Ontario Professional Foresters Association
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The Professional Forester

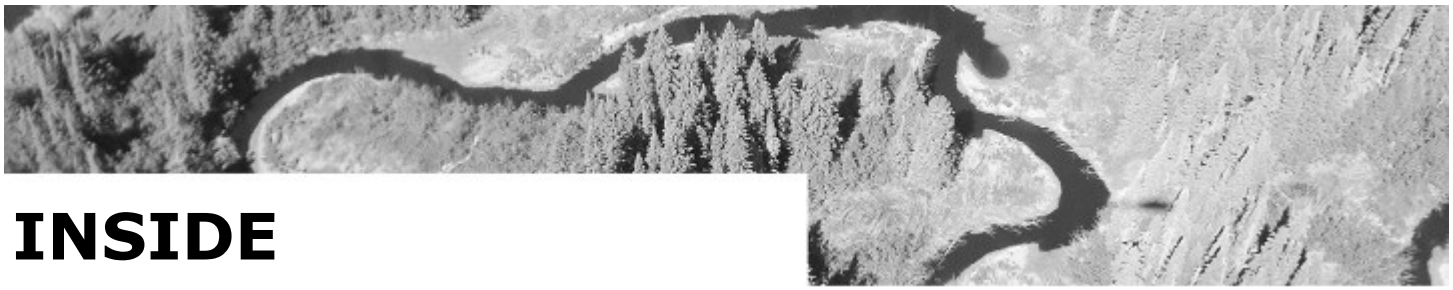
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Resilience in focus: Species recovery, forest health and urban stewardship

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Introducing the official OPFA digital signature Page 17



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Butternut recovery

Dan Cooper, Director Conservation Lands and Stewardship, On behalf of: Rideau Valley Conservation Authority and Rideau Valley Conservation Foundation

Across eastern Ontario, butternut trees have been disappearing for decades. A native species that contributes food and habitat in forest ecosystems, butternut has been hit hard by butternut canker, a disease that has caused widespread decline and led to the species being listed as endangered in both Ontario and Canada. In many places, the loss was so widespread that it would have been easy to assume the species had little chance of persisting.

Instead, a group of determined partners chose a different path. In 2005, before Ontario's Endangered Species Act came into force, organizations and individuals across the region began building a practical recovery pipeline for butternut. Their goal was simple but ambitious: help butternut persist on the landscape. Without dedicated funding, they pooled resources to collect quality seed, grow seedlings, identify promising parent trees, and distribute planting stock to landowners. At the same time, they began collecting scions from high-quality trees to establish a seed orchard of genetic clones at the Ferguson Forest Centre in Kemptville.



Photo of founding members in butternut recovery: Ed Patchell, Rudy Dyck, Linda Touzin, Rose Fleguel, missing - Barb Boysen.

What made the program work was its willingness to learn by doing. Early seed collection often relied on yard trees and easy-to-access urban specimens, but the team soon realized that pure butternut could be pollinated by related ornamental trees such as Japanese walnut, creating hybrids. The approach shifted toward collecting seed only from forest-grown trees. That meant more effort, including long pruning poles, climbers, and plenty of persistence, but it greatly improved confidence in the genetic integrity of the seed. The team also focused on what they called "putative tolerance," collecting from healthy trees growing among diseased neighbours in the hope that those individuals carried traits worth preserving. Meanwhile, nursery partners refined every part of production, from seed handling and storage to trials with husked and unhusked seed, bareroot stock, and container-grown seedlings.

A major turning point came after the Endangered Species Act created a need for practical compensation when development projects affected butternut. The Rideau Valley Conservation Authority, working with the Rideau Valley Conservation Foundation, developed a pathway that linked regulation with restoration. Developers could support compensation planting on protected lands, creating a model that restored habitat while also helping secure land for long-term stewardship. Over the years, the broader recovery effort has distributed more than 40,000 pure butternut trees across eastern Ontario. Of those, about 7,500 have been planted on conservation properties through compensation work. Some of the earliest trees are now mature enough to produce seed, a milestone that signals the program is beginning to feed its own future.

The most important lesson from two decades of work is that conservation progress does not always begin with a large budget or a perfect plan. Sometimes it begins with a handful of people who refuse to let a species slip away unnoticed. Today, the program has a strong database of healthy seed trees and 10 heavily stocked properties that may function as future orchard-style collection sites and research opportunities. Those assets could make seed collection far more efficient in the years ahead. But just as important as the trees themselves is the practical knowledge built along the way—knowledge that was often learned in the field rather than written in reports. For anyone thinking about starting similar recovery work, that may be the clearest message of all: partner early, learn from experience, and keep the goal in sight—help butternut persist on the landscape.

A growing responsibility: Professional foresters and the future of tree species at risk

Kerry McLaven, R.P.F. In Training, Chief Executive Officer, Forest Gene Conservation Association

Forestry is built around long timelines.

A decision made today can influence a forest for decades, and in some cases for centuries. Yet the policy framework within which that decision is made can change considerably faster. This creates an important question for Ontario's registered professional foresters: Is meeting today's policy requirement enough to ensure that the forest will retain the characteristics that make it resilient, diverse and valuable tomorrow?

Professional forestry has always required practitioners to look beyond the individual tree and consider the forest as a system. Increasingly, that same thinking needs to be applied to genetic diversity, species recovery and the unique characteristics of local populations. This is particularly important as Ontario moves into a new species-at-risk framework under the Species Conservation Act, 2025 (SCA).

The regulatory landscape changed when the SCA came into force on March 30, 2026, replacing the Endangered Species Act, 2007. Its stated purposes include identifying species at risk using the best available scientific information and providing for their protection and conservation while considering social and economic needs.

The new framework changes how Ontario approaches species at risk. For Registered Professional Foresters (R.P.F. s), however, the important issue requires more than simply understanding what the legislation permits or prohibits.

