



SILVA21

Annual General Meeting

May 7-9, 2024
Alt Hotel Ottawa

Ottawa, Ontario



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document online



Honouring the Anishinabe Algonquin Nation

Silva21 acknowledges that we are visitors in Ottawa on the unceded territory of the Algonquin Anishinabe Nation who have lived on this land for millennia.

As a Canada-wide research group whose ongoing work is conducted on traditional, ancestral and unceded territories of multiple Indigenous communities, we acknowledge the diverse Indigenous cultures, languages and histories that have shaped - and continue to enrich - these lands. We pay respects to both past and present Elders and extend our gratitude to the Indigenous communities who have stewarded the forests and lands upon which we live, work and play.

We acknowledge that the past and ongoing effects of colonization have had profound impacts on Indigenous peoples and their relationship with the land. We recognize the importance of decolonizing our mindsets and practices and are committed to learning from, and working in partnership with, Indigenous communities to promote the principles of reconciliation, respect, and collaboration in the field of forestry.

We invite all of the Silva21 community to reflect on the vital role that Indigenous knowledge, perspectives, and voices play in shaping our understanding of the forest ecosystem and sustainable management. Join us in committing to ongoing efforts of building meaningful relationships with Indigenous communities, acknowledging their rights and sovereignty, and integrating Indigenous knowledge and perspectives into our research and practices in a future of reconciliation, equity, and sustainability.

Our collective statement of recognition and promise, as well as land acknowledgments from each university associated with Silva21, can be found on our website at www.silva21.com/edi. We also encourage you to explore the following links:

- **The Ottawa Aboriginal Coalition** (www.ottawaaboriginalcoalition.ca) - Ottawa's aboriginal community that provide front-line programs and services to the Indigenous people living in the National Capital Region
- **Indigenous culture in Ottawa** (www.ottawatourism.ca) - Discover Indigenous culture in Ottawa including visits to the Mādahòkì Farm, the National Aboriginal Veterans Monument and the Indigenous Theatre at the National Arts Centre
- **Native Land** (www.native-land.ca) - an app to help map Indigenous territories, treaties and languages across the globe

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www.silva21.com



About the meeting



**REGISTRATION IS
NOW OPEN!**

[Click here](#) to register!

This three-day event will serve as Silva21's third Annual General Meeting (AGM). The AGM aims to provide an opportunity for researchers, HQP and partners to meet and get to know each other, as well as:

- Give an overview of the ongoing program of work at each research theme and hub
- Present projects and results developed for each research theme and hub
- Share outcomes between universities, governments, and industrial partners
- Allow partners to provide feedback about how projects may help adapt silviculture to changing realities

Expenses related to meals and the field trip are covered by Silva21.

Travel and accommodation are at your expense, except for HQPs and Silva21 co-applicants (as per NSERC grant application document).

Venue and accommodations



The 2024 AGM will take place at the [Alt Hotel Ottawa](#) (185 Slater Street), a short 15 minute drive from Ottawa International Airport (see [map](#)). For more information about Ottawa International Airport (YOW), see [here](#). All meetings, presentations, accommodations and most meals will take place on site.



There are a limited number of rooms available at the hotel, of which have been set aside to accommodate our group based on estimations of attendance. In the case of limited space, rooms are prioritized for Silva21 partners, collaborators and HQPs.



BOOK YOUR ROOM

To reserve your room at this venue, [please fill out this form](#) **before April 8, 2024**. You will be provided with confirmation of your room reservation at the end of May.

Mondays and Fridays are designated travel days, so we encourage you to book a flight that arrives in late afternoon on Monday, May 6th (check in at 15:00 pm) and leaves early afternoon on Friday, May 10th (check out 11:00 am). If you are likely to arrive earlier or leave later than these times, Alt Hotel promotes flexible times based on availability and you can call to inquire. The hotel also provides luggage storage if your room is not ready when you arrive at the hotel.

