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NORTHERN HARDWOODS RESEARCH INSTITUTE'S MONTHLY NEWSLETTER

THE LEAFLET

HARVEST KNOWLEDGE, PROMOTE GROWTH

CANADIAN WOODLANDS FORUM

A LOOK BACK ON THE FALL MEETING
October 2-3, 2019

*Smart Mixed-wood and Hardwood Silviculture
for a Changing Environment*

PRESENTED BY:

Canadian Woodlands Forum

FORUM

Forum canadien
des opérations forestières



Institut de recherche sur les feuillus nordiques Inc.
Northern Hardwoods Research Institute Inc.

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CANADIAN WOODLANDS FORUM: 2019 FALL MEETING

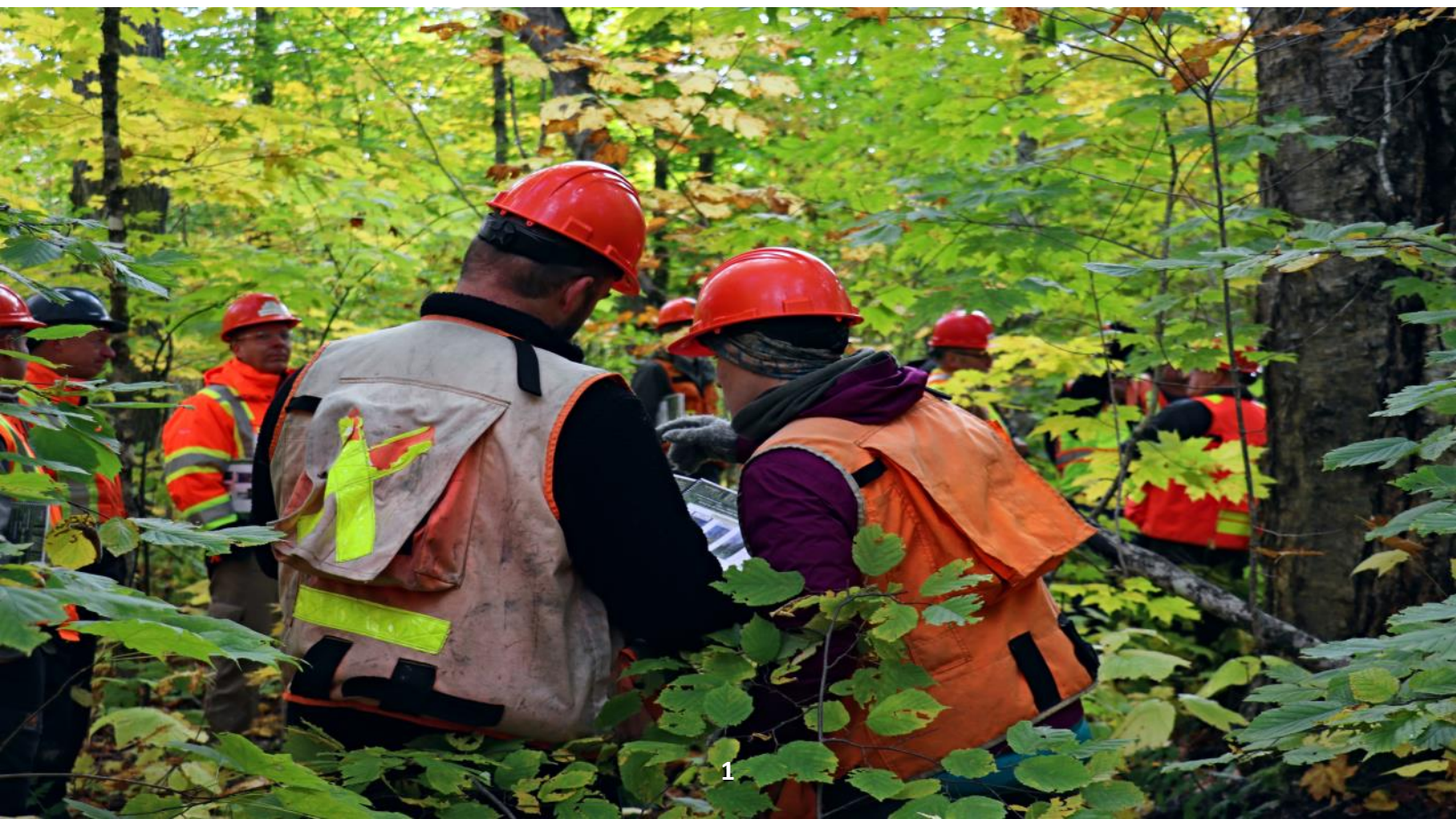
TWO DAYS OF FORESTRY DISCUSSIONS AND FIELD DEMOS