The legislation provides a framework for protecting species. It does not, by itself, provide a comprehensive framework for maintaining the genetic diversity within species, conserving locally-adapted populations, or ensuring that genetic material is available to support recovery decades from now. That distinction matters enormously for trees.

A tree species can remain present on the landscape while its genetic diversity, population structure or locally-adapted characteristics are gradually being lost. The forest may still contain the species. But it may no longer contain the genetic resources or maintain reproductive function necessary for its future.

Ontario's Crown forest sustainability framework provides an important foundation for this broader way of thinking. The Crown Forest Sustainability Act (CFSA) defines sustainability as long-term Crown forest health. Its principles include conserving large, healthy, diverse and productive Crown forests and their associated ecological processes and biological diversity. It also directs forest practices toward minimizing adverse effects on plant and animal life and other values.

Forest management plans must have regard to plant life, animal life, water, soil, air as well as social, economic, recreational and heritage values, and plans must be certified by an R.P.F. This creates a clear role for a regulated profession to maintain a higher standard.

The responsibility of the R.P.F. is not simply to determine whether an activity is permitted. The professional forester must understand the forest sufficiently to identify which elements matter, which could be lost, and which should be retained; this is particularly relevant to species at risk.

An R.P.F. working on the Crown forest has an established planning framework through which species, habitat, landscape patterns and forest conditions can be considered. The professional's expertise can help to ensure that the forest management system does not simply maintain the minimum number of trees or habitat features required by policy, but also can support the ecological and biological characteristics that allow forests to remain resilient.

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The challenge differs outside of Crown forests where statutory frameworks vary and emphasis may often rest on the individual tree rather than the forest ecosystem.

Private and other non-Crown lands account for a significant portion of Ontario's forests and are home to key populations of tree species at risk. As regulatory requirements change, there is a risk that land-management decisions will increasingly be evaluated against a simple question: "Can I legally do this?"

For forests, that is not always the right question.

A suggested and better approach is: "What will this decision mean for the forest, the local and broader species population, and the landscape over the next several decades?"

Where statutory requirements are less specific, the application of professional judgement by the R.P.F. becomes even more critical.

Landowners, developers, municipalities, utilities, infrastructure proponents and other employers working with forest resources should consider whether they have sufficient professional forestry expertise to understand the implications of removing or damaging trees at risk.

That expertise should extend beyond identifying an individual tree and should include assessing:

- the population surrounding the tree;
- the genetic diversity represented by that population;
- the condition and distribution of surrounding trees;
- opportunities for natural regeneration;
- seed sources and reproductive potential;
- connectivity between populations;
- site conditions and future suitability;
- threats affecting the broader population;
- opportunities to retain genetic material; and,
- the cumulative consequences of removing multiple trees across a landscape.

This is how professional forestry can fill an important gap between regulatory compliance and responsible stewardship.

There is another reason a bigger lens is suggested: trees operate on fundamentally different timelines from many of the species conservation models developed around fauna. A tree cannot simply move to a more suitable location when its climate or habitat changes. Its migration occurs through cycles of seed dispersal, regeneration and establishment. Depending on the species, this can take many generations and can be inhibited substantially by forest fragmentation.

A mature tree that is removed today may represent decades or centuries of genetic selection and adaptation. And the value of that tree and the characteristics expressed may not be apparent by visually or genetically assessing the individual tree.

For many tree species, particularly those experiencing disease, pests, climate stress or habitat fragmentation, population health and genetic diversity can be more important indicators of future conservation potential than the condition of an individual tree. A declining tree may still carry valuable genetic material. A healthy-looking tree may be one of very few remaining representatives of a population. A cluster of trees may contain genetic relationships that are not visible from the forest floor. And a seemingly insignificant population may represent an important source of genetic diversity for future recovery.

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This is why conservation decisions about trees should not only begin and end with the question: "Is this tree healthy enough to live?" The other important questions are:

- What population does this tree represent?
- What genetic diversity does it contain?
- What is the condition of that population?
- Is the tree isolated or in an isolated stand of trees with low genetic diversity?
- Can it reproduce?
- What will remain if these trees are removed?
- What is the status of this species locally and more broadly?

The SCA recognizes that a "member of a species" includes gametes and asexual propagules. This highlights that conservation does not necessarily have to end with the living tree, and is important to the work of the Forest Gene Conservation Association (FGCA). Seed, cuttings, scions and other reproductive material can provide opportunities to conserve genetic resources and support future recovery; however, identifying those opportunities requires expertise.

Genetic conservation is not simply collecting seed from any available tree; it requires consideration of where the material came from, how many trees are represented, how populations are structured, whether the collection is representative, how material should be maintained, and how it could ultimately be used. For some species at risk, the window to make those decisions may be relatively short. Once a population is lost, its genetic composition cannot simply be recreated.

R.P.F.s can play a much greater role in species recovery by recognizing when genetic conservation should be considered and by bringing appropriate forest genetic experts into the decision-making process.

Foresters are accustomed to thinking about future forests and beyond the policy of the day; that is one of the defining characteristics of the profession. The regulatory framework will continue to evolve. Species lists will change. Policies will be revised. Economic pressures will shift. Climate projections will change. But the fundamental biological reality will remain the same.

A forest's future depends on what genetic diversity is retained today. The R.P.F. therefore has an opportunity and, in many circumstances, a professional responsibility to look beyond immediate policy requirements. This means identifying the unique features of the forests under their care. It means recognizing when a species at risk represents more than an individual tree. It means considering populations, landscapes, reproductive capacity and genetic diversity. And it means asking whether today's decision leaves tomorrow's forest with the biological resources it needs to adapt.

