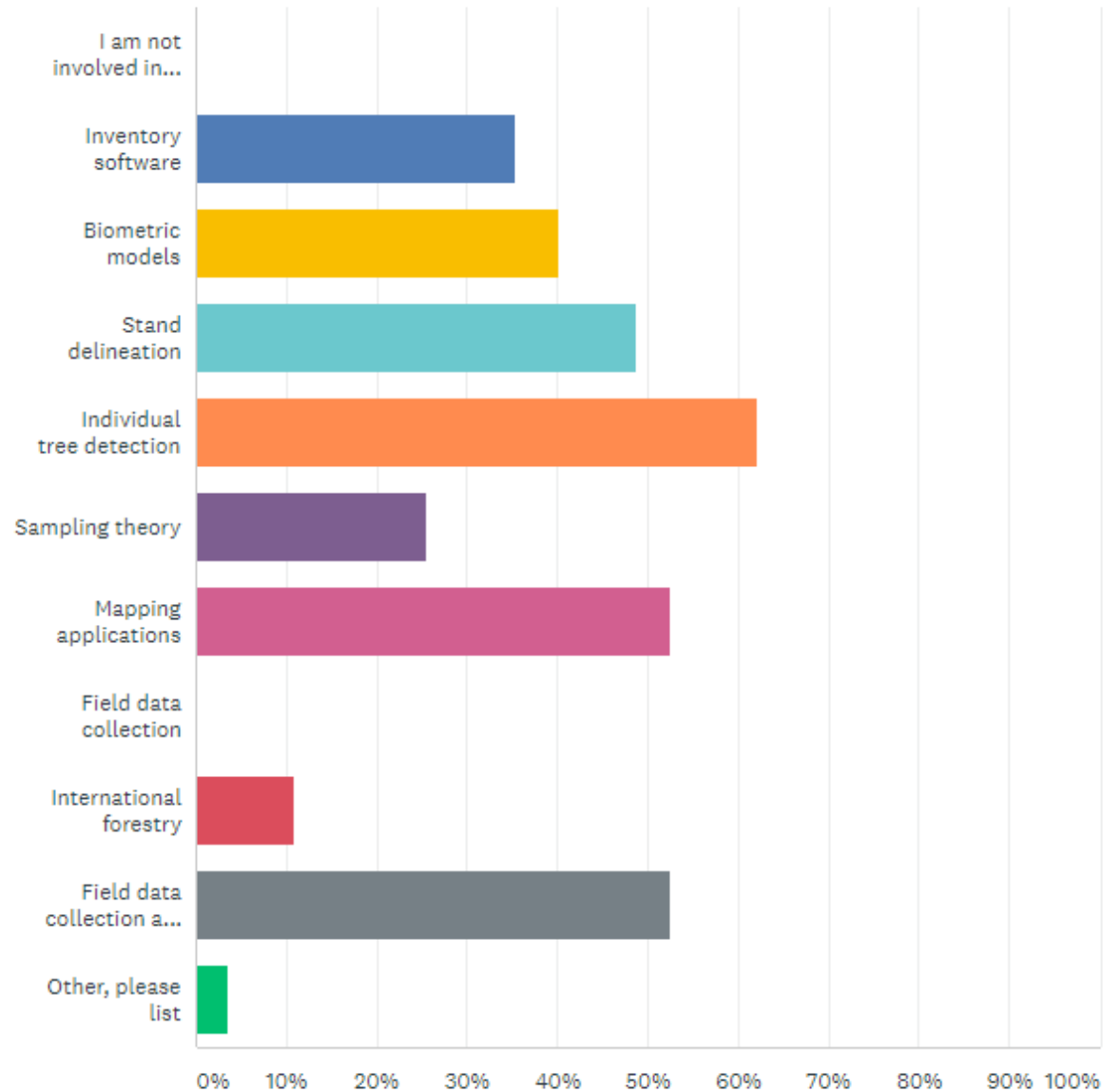
What is your role in forest inventory and monitoring?
(Select up to 3)

Answered: 84 Skipped: 0



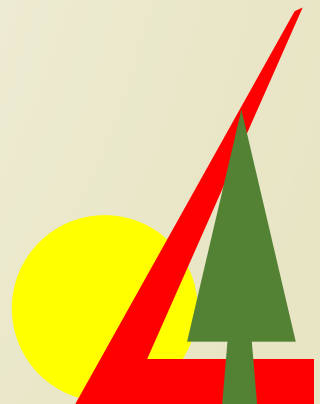
Select up to 3 topics that you would like to learn more about:

Answered: 82 Skipped: 2



Write In Section

1. Recent developments
2. Tech transfer / RS for traditional inventory
3. Operational usage
 1. harvest, stand exam, growth
4. Individual tree performance
5. Tools
6. Mobile lidar
7. Stand / forest level inferences
8. Lidar processing
9. Species modeling
10. Photogrammetry
11. Data sharing framework
12. Understory fuels



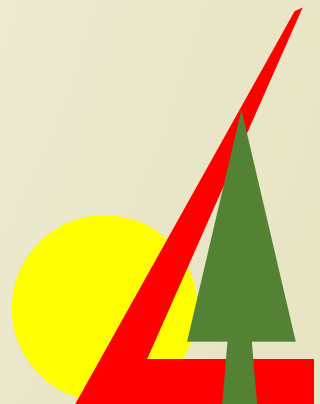
OLI Project

Concept

- Identify a research topic
- Identify interested parties
- Cooperate on an operationally relevant research project
 - Operational problem, data
 - Researchers

In practice

- Attempted a few times, but need a “champion”
- Last year: OLI helped to facilitate a funded project
 - CMS, Andy Hudak UW, Arjan Meddens WSU, many others ...
- This year: Identify a topic (and partner), student, pair with federal funding
 - L. Monika Moskal at UW
 - McIntire Stennis funding

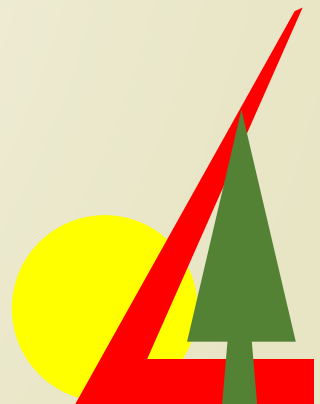


University Programs Section

- Universities are a critical part of the industry
- Learn more about what / how / who ...
- ~15 minutes

- This year: OSU, UW, UMT

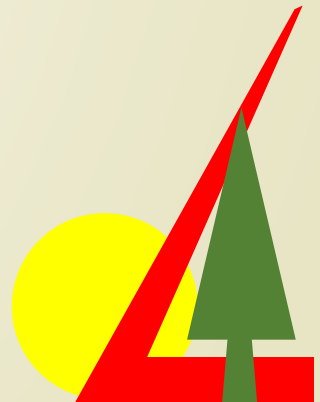
- Perhaps showcase other groups in the future?
 - Consultants
 - Public research groups
 - Collaborative land managers
 - Cooperatives



Presentation Format

- 1-2 minutes intro/ handoff
- ~23 minutes presentation
- 5 minutes questions
- Place questions in chat box
- We will relay to speakers

- Very strict with time / question
 - Feel free to use breakout room “follow-up discussion”
 - We can use main room during breaks if people are interested



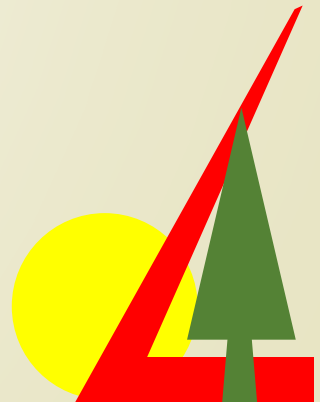
Breakout Rooms

Unscheduled breakouts

- More detail after a meeting (depends on speaker)
- Avoid zoom fatigue
- Unscheduled discussions (lets meet in room C and discuss mobile lidar)
- Anyone may pop into sessions...

Scheduled Breakouts (optional)

- McIntire-Stennis (LM Moskal) carryover (**12:00**)
- Hosted sessions (**14:30**)
 - Tech Transfer / Traditional Inventory – Tom Baribault, MBG
 - Data Sharing Framework – Marin Palmer, R6 USFS
 - Individual Tree Detection – Mike Parlow, ForSite
 - Lidar Processing & Tools – Nate Osborne, Rayonier Inc.



