



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

PRODUCTS & SERVICES

HARVEST KNOWLEDGE, PROMOTE GROWTH

CLIENT-DRIVEN APPLIED RESEARCH

NHRI's Novel Approach to Applied Research
Getting results for clients through effective partnerships!

NHRI PRODUCTS AND SERVICES

What does NHRI have to offer to businesses, governments, research institutions and NGO's?

NHRI's research and innovation capacity, which includes our in-house research team, research partners, and private sector players, combined with the boots on the ground expertise of our **Precision Silviculture Team (PST)** allows NHRI to offer a variety of forest management and applied research services. We are equipped with a flexible and practical applied forestry capacity that delivers effective and timely solutions for our clients. Our team also has the required experience to manage result-driven partner relationships so that our clients can benefit from a network of forestry experts and practitioners. We also have extensive knowledge of the various innovation funding programs, and an excellent track record, when it comes to leveraging these financial incentives to offer cost effective solutions to our clients and partners.

INDUSTRIAL FOREST MANAGERS

Forest companies and governments

Large industrial forest managers and government departments always have research and development needs, but seldom have the necessary time or resources to manage such projects on a daily basis. Our team can be part of the solution by doing the research work so they can strictly focus on using the results effectively. Whether it be sifting through mountains of data, running pilot field tests to validate operational hypothesis, or managing a project for start to finish, we have the required expertise and experience to deliver the results you need. NHRI offers a variety of services to large forest managers:

- Management of research and development Initiatives.
- Technical service contracts.
- Pilot projects and field trials
- Data capture, management, and analysis.
- Training and knowledge mobilization activities.



INDUSTRIAL CLIENTS

Our team has worked with...



J.D. IRVING, LIMITED



FIND OUT MORE...

Read about one of our projects with an industrial client!



NHRI PRODUCTS AND SERVICES



What NHRI offers to businesses.

FORESTRY SME's

Woodlot owners, contractors, equipment suppliers and forestry consultants

Forestry SME's are focused on sales, operations, logistics, and timeliness. That is how it should be if you are to run a successful forestry business! However, the daily grind can sometimes make it difficult to manage initiatives aimed at continuous improvement; like, testing and vetting new processes, implementing new management systems, and leveraging the benefits of emerging technologies. Our research staff, coupled with the field capacity of NHRI Precision Silviculture Team, has what it takes to support you in those initiatives. By working with your team, and leveraging the know-how of our network of partners, we can help your business improve without bogging you down in the nitty gritty of managing those initiatives. You can focus on the present task of running your business while we help you set up for a more efficient and cost-effective future. NHRI offers a variety of services to forestry SME's:

- Forest management services.
- Technology transfer.
- Forestry operations training.
- Applied forestry R&D management and/or support.

READ MORE!

**OUR WORK WITH FORESTRY SME's
ONE EXAMPLE.**



INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) SME's

Technology designers, equipment providers and software developers

ICT has revolutionized many economic pillars and our team believes the forestry sector is poised to benefit greatly from some of these game-changing technologies. A logistics revolution is about to unfold in the North American forest sector and NHRI is smack in the middle of it. We are currently working on several very promising ICT related projects aimed at optimizing forest operations through digitalization and connectivity. Our team is involved from precision forest inventories using remote sensing and UVA's, to improving the bucking process, and analyzing on-board harvester computer data, all the way to logistics and leveraging AI in forestry operations. Whether you are an established company already operating in forestry, a company looking to push an existing technology within the sector or a start-up in the embryonic stages, our team can become your forest operations experts. More importantly the NHRI is often a gateway to the forestry sector, a great place to get your products in the hands of clients so you can reap the benefits of our AGILE approach to applied forestry research. NHRI offers a variety of services to ICT SME's:

- Forestry expertise.
- Field testing for pre-commercial product validation.
- Expertise in product improvement and customization.
- Development and delivery of training for new products.



READ MORE!

**OUR WORK WITH ICT SME's
ONE EXAMPLE.**

NHRI PRODUCTS AND SERVICES

What NHRI offers to research institutions.



"If you are involved in fundamental research, and looking to gain access to industry players and data, or a solid partner to complete specific field work or expert analysis, our team has the know-how required to help you within your broader research initiative."