The new Species Conservation Act establishes a different regulatory environment for Ontario, but it does not eliminate the need for professional judgment; in fact, it may make that judgment more important. Professional forestry should continue to look toward the future forest. For Ontario's tree species at risk, that future depends on decisions being made today, long before the consequences are visible. Upholding this long-term perspective is central to serving the public interest and maintaining trust in the profession.

A look into some of Ontario's biggest forest invaders

Madison Sturba, Invasive Species Centre

Forests face many different types of threats, but invasive species are often among the most challenging to manage. These unwanted visitors can spread quickly, harm healthy trees, and create lasting impacts on communities. Learning more about how to identify, prevent, and manage priority pests is incredibly important when trying to protect forests. Let's look at **5 pests** that currently threaten forests in Ontario and quickly learn about a few of the ways you can help slow or prevent their spread.



Spotted lanternfly adults with egg mass. Credit: Richard Gardner, Bugwood.org

Spotted lanternfly (SLF; *Lycorma delicatula*) are colourful, invasive insects from parts of Asia that feed on over 100 different host plants. They tend to prefer economically important plants like grapevines, fruit -trees, black walnut, and maple, which threatens both agriculture and forestry. There has been an increase in sightings reported by the public, particularly in the Windsor-Essex and Niagara regions. The Canadian Food Inspection Agency (CFIA) has thoroughly investigated these suspect finds but have not found evidence of any established populations. If you think you've found SLF, it's important to take a picture, capture the insect, and report it to the CFIA immediately. At this time of year, you're more likely to see SLF as adults or egg masses, but late nymphs (which are red with black and white spots) are also possible.

Hemlock woolly adelgid (HWA; *Adelges tsugae*) are tiny, sap-sucking insects that attack and kill hemlock trees. In Canada, HWA has been confirmed on eastern hemlock trees in Ontario and Nova Scotia, with new detections occurring each year. Its spread in Ontario has led to recent regulatory changes that could impact those in the forest industry. As of now, the Township of Alnwick/Haldimand, City of Hamilton, Haldimand County, and the Regional Municipality of Niagara are all regulated to slow the spread of HWA, meaning hemlock and other potentially infested material cannot be moved from these areas without approval. The good news is that there are a lot of different tools available to prevent and treat HWA. The silvicultural and/or chemical options you choose depend largely on your goals and available resources. The Guide for Managing Hemlock Woolly Adelgid, available on the Invasive Species Centre's website, outlines these different strategies.

Emerald ash borer (EAB; *Agrilus planipennis*) is a metallic green, wood-boring beetle that feeds on all species of ash, creating s-shaped galleries under the bark that disrupt water and nutrient transport in the tree. It's had devastating impacts on ash populations, as most trees die within 10 years of initial infection. Black ash have been hit particularly hard and are now declared endangered in Ontario. To mitigate some of these impacts, the Invasive Species Centre, with funding from the Ministry of the Environment, Conservation and Parks, is coordinating a volunteer network from across the province to map black ash and collect viable seed for long-term preservation. This work is carried out in partnership with Natural Resources Canada, the Ministry of Natural Resources, and Forest Gene Conservation Association. To join the Black Ash Community Action Network and take part in black ash scouting or seed collection, visit the Invasive Species Centre's website.

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Some invasive species have been on the landscape for several decades, while others have only been here for a short while. **Beech leaf disease** is a relatively new pest in Canada, with the first detection occurring less than 10 years ago in Elgin County, Ontario. It has spread quite rapidly since its arrival and can now be found throughout Southern Ontario, ranging from Windsor up to Peterborough and Prince Edward County. Beech leaf disease is thought to be caused by an invasive nematode (*Litylenchus crenatae ssp. mccannii*) that feeds on developing buds, which impacts leaf development and plant growth. All types of beech (big or small) are susceptible to infection, but young understory trees can die within 2-7 years as a direct result of this disease. There is a lot of ongoing research to better understand dispersal and effective management, but there are still things that can be done in the meantime to protect beech trees. One of the best things you can do is report any sightings to EDDMapS.org – this helps depict where the disease is spreading. Beech leaf disease can also be treated in Ontario by licensed applicators using ARBOTECT 20-S, which is a systemic fungicide that can reduce the impact of nematode feeding.



Beech leaf disease creates a banding or striping pattern on infected leaves. Credit: Matthew Borden, Bartlett Tree Experts, Bugwood.org

Oak wilt is another newer tree disease in Ontario, but early detection and rapid response efforts have so far led to some pretty positive outcomes. Oak wilt is a vascular disease of oak trees caused by *Bretziella fagacearum,* which is an invasive fungus that can inhibit the transport of water and nutrients within oak trees (particularly red oaks). The disease was confirmed by the CFIA for the first time in Canada in 2023 after an arborist from the City of Niagara Falls reported suspect red oaks in a residential neighbourhood. Two other cases were detected shortly after: one in the Township of Springwater and the other in the Town of Niagara-on-the-Lake. All 3 locations experienced quick, collaborative action that involved tree removals and extensive surveying. There have been no other cases of oak wilt reported since this successful management, but ongoing monitoring remains extremely important. To prevent oak wilt, monitor oak trees (especially red oaks) for any signs or symptoms of the disease (e.g., wilting leaves, early leaf loss, bark cracks, fungal mats) and report any suspect findings to the CFIA immediately. Do not prune oak trees between April and November when the risk of aboveground spread is highest. If pruning is unavoidable during this time, make sure to cover the wound in pruning paint.

Interested in learning more about invasive species, collaborative action, or additional resources? The Invasive Species Centre has considerable information on their website, including factsheets, species profiles, best management practices, and upcoming funding opportunities. Check out www.invasivespeciescentre.ca to learn more.