Expenses & reimbursements

(for Silva21 HQP and co-applicants only)

Université Laval is able to provide cash advances and reimbursements to cover travel costs to and from the AGM for participating Silva21 co-applicants and HQPs. Here are some important notes when making travel arrangements:

- Airline tickets must be economy class excluding “Flex” and “Latitude” tickets (as per Air Canada or the equivalent from other airlines). Such tickets will not be accepted by Université Laval for reimbursement.
- Travel dates must correspond to those of the meeting up to one day before and one day after May 6-10, 2024.
- Travel must be from the place of residence or profession to the place of the AGM and the return must be to the same location.
- For vehicle travel over 600km, gas receipts from the city where the activity was held are required.

All requests for travel advances and reimbursements must go through [Guylaine Bélanger](mailto:guylaine.belanger@sbf.ulaval.ca) (guylaine.belanger@sbf.ulaval.ca) via email and must follow these instructions and include the following information:

For advances:

- Name, address, email, phone number
Contact info + cheque specimen or direct deposit form
- An email with the amount requested and for what purpose
- Note: all cash advances must be followed by a completed expense form within 1 month following the event

For reimbursements:

- Contact info + cheque if required
- The reference number of your advance, if applicable
- A completed [reimbursement form](#)
- A PDF of your plane ticket
- For car rentals: gas receipts from the AGM location that show the date, number of litres and price per litre



REIMBURSEMENT FORM

[Download ULaval's reimbursement form here](#) and complete it with all receipts within 1 month after the AGM. Any amount of cash advance that was not spent must be repaid.

This year's special events

Monday: evening snacks & networking

As per tradition, there will be a small dinner and networking event for those who are able to arrive on the Monday evening before sessions begin on Tuesday. This is a RSVP-only event and will take place in the upstairs Foyer of the Alt Ottawa with a cash bar. Please confirm your attendance [via the registration form](#).

Wednesday: stakeholder panel



SILVA21



OUR SPEAKERS & REPRESENTATIVES

SHANNON HAGERMAN
ACADEMIA

FLORIAN BERGOIN
FIRST NATIONS PERSPECTIVE

NELSON THIFFAULT
GOVERNMENT

SHANE FURZE
INDUSTRY

AGM 2024 **STAKEHOLDER PANEL**



May 8th, 2024
1:00pm

From four different perspectives, we will discuss the opportunities, challenges and differences in how forestry research moves through project planning, data collection and results, knowledge transfer and policy to play an active role in adaptive silviculture

www.silva21.com/agm



Submit your questions here:



Wednesday: Urban Forestry walking tour



For this year's field tour, we will be taking a walk among Ottawa's urban streets around Parliament Hill to discuss adaptive silviculture in the context of **Urban Forestry**. More specifically, we will hear about the diversity of species planted around the city of Ottawa and how the city is working hard to maintain the health of these trees in the face of climate change. This includes how they're promoting resistance and resilience to disturbances such as pests, windthrow, drought and frost damage (similarly to silviculture of larger scale-forests).

This urban walk will be led by Bruno Chicoine, a forestry engineer with the National Capital Commission. Bruno works to enhance public awareness of the importance of trees in and around cities and lead authorities to invest in their urban forests by promoting the many ecological, economical and social benefits of urban trees.

**TOUR RUNS
RAIN OR SHINE**



Please dress appropriately!

Thursday: showcase event

To take advantage of being so close to our partners in both Ontario *and* Quebec, this year we have added a showcase event where project leaders will provide an overview of the Silva21 project for adaptive silviculture in the 21st century, its progress at the halfway mark and plans for the future. This portion of the AGM is open (and free!) to the public but registration is required.



