FOREST MANAGEMENT FOR CLIMATE MITIGATION

RESEARCH-TO-PRACTICE DIALOGUE

Sustainable Forestry Initiative & McMaster University Remote Sensing Lab

March 25, 2025, 10:00 am – 4:00 pm ET

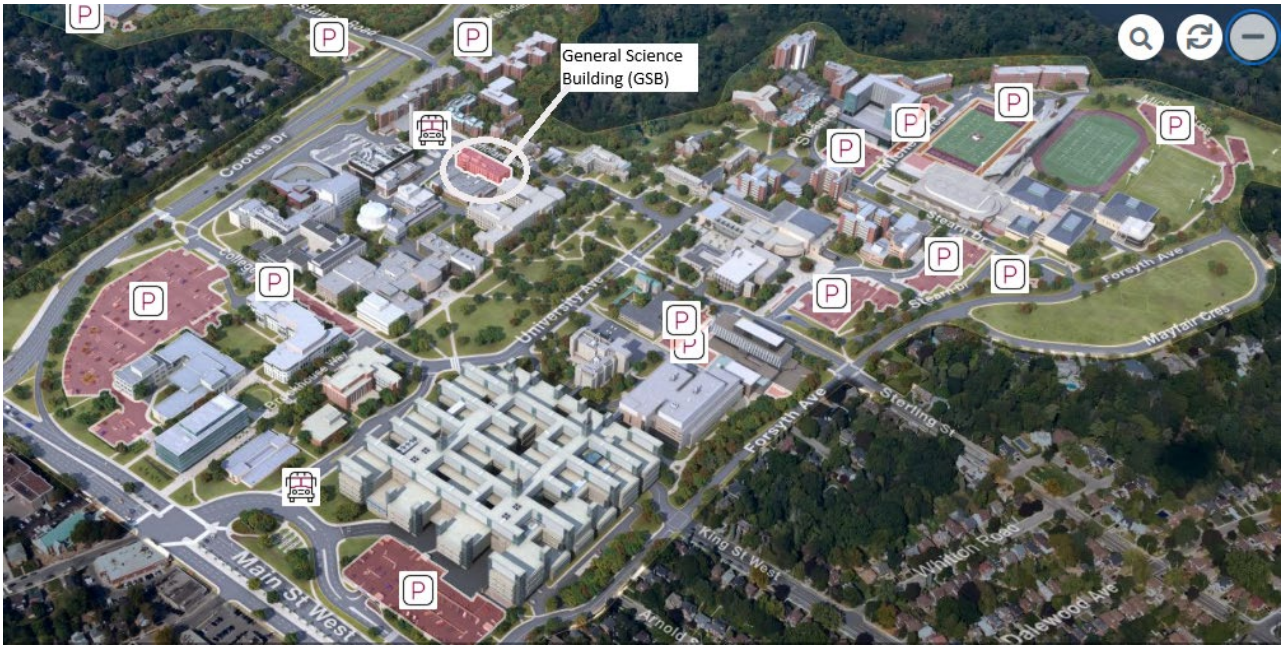
Objective: This one-day dialogue will focus on the status of greenhouse gas (GHG) accounting, with the goal of better understanding current gaps and advancements in practice-based forest management interventions – such as thinning, restoration, and avoided disturbance – and their outcomes at multiple scales.

The event features presentations and discussions on forest carbon accounting, forest disturbance, and climate-resilient forest management. A key focus is exploring the measurement and assessment of intervention outcomes, including their carbon and carbon equivalent implications, uncertainties, and time scales. Hosted by Dr. Alemu Gonsamo Remote Sensing Lab, the event will showcase research from the lab alongside presentations by government, private sector, and practitioners. Lauren T. Cooper, Chief Conservation Officer, is leading from the Sustainable Forestry Initiative (SFI).