Community forest feature: The Simcoe County Forest



Graeme Davis, R.P.F., County Forester, County of Simcoe

The events which led to the establishment of the former 'Agreement Forest' program in Ontario are well documented. European settlement in Upper Canada in the early 1800's was originally driven by the exploitation of vast quantities of timber followed by unfettered clearing for agriculture. Simcoe County became home to some of the most extensive 'wastelands' in Ontario. With Simcoe County resident E.C. Drury elected Premier of Ontario in 1919, he became the key political driver in addressing the problem through the establishment of the Agreement Forest program – local governments purchased lands and turned them over to the Ontario Department of Lands and Forests for protection and forestry development. Simcoe County became the first municipality to sign on, and the first seedlings were planted in the Hendrie Tract in 1922.

Now thirty years out from its demise, what was perhaps the most impactful forest restoration program ever in Canada is largely forgotten. If you are an R.P.F. in Ontario and are not aware of this history, shame on you! Please locate a copy of 'Evergreen Challenge – The Agreement Forest Story' and get yourself up to speed. It is an amazing success story which should be celebrated and learned from. I do many presentations every year, and there is always surprise and amazement about the circumstances that led to our collective 'community' forests we are blessed with today. I include much of that history not only because it is often of great interest, but also because it is impossible to understand the current Simcoe County Forest (SCF) without knowing where we came from.

Taking a look at property acquisition and reforestation levels over the years also paints an interesting picture and helps to explain current successes and challenges:

Decade	Land Purchased		Average Price		Trees Planted
	Hec-tares	Acres	$/ha	$/acre	
1920 - 1929	575	1,420	16.40	6.64	2,014,200
1930 - 1939	1,539	3,800	15.61	6.32	4,079,855
1940 - 1949	2,152	5,314	20.43	8.27	5,050,270
1950 - 1959	1,992	4,919	59.60	24.13	3,686,450
1960 - 1969	1,944	4,800	96.38	39.02	3,191,245
1970 - 1979	1,301	3,213	312.50	126.52	1,715,240
1974*	1,428	3,525			
1980 - 1989	208	514	1,217.41	492.88	406,350
1990 - 1999	488	1,257	1,537.08	622.30	49,400
2000 - 2009	1,076	2,660	8,236.17	3,332.96	47,600
2010 - 2019	859	2,123	8,333.51	3,372.80	555,625
2020 - 2026	578	1,427	11,400.60	4,612.82	169,500

* The realignment of Simcoe County in 1974 resulted in the incorporation of forest tracts from the former 'Ontario County' in Ramara Township.

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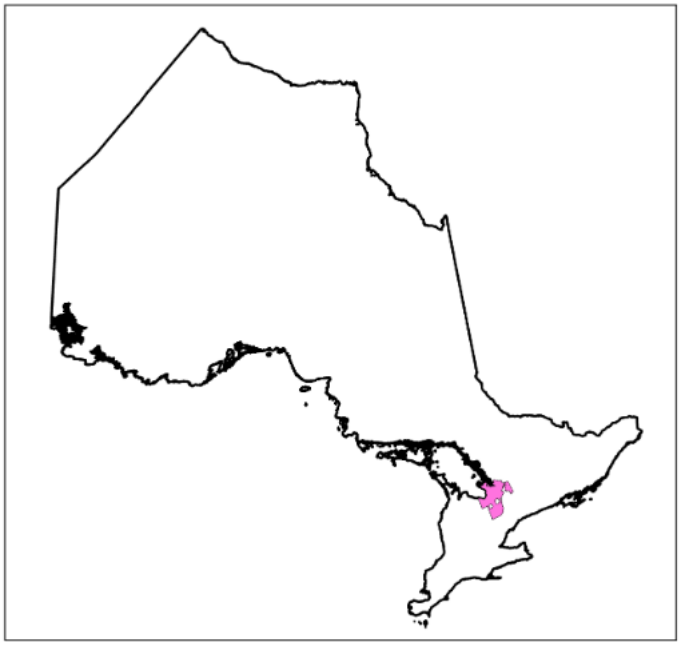
Also to put things into perspective provincially, in 1982 (60 years following inception) the Agreement Forest Program had grown to include:

- 19 Counties
- 6 Regional Municipalities
- 10 Townships
- 22 Conservation Authorities
- 1 Federal Government Agency
- 1 Corporation

Collectively these agreements totalled 107,000 hectares. Of all 59 agreements at that time Simcoe County was the largest at 10,588 hectares - yet unlike most other agreement holders, growth did not stop there. Why not?

The SCF experienced a pivotal year in 1996. Significant changes to the resources and mandate of the Ministry of Natural Resources culminated in a new agreement, whereby the County assumed full management responsibility. Two key policies were adopted which established the first land acquisition principles and a 'Reforestation Reserve', essentially ensuring that all income derived from the SCF be reinvested back into its continued management, protection and growth. This formed the foundation, along with a very long-term commitment to sustainable forestry and an economy of scale, which has resulted in continued growth and success. In short, money talks. The large, productive land base and continued focus on the production of high-quality timber has enabled continued investment and growth.

We continue to see a very high level of support for the broader economic, environmental and social objectives of the SCF. Today this amazing asset spans 13,955 hectares distributed amongst over 150 properties throughout the County. The "barren lands" of the 1920s, 1930s and 1940s are now healthy forests providing homes for wildlife, wood for the forest industry, and recreation to hikers, bikers, hunters, naturalists and many more. SCF is a living testament to the benefits of long-term, sustainable and science-based forest management practices.



Simcoe County Forest

Population	**533,000**	Year established	**1922**
Land area (km^2)	**4,860**	Full time staff	**8**
County forest tracts	**150+**	Forest conservation by-law	**Yes**
County forest area (ha)	**13,955**		

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The productive forest area within the SCF is about 75% of the total land base. Of the total production area approximately 35% is red pine, but that area is declining as many of the original plantations reach maturity. Referring back to the table depicting property acquisition and reforestation, it is evident why. The large expanses of predominantly red pine plantations established in the early decades have been maturing and converting to other forest types.