8:00am Breakfast & Registration

8:30am **Welcome address** from Silva21 principal investigator [Alexis Achim](#) (Université Laval) and project co-lead [Nicholas Coops](#) (University of British Columbia)

9:00am Indigenous ceremonial opening
Elder Thomas Louttit from the [Ottawa Aboriginal Coalition](#)

9:30am Invited Speaker: **Waseem Ashiq**, PhD, RPF
Provincial Forest Productivity Forester,
Ontario Ministry of Natural Resources and Forestry



10:00am Coffee break

10:30am **Laurence Boudreault**, PhD candidate, Université Laval
[Project AD6](#): Culturally important species (Hub: Eastern Townships, QC)
Supervisor: Alexis Achim; Partners: Grand Conseil de la Nation Wabanaki

10:45am **Dane Pedersen**, PhD candidate, University of British Columbia
[Project AD5a](#): Deliberative-analytic framework to engage publics and stakeholders (Hub: Quesnel, BC)
Supervisor: Shannon Hagerman; Partners: Nazko First Nations

11:00am **Catherine Beaulieu**, PhD candidate, Université Laval
[Project AN9](#): Flexibility in forest management to preserve caribou habitat (Hub: Newfoundland)
Supervisor: Alexis Achim; Partners: Kruger Inc.

11:15am **Emanuelle Dufour**, PhD, Postdoctoral Fellow, Université Laval
[Project AD7](#): Visualization techniques for social commentary (Hubs: all)
Supervisor: Anne Bernard

11:30am **Emmanuelle Baby-Bouchard**, Research Associate, Université Laval
[Project AN2](#): Tree ring characterization (Hubs: all)
Supervisor: Alexis Achim; Partners: Quebec MFFP, Ontario MNRF

11:45am **Florence Leduc**, PhD candidate, Université Laval
[Project AN1c](#): Impact of climate change on the growth of commercial forests in Nova Scotia (Hub: Nova Scotia)
Supervisor: Alexis Achim; Partners: Nova Scotia, DNRR

12:00pm Lunch



Tuesday / May 7

afternoon agenda
Rose-fuchsia
conference room

12:00pm Lunch

1:00pm **Sébastien Dumont**, PhD student, Université Laval
Project AN1e: Impact of acute climatic events on tree growth (Hubs: all)
Supervisor: Alexis Achim

1:15pm **Philippe Riel**, MSc student, Université Laval
Project AN1d: Wood properties as proxies for climate conditions
(Hub: Ontario and Quebec)
Supervisor: Alexis Achim; Partner: Quebec MFFP

1:30pm **Kate Donaleshen**, PhD student, University of British Columbia
Project: Climate-growth relationships of coastal BC species
Supervisor: Ignacio Barbeito

1:45pm Invited Speaker: **Joanne White**, PhD
Research Scientist, Forestry Inventory and Analysis,
Pacific Forestry Centre, Canadian Forest Service (Victoria, British Columbia)

2:15pm **Chris Mulverhill**, PhD, Postdoctoral Fellow, University of British Columbia
Project OB5a: Continuous forest inventory framework (Hubs: all)
Supervisor: Nicholas Coops; Partner: JDIrving

2:30pm Coffee break

3:00pm **Spencer Shields**, MSc student, University of British Columbia
Project OB5b: Satellite data for near-real time disturbance attribution
(Hubs: East focus)
Supervisor: Nicholas Coops; Partner: JDIrving

3:15pm **Madison Brown**, MSc student, University of British Columbia
Project OB5c: The impact of non-stand replacing disturbance within near real-time context
(Hub: Quesnel)
Supervisor: Nicholas Coops

3:30pm **Liam Irwin**, PhD candidate, University of British Columbia
Project OB2: Advanced remote sensing: free-to-growth to thinning stage (Hubs: Romeo
Malette, ON; Quesnel, BC)
Supervisor: Nicholas Coops; Partners: Ontario MNRF

3:45pm **Lukas Olsen**, MSc student, University of British Columbia
Project OB6: New technologies for measurements within stands (Hubs: all)
Supervisor: Nicholas Coops; Partner: Domtar

4:00pm **Sarah Smith-Tripp**, PhD candidate, University of British Columbia
Project OB5b: Satellite data for near-real time disturbance attribution
(Hubs: Quesnel and Malcolm Knapp, BC)
Supervisor: Nicholas Coops