On October 2-3, 2019, the Canadian Woodlands Forum presented the 2019 Fall Meeting in collaboration with host, AV Group NB Inc. and conference partners from the Northern Hardwoods Research Institute and Groupe Savoie Inc. Held in Campbellton, NB, the meeting entitled “Smart Mixed-wood and Hardwood Silviculture for a Changing Environment”, offered the 110 forestry professionals across the region with thought provoking and timely topics focusing on implementing novel and innovative silviculture to sustain our mixed and hardwood resource.

The program included excellent presentations covering the tools to predict the patterns of natural regeneration in harvested hardwood stands, an update on the potential impacts of federal legislation regarding species at risk, migratory birds, fisheries and their habitats, and new tools and planning approaches to improve productivity and quality in forestry operations. The feature session included the premier of the video documentary presentation entitled “Our Forests at Risk: Un paysage en transition”, produced by the Northern Hardwoods Research Institute. This was followed by an excellent panel discussion on how our forests and forest management can provide solutions in adapting and mitigating the effects of a changing climate.

On day two, the group enjoyed a sunny but brisk fall day during the field trip which focused on a series of 10-15-year-old hardwood silviculture treatments which generated discussion on resulting harvest outcomes and future options. Everyone was well fed with a great BBQ lunch provided exclusively by ALPA Equipment Ltd. All in all, a great two days.

In this joint edition of The Leaflet, presented by NHRI in collaboration with the Canadian Woodlands Forum, we are happy to present a look back on this great event. We have made efforts to make the highlights and information shared available to our readers in a user friendly format. You can watch the videos and see the presentations by following the links provided. We hope you get a good overview of the event. However, some things can't be captured by a newsletter —like meeting all the great people in our sector, networking and taking the bus to spend a day in the forest on a beautiful fall day—so we hope to see you there next year!



PLANERY #1—REGENERATION OF NORTHERN HARDWOOD FORESTS: IMPROVING FOREST MANAGEMENT THROUGH APPLIED RESEARCH

A key question shared by many practitioners in the forest sector across New Brunswick is to predict what will regenerate after harvesting a hardwood stand. Predicting the characteristics of natural regeneration in terms of species composition, density, and age or size structure is not a simple process because forest regeneration is a highly variable and largely random process. To tackle this applied research challenge, the Northern Hardwoods Research Institute Inc. has partnered with the K.-C.-Irving Chair in Environmental Sciences and Sustainable Development at Université de Moncton and the New Brunswick Department of Natural Resources and Energy Development. In this plenary, members of this research partnership present the results and ongoing research projects contributing to answering the questions of practitioners about the patterns of natural regeneration in harvested hardwood stands.



Better Forecasting Regeneration Dynamics to Improve Forest Yields Predictions

Marie-Andrée Giroux, PhD

Chair, K.-C. Irving Research Chair in Environmental Sciences and Sustainable Development

[WATCH VIDEO](#)
[VIEW SLIDES](#)


Recruiting Adequate Cohortes of Hardwood Species: Perspectives of a Silviculturist

Gaetan Pelletier

Executive Director, NHRI

[WATCH VIDEO](#)
[VIEW SLIDES](#)


Post Harvest Regeneration What does regeneration look like after harvesting?

Stéphanie Landry, PhD Candidate

Regeneration Specialist, NHRI

[WATCH VIDEO](#)
[VIEW SLIDES](#)


Mapping Tree Species Ecological Affinity in New Brunswick

Chris Hennigar, PhD, BSc.F

- NB Dept. Energy and Resource Development
- University of New Brunswick
- FORUS Research

[WATCH VIDEO](#)
[VIEW SLIDES](#)

PLANERY #2—VIDEO DOCUMENTARY PRESENTATION AND PANEL DISCUSSION

CAN FOREST MANAGEMENT PROVIDE SOLUTIONS IN ADAPTING AND MITIGATING THE EFFECTS OF A CHANGING CLIMATE?