Harvest levels over the past decade average 36,900 m³ on 750 ha and netted just over $2million annually. Extrapolating from Statistics Canada's Input-Output Model, the total forestry sector employment generated by the SCF averages 167 direct, 137 indirect, and 147 induced jobs annually.



Productive, valuable red pine on former agricultural lands.



Prescribed burning as a site preparation tool.

The current revenue level will be difficult to maintain in coming years as the highly valuable red pine areas continue to reach rotation age and convert to mixed forest types. So, one of the significant strengths which has been our red pine also presents a challenge due to the uneven age class structure and irreplaceable nature of these plantations. Our management plan recognizes this, and we continue to try to mitigate the effects both to our revenue stream and impacts to local mills which have depended on thinning these plantations for many years.

Our changing climate is also accelerating changes to our forest structure. There have been two significant weather events over the span of my career, both causing significant damage to highly valuable timber. The year 2025 was punctuated by a severe ice storm which occurred over the last weekend in March. Many individuals across Simcoe County and much of central Ontario will always remember the ice buildup, tree breakage and extended power outages that ensued. For the SCF, this weather event was the most impactful in its history. By early fall, salvage operations were completed within 14 Forest Tracts, recovering nearly 14,000 m³ of red pine (approximately 50% of the normal annual harvest). I would estimate that a similar volume of red pine was also lost that was not recoverable, and the future value of many hectares of high-quality hardwood has also been severely reduced.

Of course, the other significant management challenge somewhat tied to our changing climate is invasive exotic species of all kinds, and our proximity to the GTA only accelerates these impacts. Substantive and ongoing efforts have been made in mapping, monitoring and management of a wide range of invasive plants within the SCF with a focus on prevention, detection, control, and adaptation. Prevention includes investing in public education and partnerships, clean equipment protocols and timing of harvest activities, and limiting trail development in more sensitive locations. An Integrated Resource Management approach means that, while significant investments are made to locate, track, and manage the most impactful invasive plants, pesticide use remains thoughtful and limited in scope. In addition to detailed point source mapping of invasive plants and tracking of control efforts, a ranking system is employed at the stand level to enable monitoring of overall impact and changes over time.

Simcoe County’s land acquisition and afforestation efforts are also helping to restore rare habitat types. In 2017, the County of Simcoe, in partnership with the Canadian Wildlife Service, GEI Consultants, American Forests, Forests Ontario and Mary Gartshore Consulting, began work on the first Canadian project to create suitable nesting habitat for the Kirtland’s Warbler, a globally endangered migratory bird, which once called Simcoe County home.

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A second project began in 2019, with funding provided by Ganawenim Meshkiki - Henvy Inlet First Nations through The Eastern Georgian Bay Initiative. During its spring migration in 2022, the project team was excited to confirm several Kirtland's Warblers made a stop in Simcoe County to help celebrate the 100th anniversary of the Simcoe County Forest. In 2026 we had the first males arrive to check out the conditions in the Museum Tract where work began in 2017.

Much of today's knowledge regarding plantation establishment and management has been derived from decades of research and trials conducted within the SCF. Growth and yield permanent sample plots have been maintained for decades, with the County partnering with the provincial Ministry of Natural Resources and committing resources to ensure these valuable plots remain intact. Supporting research in many forms has been a hallmark of the SCF, improving our collective knowledge and forest management practices well beyond Simcoe County.



A maturing plantation transitions to the next phase.

I have always felt a responsibility to continue to utilize the lessons learned from past management and ongoing research in making silvicultural decisions. One of our auditors a few years ago in an annual FSC Forest Management audit report stated 'SCF continues to implement exemplary forest management and innovation in the face of intense and varied public land use.' Despite the high visibility we continue to see little opposition resulting from harvesting, tending operations or controlled burning. Often, the most visible events such as controlled burning have provided great opportunities to get in front of the public and tell the good story that we have about the benefits of sustainable forestry. Maintaining Forest Stewardship Council® certification since 2010 has also been beneficial in this regard by providing a level of confidence to the public in our management activities.

It's also important to recognize the symbiotic relationship that we are fortunate to have with our local mills and long-time harvesting contractors. As we celebrated the 100-year milestone in 2022, the thing that struck me the most consistently during conversations with the public, councillors, former staff, and anyone who has contributed to the development of the SCF – was pride. And it was also clear that most of the contractors who had been around for many years also felt proud to have contributed in the way that they conduct themselves and the quality of work completed, most often this goes unacknowledged.

Residents of Simcoe County are quite familiar with the county forests distributed throughout the community and they have become integral to the high quality of life that we enjoy. A Recreation Policy was first established in 2006 which provided much needed clarity and set the table for where we are now. Many positive partnerships have evolved, and opportunities for enhanced access through recreational trail development has grown dramatically. The SCF now boasts some of the largest networks of hiking, mountain biking, snowmobiling, ATV and off-road motorcycling trails in Ontario. This has been balanced with more limited trail development in sensitive locations.

Simcoe County also provides support for tree planting initiatives on private lands. The Simcoe County Tree Planting Program is funded by revenues produced by the SCF and administered by area partners. Program funding provided since 2007 totals $460,863 which has been leveraged with contributions from many other organizations and landowners resulting in a total project value of $2,845,000. This has culminated in over 1 million trees planted on 650 hectares over the past 19 years.

A forest conservation by-law has been in effect in Simcoe County for over 50 years which is intended to ensure that privately-owned forests are harvested on a sustainable basis and to regulate the clearing of woodlands. The by-law objectives are to conserve the forest landscape and prevent over harvesting, protect sensitive natural areas, encourage good forestry practices and ensure a sustainable supply of timber for industry and landowners. I am confident that the investment made by the County in enacting and enforcing this by-law over time has paid dividends in improved conditions for today's local industry while conserving and enhancing the forest landscape.