RESEARCH INSTITUTIONS

Universities and research centers

For universities and research centers embarked in projects aimed at advancing fundamental knowledge, it can sometimes prove difficult to convince companies and practitioners to invest resources now for benefits that will only be felt in 3-5 years. This can also make it a challenge to access the necessary field data, and input, to test a research hypothesis. Our team has access to, and experience working with, a variety of forest managers, small, medium, and large. We also have experience in negotiating access to very large data sets, and the required processes to reassure data providers that their data will remain protected and well managed. Our team is also used to working on a specific deliverable within larger research initiatives. If you are involved in fundamental research, and looking to gain access to industry players and data, or a solid partner to complete specific field work or expert analysis, our team has the know-how required to help you within your broader research initiative. NHRI offers a variety of services to research institutions:

- Expertise in applied research related to the management of northern hardwood and mixed stands.
- Access to forests, forest data and forestry end-users.
- Service provider within larger research initiatives.
- Support in organizing knowledge mobilization events.



NHRI PRODUCTS AND SERVICES

What NHRI offers to NGO's.



NON-GOVERNMENTAL ORGANIZATIONS

Industry and special interest NGO's



Propriétaires de boisés



Atlantic Forest
Research
Collaborative

Through the years our team has had the privilege of working, and building relationships, with some very well established non-governmental organizations. We are often called upon to deliver workshops, conferences and training. We also work closely with some of these partners to leverage our communications channels for promotional and knowledge transfer purposes. Our expertise in northern hardwoods silviculture is also called upon as a sounding board, or to validate information. If you are looking for a partner to help organize an event, build up your training capacity, get sound advice on forest management, or simply to help spread the word, the NHRI team is here to help.

- Training and knowledge mobilization services.
- Organization of forestry workshops and presentations.
- Expertise in applied research and northern hardwoods.
- Access to our communications channels.



CLIENT DRIVEN RESEARCH

THE BUSINESS OF APPLIED FORESTRY RESEARCH

Getting results for clients through effective partnerships!



The Northern Hardwoods Research Institute's novel approach to research is anchored in its' very foundation. Our organization was created to fulfill an urgent need to conduct applied research related to the management of northern hardwoods and mixed forests of Eastern North America. In 2012, forest industry companies, governments and academia came together to fill that void, and an innovative partnership was born. The NHRI was created with very specific objectives which can be boiled down to working with our academic, government and industry partners to develop, or improve, knowledge, methods and harvesting techniques aimed at increasing volume and value of the northern hardwoods resource. In a nutshell, the NHRI was created to bring immediate, user friendly, and field-tested solutions for foresters, contractors, woodlot owners and forest workers, with boots on the ground and eyes on the canopy. For our team this means that all research and field work must be focused exclusively on that end.

To achieve this, we have had to spend considerable energy and resources to the task of flipping the traditional research center model on its head. Instead of having a highly qualified research team sit in a lab and think of interesting research questions, we work with various stakeholders to identify the real issues happening in the forest and turn them into applied research projects. We essentially took a top-down model and flipped it into a bottom-up approach. The objective being to ensure that our partners and clients have access to applied research results that are useful, practical, and aligned with their needs.

Our boots on the ground approach to research, and our close relationship with the stakeholders, has allowed us to position ourselves not only as knowledge producers, but more importantly as knowledge mobilizers. Knowledge transfer and practical in the field training are an important component of our work at NHRI. Our research is not meant to be published and stacked on a shelf. Our team devotes considerable resources to ensure that our work is useful and used by the people who need it. Knowledge mobilization is at the forefront of our mission.



MISSION

Our mission is to produce and mobilize the knowledge and tools required by forest stakeholders to manage northern hardwoods and mixed forests optimally; in terms of resource growth, harvest volumes, timber value and long-term sustainability.

CLIENT DRIVEN RESEARCH

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The work environment at the NHRI is fast paced, client focused and result driven. Over the years we have implemented a Lean/Six-Sigma type management system where key processes are standardized to improve efficiency. This approach to our work has allowed us to continuously improve, but more importantly, it has pushed us towards a tighter alignment with our clients, and by the same token, enabled our team to better meet the needs of industry.

Our team's efforts have proven effective, and the NHRI is in a better position today than ever before. Since our humble beginnings we have had the privilege of working collaboratively with over 60 businesses, research institutions, and government agencies, not the mention the hundreds of amazing like-minded people we have met along the journey. Based on these experiences our team has gained precious know-how when it comes to delivering results to clients through effective partnership management.

We are particularly proud of the beachhead we have established in the emerging field of forest operations optimization through digitalization and connectivity. Our dedicated team has managed to gain the trust, and establish productive working relationships, with several key businesses operating in the field of ICT forestry technology and services.