The 25-minute video documentary entitled “Our Forests at Risk: Un paysage en transition”, produced by the Northern Hardwoods Research Institute (NHRI) delves into the subject of climate change, its potential effects on our forests, and what can, and should be done to adapt. Following the viewing a panel discussion on this important issue featuring experts and professionals interviewed in the video documentary was held.

- **Jean-Martin Lussier.** Natural Resources Canada, Canadian Wood Fibre Centre, Research Scientist, Silviculture and Forest Productivity
- **Anthony Taylor.** Natural Resources Canada, Atlantic Forestry Centre, Forest Ecologist
- **Charles Bourque.** UNB, Faculty of Forestry and Environmental Management, Professor
- **Louise Comeau.** UNB, Faculty of Forestry and Environmental Management, Research Associate
- **Chris Hennigar.** New Brunswick Department of Energy and Resource Development, Forester, Forest Strategy Section
- **Adrian Prado.** Northern Hardwoods Research Institute, Project Lead: Adaptation to climate change
- **Greg Adams.** J.D. Irving, Limited and Maritime Innovation Limited, Advisor, Tree Improvement and Forest Research and Development

WATCH
DOCUMENTARY

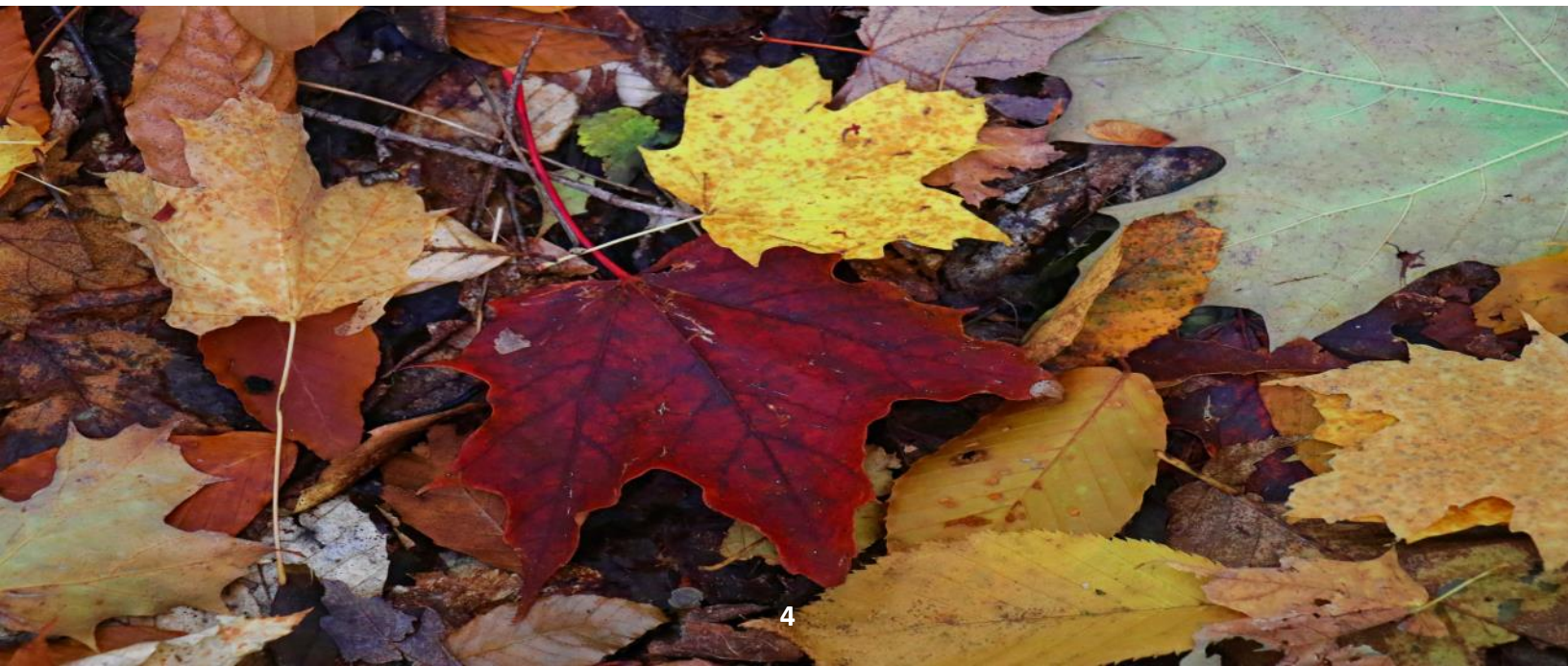
WATCH
PANEL DISCUSSION



LUNCH AND LEARN: CANADIAN ASSOCIATION OF FOREST OWNERS (CAFO) FISH AND WILDLIFE – THE STRONGEST IMPACTS ON FORESTRY?