Urban Forest Management Plan

Arben Pustina, R.P.F.

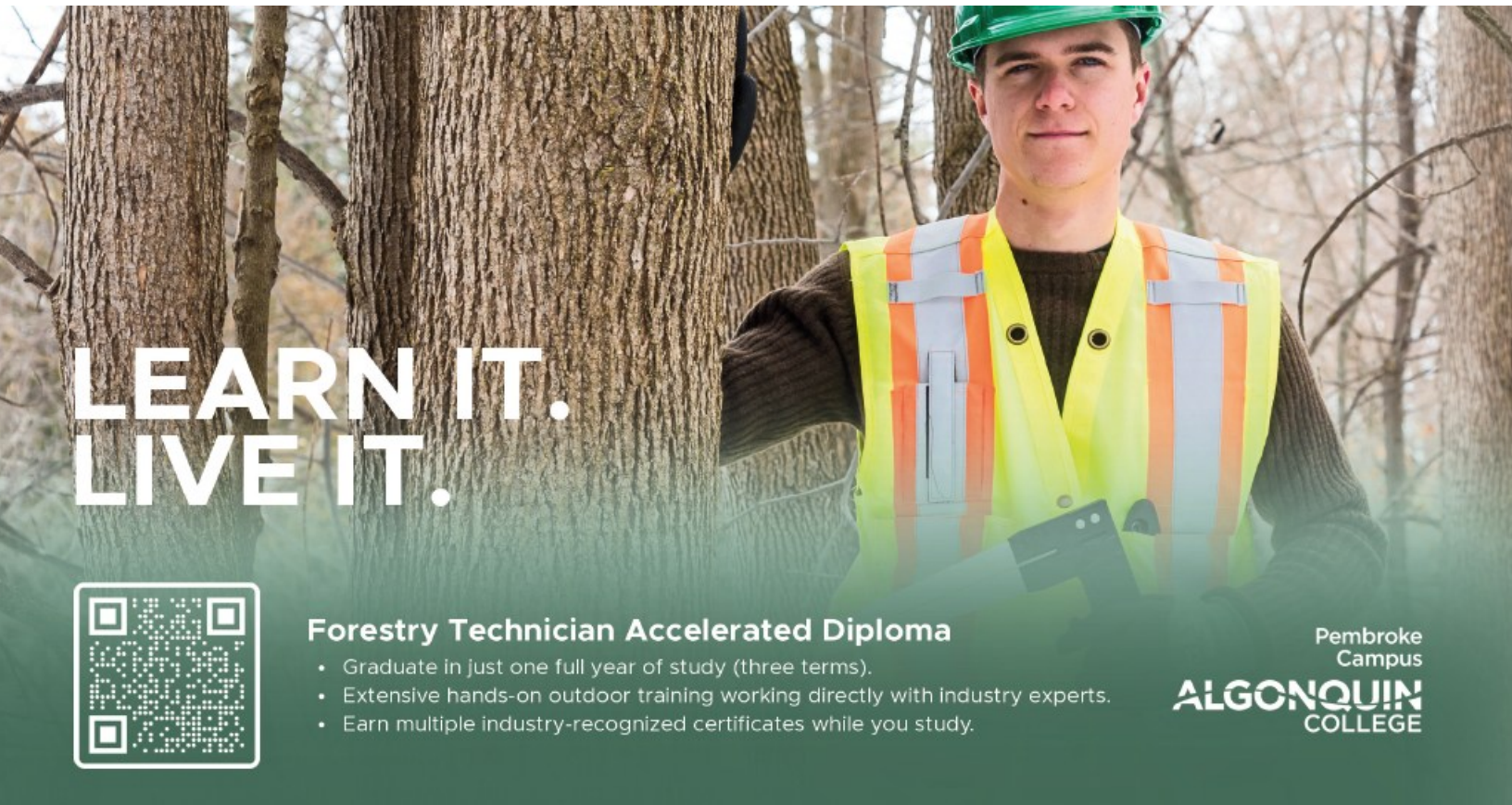
Southern Ontario is the most populous and densely populated region of Ontario and Canada. Several important natural features are in this region such as Niagara Escarpment, Oak Ridges Moraine, Ontario's Greenbelt, Great Lakes, other lakes, rivers, creeks, forests, woodlands, wetlands, agricultural fields, and urban natural features.

Urbanization means that many people live in this area and quality of life is particularly important. Trees, woodlands and other natural features are an important part of the urban landscape. Protection and enhancement of these natural assets is important in an urbanized environment for the quality of life of the residents. "Broadly speaking, urban forestry is a specialized yet multidisciplinary branch of forestry focusing on forest and tree management techniques and practices that range from planning, planting, maintaining, and protecting trees to public engagement and education" (Deneke, 1993).

In response to the above, many regions, cities and towns of southern Ontario have engaged in addressing trees (streets and parks), woodlands and natural features for their protection and enhancement. Cities such as Toronto and Hamilton have adapted urban forest management strategies to address protection and enhancement of trees, woodlands, ravines and natural features for the next 20 years. Other cities and towns such as Oakville, Burlington, Newmarket, Collingwood, Brampton, Markham, Guelph, and London. have prepared or are preparing 10- or 20-year Urban Forest Management Plans (UFMP) which address planning for tree protection, tree planting, woodland conservation and management, protection of natural features, invasive species, insects and diseases, legislation, tree inventory and monitoring, equity, and community stewardship.

A UFMP is a strategic, long-term document that guides the planting, protection, and maintenance of all public and private trees within a municipality to maximize environmental, social, and economic benefits. It establishes a shared vision, assesses the current canopy state, and sets actionable, measurable goals for sustainability and resilience.

