

KNOWLEDGE EXCHANGE NETWORK (KEN) ECOLOGICAL FORESTRY RESEARCH INITIATIVE (EFRI)

Edition #6



Image Credit:
Ben Collison

EXCITING FIELDWORK SEASON AHEAD FOR EFRI STUDENTS FROM THE UNIVERSITY OF NEW BRUNSWICK, UNDER THE SUPERVISION OF DR. ANTHONY TAYLOR



Sean O'Connor, joined by research assistant Ayden MacFarlane, is studying stand windthrow vulnerability in the Acadian-Wabanaki Forest Region. His study employs tree-pulling experiments to compare the wind resistance and biomechanics of red spruce (*Picea rubens*) across various soil types and forest conditions. He is currently working in the Noonan Research Forest near the University of New Brunswick in Fredericton.

Pulling test data, along with local climate data, will be used to parameterize ForestGales, a process-based windthrow model that predicts critical wind speeds required to overturn or break trees in a forest stand under different silviculture scenarios.

Tiago Alvarez Geldart is studying forest carbon dynamics in red spruce stands managed under different silvicultural systems in Nova Scotia. Using a chronosequence approach, this study evaluates carbon stocks across various age classes to determine the effects of intensive and ecological silviculture. Tiago's research aims to improve our understanding of how silvicultural pathways influence long-term forest carbon stocks.



CONGRATULATIONS SAMANTHA CHU!!

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From left to right: Dr. Thomas Beckley, Dr. Deepa Pureswaran, Dr. Alana Lajoie-O'Malley, Dr. Alana Westwood, Samantha Chu and Dr. Anika Cloutier

Congratulations to Samantha Chu for successfully defending her Master of Environmental Science Thesis titled: *Planting the Seeds for Knowledge Exchange in Canadian Forestry: Perspectives from Forest Professionals on Trust, Barriers, and Preferences*. Sam's thesis will be available online later this summer, and she will be preparing it for journal submission and peer review.

NEW PAPER!!

THREAT OF RED PINE SCALE, *MATSUCOCCUS MATSUMURAE* (KUWANA) TO THE MIDWESTERN UNITED STATES AND CANADA

Pureswaran, D.S, Garnas, J. (2025). Threat of Red Pine Scale, *Matsucoccus matsumurae* (Kuwana) to the Midwestern United States and Canada. *Plant Health Cases*. <https://doi.org/10.1016/j.foreco.2024.122482>

>>> READ MORE

The red pine scale, *Matsucoccus matsumurae* (Kuwana, 1905) (Hemiptera: Matsucoccidae), is the most destructive pest of red pine in North America. Native to Japan, it was first detected in the USA in 1946 and has since spread northward to the Canadian border. Outbreaks cause mortality in red pine stands, which could have important consequences for forest ecosystems in the northern part of their range.

READ MORE <<<

The Province is restricting travel and activities in the woods because continued hot, dry conditions have greatly increased the risk of wildfires.

The restrictions, effective as of 4 p.m., August 5, include:

- hiking, camping, fishing and the use of vehicles in the woods are not permitted
- trail systems through woods are off limits
- camping is allowed only in campgrounds.

MEDIA!!

TRAVEL, ACTIVITIES IN WOODS
RESTRICTED TO PREVENT
WILDFIRES

CALL OUT

Knowledge Exchange Network (KEN) Session Recommendations:

Got something you want to share or teach, or interested in learning about something new? Let us know!

We are organizing the 2025 KEN sessions, and we want to make sure the upcoming sessions reflect your interests! So, did you just wrap up a research project and looking to share results, or got a skill worth sharing (like grant writing, or stress management), or just interested in learning more about a specific topic? Let us know and we can make it happen!

Please get in touch at: efri@dal.ca



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