Chris Lee, Executive Director of the Canadian Association of Forest Owners (CAFO), presented the federal legislative framework applicable to wildlife and the effects it is having on forestry and forest owners. M. Lee also brought to light how CAFO is working to influence federal legislation on species at risk, migratory birds, fisheries and their habitats. The lunch and learn was a timely update on their efforts and progress on these challenging issues, and highlighted how to get involved.

If this important topic is of interest to you you can watch the video of the presentation and download the slides by clicking the links below.

[WATCH VIDEO](#)[VIEW SLIDES](#)

PLANERY #3—AT THE JUNCTION OF PRECISION AND ADAPTIVE FORESTRY

NEW TECHNOLOGIES, PROCESSES AND TOOLS TO BETTER MANAGE FORESTS

Gaëtan Pelletier, Executive Director of NHRI, was the moderator for this plenary session that aimed to showcase some new promising precision forestry technologies, processes and tools and how they should be a great help in implementing adaptive forestry management.

A New Tool to Visualize the Effects of a Changing Climate

Adrian Prado of NHRI presented the highlights of a new mapping tool developed by the NHRI that allows a clear visualization of the effects of climate change at the eco-district level for the province of New Brunswick. This free and publicly available mapping tool should be of great use to foresters attempting to practice adaptive forest management within the reality of a changing climate.

[WATCH VIDEO](#)
[DOWNLOAD SLIDES](#)

PRISM: Plan, execute, and manage successful timber cruises all within the same powerful and user-friendly digital tool

Alexander Ryerson of Lim Geomatics presented PRISM a new digital timber cruising application that has been developed to improve data quality and survey efficiency. Prism allows foresters to plan, execute, and manage successful timber cruises all within the same powerful and user-friendly digital tool.

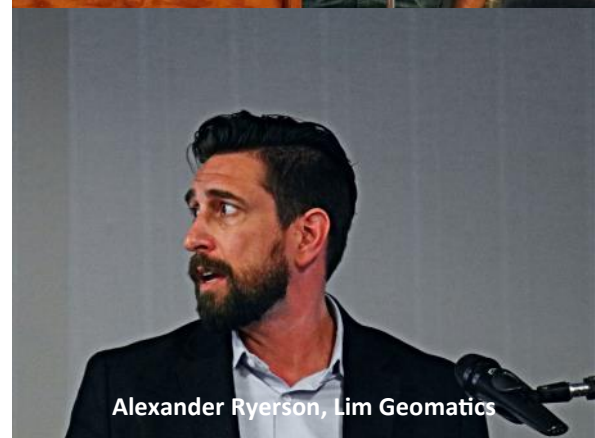
[FIND OUT MORE](#)

A New Planning Approach to Improve Productivity and Quality in Forestry Operations.

Gaëtan Pelletier of NHRI presented the highlights of their Precision Block Planning initiative that leverages many of its tools to provide forest products companies with an all-in-one operational process. Precision inventories that combine field timber cruises with remote sensing are conducted to assign silviculture prescriptions, set harvest productivity, volume and saw log recovery targets.

[WATCH VIDEO](#)
[DOWNLOAD SLIDES](#)


Adrian Prado, NHRI



Alexander Ryerson, Lim Geomatics



Gaëtan Pelletier, NHRI

GUEST SPEAKER : CHRIS WARD**THE ROLE OF PRECISION AND ADAPTIVE SILVICULTURE
FOR THE FUTURE OF FOREST MANAGEMENT IN NB**

Chris Ward, Assistant Deputy Minister, New Brunswick Department of Natural Resources and Energy Development was the guest speaker during dinner. Mr. Ward spoke about what his department has been working on in terms of implementing an adaptive forestry model within the province. He also spoke about the important role precision forestry should play in such a model and gave examples of how such approaches could benefit the forestry sector by increasing wood supply while improving the quality of stands.

Click on the links below to find out more! Watch the video of the presentation and download the slides presented by clicking below!