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A UFMP is a tailored plan that guides tree care professionals to manage and provide for maximum, long-term benefits to the community proactively and effectively. An UFMP is a roadmap that creates a shared vision for the future of a tree canopy. The plan provides recommendations based on the analysis of detailed inventories and includes additional components or documents, such as budgets, implementation schedules, policy and procedure manuals, standards and specifications, public education, and monitoring plans, and existing by laws. Annual work plans and budgets are then developed based on the long-term UFMP and Council priorities.

Trees, woodlands and natural features are assets of green infrastructure. They are an important part of urban ecosystems. Certification of these assets either under Forest Stewardship Council (community forests) or the Sustainable Forestry Initiative (urban forestry) is an important tool to maintain and enhance high standards of stewardship for these assets.

Maintaining and enhancing tree canopy is another long-term target set by various municipalities of southern Ontario to increase green cover, improve air quality, and maintain healthy urban ecosystems to improve the quality of life in this region. The cities of Hamilton, Toronto and Oakville have set a 40% canopy target by the year 2050 or 2057. This will be achieved by protecting and preserving existing trees, planting more trees on city and private property, protecting and enhancing natural features, combating invasive species, planting a diversity of trees in their respective jurisdiction, taking into consideration climate change and species migration, and community engagement.

Many of our members work in urban forestry in southern Ontario for various cities, regions and towns such as Mississauga, York Region, Oakville, Burlington, Hamilton, Guelph, Halton Region, and London. They provide a substantial contribution to the maintenance and enhancement of green infrastructure in their communities.

https://opfa.ca/resources/urban-forestry/



Seed collection in an urban forest context

Sara Rowland R.P.F., Certified Seed Collector (2026)

For those of us that are required to purchase and plant trees in urban areas, it is evident that sourcing trees has become a lot more difficult and expensive in recent years. The impact of closing the Ontario Tree Seed Plant in 2018 increased the difficulty, with seed for some native species being impossible to procure. I considered, therefore, whether urban forests might become a useful source of seed.

Genetic diversity: The case for collecting urban seed

Urban forests are living laboratories of adaptation, serving as a kind of genetic reservoir under stress, and potentially a source of adapted seed that may help Ontario's forests meet the challenges of a rapidly changing climate. Seed collection has always been a cornerstone of sustainable forestry. Genetic diversity underpins resilience, and Ontario's forests will need every advantage as they face shifting climate zones, invasive pests, and extreme weather. Urban trees, exposed to heat islands, compacted soils, air pollution, and irregular moisture regimes, often demonstrate surprising hardiness. Their survival under these stresses raises an intriguing question: could urban phenotypes offer traits valuable for climate adaptation?



American hornbeam, *Carpinus caroliniana.*

Opportunities and limitations of urban seed sources

Cities offer an abundance of maturing, seed□bearing trees in generally accessible locations, if landowners provide consent. For collectors, this can be a practical and economic advantage compared to remote stands. Species that are rare in natural settings may be common in parks or along boulevards. For educational programs, urban seed collection can be a gateway to public engagement in forestry.

Yet the limitations are equally real. Provenance matters. Many urban trees were planted decades ago with nursery stock sourced from wherever was convenient and cheap, potentially with trees from far outside local seed zones. It is unlikely that records will show if a given tree represents locally adapted genetics or a cultivar imported from another region. This uncertainty does not make urban seed useless, but it does require caution and transparency. The Ontario Tree Seed Transfer Policy protects Crown forests by specifying where it would be appropriate to introduce trees grown from seed gathered from other places in Ontario. While this Policy is unlikely to apply to an urban forest, it is a resource that provides valuable decision-making perspectives for urban foresters tasked with maintaining and perpetuating a genetically diverse and climate-resilient urban forest.

For this reason, urban seed is best used in contexts where provenance uncertainty is acceptable such as research trials, controlled urban planting, or climate-adaptation experiments.

Safety, liability, and the realities of working in public spaces

Seed collection is not without risk. The methods of seed collecting all introduce significant public safety concerns. Permits to gather plant parts may be required, as well as landowner consent. Seed collectors would need insurance and to follow established safety protocols, perhaps following the recent Community Partnership Insurance Program of Ottawa. Training and certification as Certified Seed Collectors can create a safer environment while ensuring that collection practices meet professional standards, while clear communications of guidelines would be necessary.

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Who owns urban seed? Ethics, economics, and public perception

One persistent question is whether individuals should be allowed to collect seed from taxpayer□funded trees for modest private profit? Is this fundamentally different from a commercial dog walker using public parks to earn income? Municipalities vary widely in their policies. Some prohibit any removal of natural materials; others allow foraging within limits. The ethical considerations hinge on public benefit. If seed collection supports ecological restoration, research, or community forestry, the public may view it as aligned with the purpose and use of urban green spaces. If it appears extractive or commercialized, concerns may arise about fairness and resource stewardship.

A transparent permitting system and crop sharing agreement may help balance these interests. Municipalities could designate specific trees or zones for collection, impose limits of quantities, and receive a share of the crop or its monetary value to support urban forestry programs.

From seed to supply chain: Managing a niche resource

Urban seed, especially from climate□stressed trees, may become a niche but valuable commodity. However, small, variable seed lots require careful handling. Cleaning, drying, viability testing, and storage all demand technical skill. Buyers increasingly expect traceability information about species, location, collection date, and any known provenance.

This is where Certified Seed Collectors play a crucial role. Their training ensures that seed is collected ethically, from appropriate trees that are not isolated from others of the same species (unless for some reason, an isolated tree or small isolated community of trees has specific, desirable traits that require further evaluation), safely, and with proper documentation. Working under their supervision allows municipalities and community groups to maintain quality control while engaging volunteers.