4:15pm **Shaya Gholami**, PhD student, Université Laval
Project OB7: Characterization of regeneration failure in the boreal forest using
satellite imagery (Hubs: Romeo Malette, Lac St-Jean and Montmorency)
Supervisor: Alexandre Morin-Bernard

6:00pm **Dinner** (in the conference room)

7:00pm 3rd Annual Pub Trivia hosted by Chris Mulverhill
Location: conference room



8:00am Breakfast

8:30am Day 1 Recap

8:45am Invited speaker: **Chris Elden: A career and life in forestry**
Planning Coordinator, West Fraser (British Columbia)



9:15am **Christina Howard**, PhD candidate, University of British Columbia
Project AN3a: Integration of climate drivers into growth modeling
(Hubs: Eastern Townships, QC)
Supervisor: Bianca Eskelson; Partners: Quebec MFFP

9:30am **Jamie Ring**, MSc student, University of British Columbia
Project AN3b: Integration of climate drivers into growth modeling
(Hubs: Nova Scotia)
Supervisor: Bianca Eskelson; Partners: Quebec MFFP

9:45am **José Riofrio**, PhD, Postdoctoral Fellow, University of British Columbia
Project OB4a: Lidar EFI for growth projections: new approaches (Hub: Romeo Malette)
Supervisor: Nicholas Coops; Partner: Ontario MNRF

10:00am **Kirk Johnson**, PhD student, University of British Columbia
Project AN8b: Viability of climate-informed, landscape level strategies
(Hubs: all; west focus)
Supervisor: Nicholas Coops; Partner: Canadian Wood Fibre Centre

10:15am **Helin Dura**, PhD student, Université Laval
Project AN8a: Forest management plans for resilience landscapes (Hubs: all; east focus)
Supervisor: Alexis Achim; Partner: Canadian Wood Fibre Centre

10:30am Coffee break
Quesnel Huddle with Chris Elden: If you are a HQP working in the Quesnel Hub please see Amy during the coffee break about a potential research presentation event to West Fraser. Organized by Chris Elden and Dominik Roeser.

11:00am **Ethan Ramsfield**, MSc student, University of Alberta
Project AD1a: Revisiting existing trials (Hubs: all)
Supervisor: Brad Pinno; Partner: Ontario MNRF

11:15pm **Joao Paulo Czarnecki de Liz**, PhD candidate, Université Laval
Project AN5: Targeted assisted migration (Hubs: all)
Supervisor: Alexis Achim; Partner: Domtar

11:30am **Amy Wotherspoon**, PhD, Postdoctoral Fellow, University of British Columbia
Project AD8b: Teaching the new culture of silviculture (Hubs: all)
Supervisors: Nicholas Coops and Alexis Achim
Co-presenter: **Alexandre Morin-Bernard**, Associate Professor, Université Laval



12:00pm Lunch

12:00pm Lunch

1:00pm **Stakeholder Panel**



Academia perspective
Shannon Hagerman, PhD
Professor & Associate Dean of graduate studies
University of British Columbia (BC)

Government perspective
Nelson Thiffault, PhD, ing.f
Researcher Scientist
Canadian Wood Fibre Centre (QC)



Industry perspective
Shane Furze, MSc, PRF
Forest Productivity Leader
JDirving.(NB)

First Nation representative
Florian Bergoin, MSc, RPBio, PRF
Resources Manager
Nazko First Nation (BC)



The 2 Billion Trees Program

2:00pm

Hannah Dubber
Policy analyst, NRCan (ON)

Dominique Guenette-Lamontagne
Senior Program Officer, NRCan (ON)

3:00pm

Field Tour: Urban Forestry in Ottawa
Host: **Bruno Chicoine**
Forest engineer, National Capital Commission (QC)