REMSOFT®


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Resource Management



Groupe Système Forêt
Spécialistes en géomatique

Forus
Research

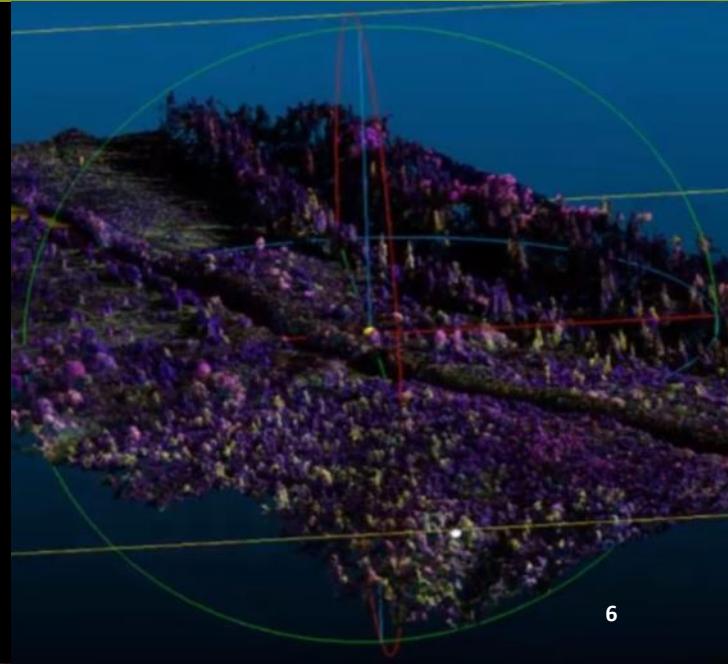


CLICK COMPANY LOGOS!
LEARN ABOUT OUR WORK WITH ICT SME'S
A FEW EXAMPLES.



CLIENT DRIVEN.

We take great pains to ensure that our clients' needs are understood and elevated to priority number one. All activities within our walls start and end with fulfilling the needs of our clients. Our research is client centric and aims to find solutions for various forest management stakeholders.



CLIENT DRIVEN RESEARCH

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Working with businesses that are at the cutting edge of these emerging technologies has also pushed us to develop some impressive research partnerships, which has allowed us to be involved in projects we otherwise could not have delivered alone. Some of these key research partners include:

[Eric R. Labelle](#), Université Laval

[Nicholas Coops](#), University of British Columbia

[Richard Fournier](#), Université de Sherbrooke

[Michel Soucy](#), Université de Moncton

[Thom Erdle](#), University of New Brunswick

[John Kershaw](#), University of New Brunswick

[Van Lantz](#), University of New Brunswick

[Tom Beckley](#), University of New Brunswick

[Charles Bourque](#), University of New Brunswick

[Jasen Golding](#), University of New Brunswick

[Paul Arp](#), University of New Brunswick

[Marie-Andrée Giroux](#), Université de Moncton

[Jeffrey Dubis](#), University of Maine, Fort Kent

[Nicole Rogers](#), University of Maine, Fort Kent

[Aaron Weiskittel](#), University of Maine, Orono

[Mathieu Varin](#), CERFO

[Chris Hennigar](#), DNRED, Government of New Brunswick

[Jean-Martin Lussier](#), Canadian Wood Fibre Centre

[Atlantic Forest Research Collaborative](#), University of New Brunswick

[Integrated Remote Sensing Studio \(IRSS\)](#), University of British Columbia

WATCH VIDEO!
NHRI & IRSS COLLABORATION



Our current involvement in several very important applied research initiatives, at the provincial, regional, and federal levels is a testament to our continued efforts. The Northern Hardwoods Research Institute is now a recognized innovation hub and agent of change in the way northern hardwoods and mixed forest management are conducted. Our aim is to leverage our position to encourage more partners from industry (forestry and ICT), academia and government to come together to find tangible solutions to today's most pressing forest management issues.

Amongst the chaos, confusion and exhilaration that is associated with the trials and tribulations of establishing NHRI's place in the forestry innovation ecosystem, we remain focused on, and driven by, the needs of our clients and the realities of people in the field. When the dust settles, we regroup, focus and remember why, and for who, we are doing all this. Our northern hardwood forests are essential to our economy, our ecosystems, and our people. Those tasked with the very important responsibility of managing these forests need the right tools for the job, and we are wholly dedicated to helping them vet, test and implement these tools. For our team, that is what it means to be in the business of applied forest research!



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