Precision Forestry Cooperative Meeting Tomorrow (Virtual)

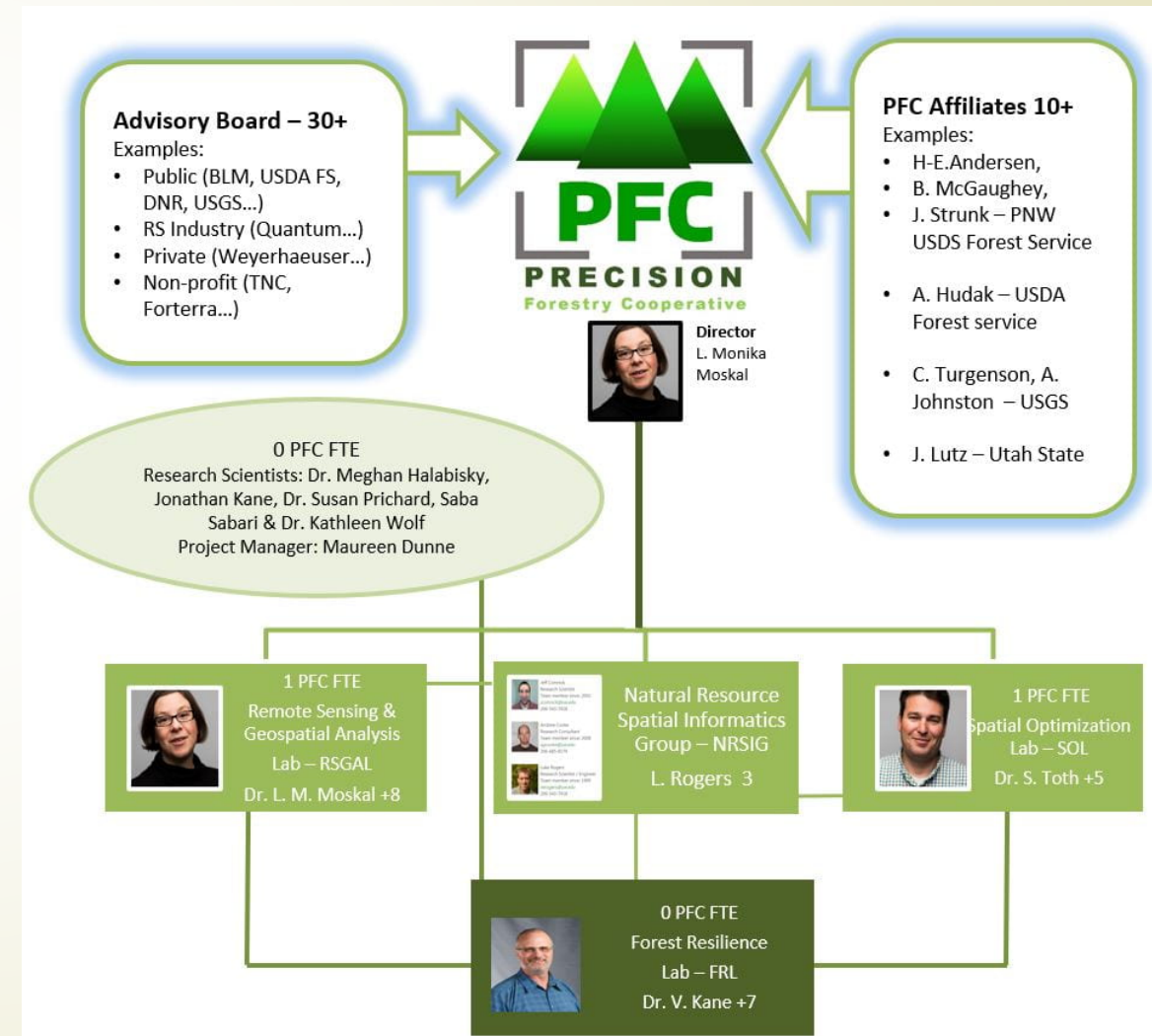
UW Precision Forestry Cooperative (PFC) Board Meeting

Zoom Meeting ID: 91 95 14 92 290

Thursday, April 8th, 2021, 8:30am-12pm (PST)

PFC website

<https://sites.uw.edu/uwpcf/>



GMUG Meeting

- Growth Model User's Group (GMUG)
 - Tentatively September 2021
 - Host: Weikko Jaross, LandVest
- Started by Greg Johnson and Dave Marshall
 - 04/18/2000, Willamette Industries office in Albany Oregon
- Focus on forest-modeling issues
- Historically, PNW emphasis
- On hiatus for a few years