6:00pm

Dinner at 3 Brasseurs
240 Sparks St, Ottawa

Shoutout to our HQPs who could not attend

Lisa Han
Meghan Clayton
Tommaso Trotto

Chloe Larstone-Hunt
Catherine Chagnon
Jacob Ravn

Mario Stolz
Sergio Alonso Sanchez



Free event!
Lunch included

AGM SHOWCASE

May 9, 2024

8:30am - 3:00pm

Alt Hotel
Ottawa, ON

Showcase agenda

- 8:30 Silva21 project overview
- 8:45 Canada's flagship projects - Vincent Roy, CWFC
- 9:15 Social science context - Shannon Hagerman, UBC
- 10:00 Coffee break
- 10:30 Lessons from *Observe* - Nicholas Coops, UBC
- 11:15 Lessons from *Anticipate* - Alexis Achim, ULaval
- 12:00 Lessons from *Adapt* - Loïc D'Orangeville, UNB
- 12:45 Lunch (free!)
- 13:45 Discussion & networking

Putting adaptive silviculture in a Canadian context



Vincent Roy
Silva21 Partner
Canadian Wood
Fibre Centre

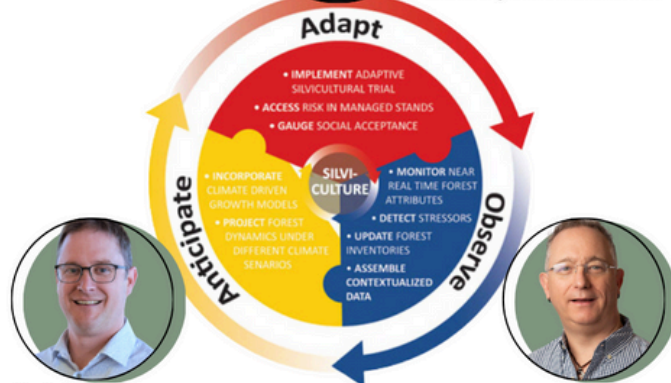


Shannon Hagerman
Silva21 Partner
University of British
Columbia

Silva21 at the half way mark; progress & the future



Loïc D'Orangeville,
PI of TransX and ThiRST
University of New Brunswick



Alexis Achim
Principal Investigator
Université Laval



Nicholas Coops
Project Co-lead
University of British Columbia

8:00am Breakfast & Registration

8:30am **Showcase welcome address**
Alexis Achim & Nicholas Coops

9:00AM Invited speaker: **Ainsley McFarlane**
Deputy Director for Natural Sciences and Engineering Research Council

9:15am **Flagship silviculture projects across Canada**
Vincent Roy, Collaborative Research Director
Canadian Wood Fibre Centre, Natural Resources Canada

9:45am **Seeing the bigger picture: adaptive silviculture in a social science perspective**
Shannon Hagerman, Professor & Associate Dean of Graduate Studies
University of British Columbia

10:15am Coffee break

10:45am **Lessons from Observe**
Nicholas Coops, Professor, Canada Research Chair of Remote Sensing (I)
University of British Columbia

11:30am **Lessons from Anticipate**
Alexis Achim, Silva21 Principle Investigator, Professor, Vice-Dean of Research
Université Laval

12:15pm Lunch

1:15pm **Lessons from Adapt**
Loïc D'Orangeville, Lead of TransX and ThiRST, Associate Professor
University of New Brunswicks

2:00pm Discussion & Networking

2:45pm Discussion recap


3:00pm **Closing Ceremony**
Alexis Achim & Nicholas Coops

3:30pm **Advisory + Scientific Integration Committee Meetings** (conference room)
HQP activity (off site)


6:00pm Dinner (in the conference room)

The latest results


from Silva21



Leduc, F., Chagnon, C., Moreau, G., Dumont, S., St-Jean, É., Achim, A. (2024) American beech outgrows sugar maple at the sapling stage regardless of partial harvest intensity in northern hardwood forests. *Forest Ecology and Management*, 533: 121630, <https://doi.org/10.1016/j.foreco.2023.121630>




Smith-Tripp, S., Coops, N., **Mulverhill C.,** White, J., Axelson, J., (2024) Landsat assessment of variable spectral recovery linked to post-fire forest structure in dry sub-boreal forests. *ISPRS Journal of Photogrammetry and Remote Sensing*, 208: 121-135, <https://doi.org/10.1016/j.isprsjprs.2024.01.008>