[WATCH VIDEO](#)
[DOWNLOAD SLIDES](#)

“Research and adaptive management reduces uncertainty. We have to ask good management questions, state them clearly and find very efficient ways to have them answered”.

Chris Ward

Government of New Brunswick
Assistant Deputy Minister, Department of
Natural Resources and Energy Development



CWF 2019 FALL MEETING - FOREST FIELD DAY

SHOWCASING NHRI'S TOOLS THROUGH FIELD DEMONSTRATIONS



As the old adage goes: "A bad day in the forest will still always be better than a good one in the office." The CWF team put together a great field trip in the forest for the 2019 CWF Fall Meeting (October 3rd, 2019). The fall colors were amazing, the weather was cool but sunny and there were over 100 forestry professionals representing various companies and organizations from across the Maritime provinces.

During the day the NHRI team had the opportunity to showcase its flagship Tree Classification and Silviculture Prescription Systems. Demonstrations were made in various stands during the day. The Precision Block Planning Initiative, which aims to leverage various precision forestry tools in order to gain operational efficiencies, was also showcased and the results from each block were presented in the participant field guide.

The field demonstrations led to some very pertinent questions and interesting discussions about resulting harvest outcomes and future management options. Everyone was well fed with a great BBQ lunch provided exclusively by ALPA Equipment Ltd. All in all, it was a great day in the woods!

If you are interested in browsing the participant field guide or if you would like to view a short video of the day's highlight you can click on the links below.

**WATCH
FIELD TRIP VIDEO**

**DOWNLOAD
FIELD TRIP GUIDE**

CWF 2019 FALL MEETING - FOREST FIELD DAY

LANDRICH 2.0: A GREAT DAY FOR A LAUNCH !

ALPA Equipment Ltd. used the platform provided by the 2019 Canadian Woodlands Forum Fall Meeting to launch the brand new LANDRICH 2.0. The ALPA Equipment team was on hand to showcase the machine's functions and options and to take questions from the crowd. The showcase was followed by a field demonstration which allowed participants to see the LANDRICH 2.0 in action.

Designed and built in Balmoral, New Brunswick by A. Landry Fabrication Ltd, the LANDRICH is the first purpose built track harvester optimized for the cut-to-length method of mechanized logging.

Congratulations to the entire team at A. Landry Fabrications Ltd. and ALPA Equipment Ltd. for a very well organized and successful launch!

If you would like to see the LANDRICH 2.0 in action click on the link below and watch the short video!



[WATCH VIDEO](#)

[FIND OUT MORE @
WWW.LANDRICH.COM](http://WWW.LANDRICH.COM)

UPCOMING EVENTS



Institut de recherche sur les feuillus nordiques Inc.
Northern Hardwoods Research Institute Inc.

NHRI STAKEHOLDER COMMITTEE MEETING, NOVEMBER 5th 2019

The NHRI stakeholder committee will be meeting at our facilities on November 5th 2019. The team will present on-going projects and more importantly discuss what we are considering for the months ahead. The stakeholder committee is always a great opportunity for us to get feedback and adjust our activities accordingly.

NHC 2020 NORTHERN HARDWOOD CONFERENCE Bridging Science and Management for the Future

NHC 2020
Northern Hardwood Conference
**Bridging Science and Management
for the Future**

DATES: June 16-18, 2020
KI Convention Center, Green Bay, WI

Initiated by a diverse group of professionals, this conference aims to facilitate collaboration across the northern hardwood range and provide researchers and forest managers with a forum to learn, share and discuss cutting edge science and innovative management practices.

Please consider sharing your expertise in a personal talk, a poster, a professional seminar or an ignite talk. For more information and to register as a presenter or attendee, visit the website @ <https://uwccs.eventsair.com/nh2020/info>

Event Partners:
USFS – Northern Research Station | Wisconsin Department of Natural Resources | Society of American Foresters | Michigan Technological University | Tigonon Lumber Company | University of Minnesota | Government of Quebec | Michigan Department of Natural Resources | University of Vermont | Penn State

Are you a forest manager, industry representative, researcher or academic who works with northern hardwoods? The 2020 Northern Hardwood Conference is now accepting abstracts on a range of topics related to northern hardwood science and management. Abstracts are due October 31 for group, panel and professional development presentations and November 30 for individual presentations.

MORE INFO





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