The outcome of this event will include a report on 'climate smart forestry' practices, opportunities, and challenges in measuring their effectiveness, as well as fostering collaboration with attendees for future partnerships. For SFI, the dialogue will enhance the climate-related work across our nearly 100-million-hectare footprint in Canada, including a major project funded by ECCC.

Where: McMaster University, General Science Building, GSB-330 (Third Floor), 1280 Main Street West, Hamilton, ON. *Remote participation details at end of this document.*

Google map link to General Science Building: https://maps.app.goo.gl/zdpY2rSjx7tXhPEh7



Project financially supported by

Environment and Climate Change Canada | Environnement et Changement climatique Canada

AGENDA

Please note that * indicates that these sessions will be available for remote participation.

Time	Topic	Presenters / moderators
10:00 - 10:10	Welcome and traditional land acknowledgement*	Alemu Gonsamo
10:10 - 10:30	SFI overview*	Lauren Cooper
10:30 - 12:00	Presentations and questions: Part I – a focus on research*	see table below
12:00 - 1:00	Networking and Lunch (provided)	
1:00 - 2:30	Presentations and questions: Part II – a focus on practice* *Conclusion of remote portion*	see table below
2:30 - 2:45	Networking Coffee Break	
2:45 - 3:45	Discussion: Translating Science to Practices Key topics include: 1. Challenges in carbon accounting 2. Knowledge and communication gaps 3. Opportunities to collaborate	L. Cooper and A. Gonsamo
3:45 - 4:00	Wrap up – what we heard and next steps	L. Cooper and A. Gonsamo

PRESENTATIONS

Author	Organization	Title
Zilong Zhong	McMaster	Burned Area Detection, Carbon Emissions Estimation, and Biomass Budget Modeling in Forests.
Jose Bermudez	McMaster	Integrating Multi-Sensor Data and Deep Learning for Estimating Canopy Height, Biomass, and Uncertainty in managed southern and data-scarce northern forests.
Tenaw Geremew	McMaster	High-Resolution Space-Based Monitoring of Large-Scale Tree Planting Initiatives for Climate Mitigation and Environmental Restoration.
Kangyu So	McMaster	Retention forestry: assessing biomass, soil carbon and albedo impacts with ground, UAV and satellite observations.
Dominic Cyr	ECCC	Uneven-Aged Stand Dynamics, Trees Outside Forests, and Other Opportunities to Improve Canada's National GHG Inventory Carbon Estimates
Sean Rudd	Korotu Technology	Towards a multi sensor, locally calibrated estimation of forest carbon stocks from space, aerial and terrestrial data combined
Brennan Vogel	Chippewas of the Thames First Nation	Exploring Collaboration & Planning Opportunities for Sustainable Forest Stewardship, Restoration & Conservation.
Caleb Rempel	FNESS	First Nations Emergency Services Society Integrated Fire Management (IFM)
Leigh Fox	Wahkotowin Development	Mycorrhizal inoculation of forest seedlings and connection to Indigenous forest stewardship values: measuring above ground biomass in below ground Improved Forest Management (IFM) silviculture interventions
Aidan O'brien	Forests Canada	Challenges and Opportunities to Measuring Forest Carbon
Shannon Rawn	Miisun Integrated Resource Mgmt. Co.	Miisun's Approach to Achieving Climate Smart Forestry

Part I talks are ~15 minutes with 3 minutes of Q&A, Part II talks are ~12 minutes with 3 minutes of Q&A

Project financially supported by
Environment and Climate Change Canada | Environnement et Changement climatique Canada

Remote Connection

Zoom link: https://mcmaster.zoom.us/j/93104037629 Password: landsat

One tap mobile

+17789072071,,93104037629#,,,,*3152381# Canada

+12042727920,,93104037629#,,,,*3152381# Canada

Join by SIP
• 93104037629@zoomcrc.com

For any other phone:

Meeting ID: 931 0403 7629
Passcode: 3152381

Project financially supported by
Environment and Climate Change Canada
Environnement et Changement climatique Canada