Morin-Bernard, A., Achim, A., Coops, N.J.C., White, J. (2024) Integration of tree-ring data, Landsat time series, and ALS-derived topographic variables to quantify growth declines in black spruce. *Forest Ecology and Management*, 557(1): 121765. <https://doi.org/10.1016/j.foreco.2024.121765>

Morin-Bernard, A., Achim, A., Coops, N.C. (2023). Attributing a Causal Agent and Assessing the Severity of Non-Stand Replacing Disturbances in a Northern Hardwood Forest using Landsat-Derived Vegetation Indices. *Canadian Journal of Remote Sensing*, 49(1), <https://doi.org/10.1080/07038992.2023.2196356>


Morin-Bernard, A., Coops, N.C., White, J.C., Achim, A. (2023) Predicting net growth rates in boreal forests using Landsat time series and permanent sample plot data. *Forestry: An International Journal of Forest Research*, 1-17. <https://doi.org/10.1093/forestry/cpad055>.




Wotherspoon, A.R., A. Achim, and N.C. Coops. (2023) Assessing future climate trends and implications for managed forests across Canadian ecozones. *Canadian Journal of Forest Research*. 54:278-289. <https://doi.org/10.1139/cjfr-2023-0058>.



Ravn, J., Taylor, A.R., Lavigne, M.B., D'Orangeville, L. (2023) Local adaptation of balsam fir seedlings improves growth resilience to heat stress. *Canadian Journal of Forest Research*. e-First <https://doi.org/10.1139/cjfr-2023-0128>




Chagnon, C., Moreau G., D'Orangeville L, Caspersen J, Labrecque-Foy J-P and Achim A (2023) Strong latitudinal gradient in temperature-growth coupling near the treeline of the Canadian subarctic forest. *Frontiers in Forests and Global Change*. 6:1181653. <https://doi.org/10.3389/ffgc.2023.1181653>




Moreau, G., Cecil-Cockwell, M. J., Achim, A., Bédard, S., Guillemette, F., & Caspersen, J. (2023). Quantifying the probability of decline in quality: Implications for selection management in northern hardwood forests. *Forests*, 14, 280. <https://doi.org/10.3390/f14020280>

Moreau, G., Cecil-Cockwell, M. J., Pothier, D., Achim, A., Bédard, S., Guillemette, F., & Caspersen, J. (2023) Visual assessment of tree vigour in Canadian northern hardwood forests: The need for a simplified system. *Forest Ecology and Management*, 529, 120720. <https://doi.org/10.1016/j.foreco.2022.120720>

Moreau, G., Chagnon, C., Cecil-Cockwell, M. J., Pothier, D., Achim, A., Bédard, S., Guillemette, F., & Caspersen, J. (2023) Simplified tree selection guidelines enhance stand vigour and value recovery in northern hardwood forests under selection management. *Forestry: An international Journal of Forest Research*; cpad045. <https://doi.org/10.1093/forestry/cpad045>



Mulverhill, C., Coops, N. C., & Achim, A. (2023). Continuous monitoring and sub-annual change detection in high-latitude forests using Harmonized Landsat Sentinel-2 data. *ISPRS Journal of Photogrammetry and Remote Sensing*, 197, 309-319. <https://doi.org/10.1016/j.isprsjprs.2023.02.002>



Riofrio, J., White, J.C., Tompalski, P., Coops, N., Wulder, M.A (2023). Modelling height growth of temperate mixedwood forests using an age-independent approach and multi-temporal airborne laser scanning data. *Forest Ecology and Management*, 543, 121137. <https://doi.org/10.1016/j.foreco.2023.121137>

Connect with us on social media using our hashtag



Stay updated and join our community!

Our website is updated weekly and has the most up-to-date information relating to all our Silva21 projects and events! Visit our home page to subscribe to our newsletter

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notes



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notes



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Thank you to our partners who help make this event possible