Toward a responsible urban seed strategy

Urban seed collection sits at the intersection of forestry, public policy, and community engagement. The Southern Ontario Seed Strategy collaborative led by Carolinian Canada is actively working through this complex problem to develop a cooperative pool of willing landowners, knowledgeable and enthusiastic seed collectors, nurseries and conservationists, to rebuild Ontario's tree seed supply as an example of excellence. The Forest Gene Conservation Association continues to train and track Certified Seed Collectors, a qualification professional foresters may consider adding to their professional portfolio to ensure that seed collection contributes meaningfully and responsibly to the future of our forests.



Pawpaw, *Asimina triloba.*



Eastern redcedar, *Juniperus virginiana.*

References

Community Partnership Insurance Program Eligibility Intake Form - Jobs and community involvement | City of Ottawa - https://ottawa.ca/en/recreation-and-parks/jobs-and-community-involvement/community-partnership-insurance-program-eligibility-intake-form

The Southern Ontario Seed Strategy | Carolinian Canada - https://caroliniancanada.ca/seed

Certified Seed Collector Course - FGCA - https://fgca.net/seed-expertise/certified-seed-collector-course/

Ontario Tree Seed Transfer Policy | ontario.ca - https://www.ontario.ca/page/ontario-tree-seed-transfer-policy#section-1

Sharing our roots: Journeys to becoming a professional forester

This segment introduces some of Ontario's new R.P.F.s and Associate R.P.F. members by sharing the personal stories behind their decision to join the profession and their experience as a professional forester so far. It highlights the wide range of backgrounds and career paths that strengthen forestry in Ontario and the value this diversity brings to the profession.

Introducing: Kristen Grittani, R.P.F., ISA Certified Arborist, TRAQ

As far back as I can remember, I have been fascinated by the science of our natural environment and felt drawn to preserve it. I grew up spending time outdoors with a very healthy curiosity for the plants and animals surrounding me. I asked a lot of questions, did my own experiments, and gathered as much knowledge as I could.



Ts'uu - Western Red cedar (*Thuja plicata*) in Gwaii Haanas National Park Reserve and Haida Heritage Site, Haida Gwaii, British Columbia. Photo Credit: Kristen Grittani.

Later in life, I applied that curiosity in my formal education, completing an undergraduate degree in Biology at McMaster University, before moving on to the Ecosystem Restoration program at Niagara College. When it became apparent that trees drew most of my attention, I moved on to the Master of Forest Conservation program at the University of Toronto. As I learned more about forestry, I found that I was looking at it in a slightly different way. I wanted to know exactly how each tree was functioning and the story behind it. I became fascinated by the impacts that trees could have on an urban landscape and on residents, and particularly the mental and physical health benefits of simply being near trees. I remember first learning about the Japanese practice of Shinrin-yoku (forest bathing), and how that sparked my passion for accessibility to trees.

To support my curiosity for how trees work, I became an ISA Certified Arborist in 2016. For the past 10 years, I have worked in the realm of urban forestry and arboriculture, in both public and private consulting capacities. In January of 2026, I became an RPF and shortly after, I started a new role as the Urban Forester for the City of Guelph. Becoming an RPF and an Urban Forester has directed my career in an exciting new way, towards the strategic planning, decision-making and broader sense of health and continuity of the urban forest. My involvement with the OPFA has opened new doors professionally and socially, as I now serve on the ISA Ontario Board of Directors, the Canadian Tree Fund and a number of professional committees. I am proud of the growth and understanding of Urban Forestry as a career, as we encompass a diverse group of talented professionals that work to support all aspects of urban living and as we seek to better define this path professionally in Ontario.



Kristen and colleague Annelise Petersen handing out trees at a City of Cambridge giveaway day. Photo Credit: Cambridge Today.

In urban forestry, we have a unique role. We work to maintain the health of the urban canopy as a whole but also find ourselves focusing heavily on the individual trees. Large, healthy trees become landmarks, green spaces are treasured and planting a single tree makes a visible difference. Trees in cities can have proven benefits to mental and physical health, lowering cortisol, blood pressure and improving mood, mitigating heat island effects, and providing energy savings for cooling homes, just to name a few.

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Dr. Geoffrey Donovan provides some of my favourite facts about urban forestry, translating the public healthcare benefits of trees in cities into specific economic terms. He recently presented the figure that roughly 100 trees planted equalled one life saved, by comparing data of trees planted in the City of Portland, Oregan, with cardiovascular mortality over 30 years, putting the health effects of planting trees in cities into very simple, impactful statements. Other studies have shown a range of health benefits to correlate with the presence of trees, including reductions in blood pressure and cortisol and improved cognitive performance and mood. In urban forestry, we know and can immediately see the impacts of trees in cities, supported through research and through our own interactions with community.



Preparing trees to hand out to Cambridge residents. Photo Credit: Cambridge Today.

Today, many cities are setting goals to reach a higher percentage of canopy coverage, which creates some interesting challenges. One of which is preventing the loss of trees. In an urban forestry setting, trees can commonly be viewed as a barrier to development or a nuisance to be removed. One of my goals of working in urban forestry is to improve the relationship homeowners have with trees, starting with an understanding of the true benefits of trees to our homes, our health and dispelling common myths and perceptions of trees as a nuisance. I commonly see that urban residents acknowledge and understand the value of trees but just don't want the perceived limitations of having them in their own yards.

In Urban Forestry, we have also come to understand that most canopy goals won't be reached without intensive tree planting on private property. I am excited to see how municipalities are starting to work with private landowners to reach these goals and look forward to the creative challenge of how urban foresters can help achieve this.

Despite the challenges faced, while working in urban forestry, I feel fortunate that I get to see the benefits of my work every day when I step outside and see the trees. Every day there are small wins that make a big difference. Whether it is changing plans to preserve a special tree, the excitement we see giving a family a free tree or the positivity of a community tree planting event - the impact that trees can have on the community is always tangible.

Introducing the official OPFA digital signature

Louise Simpson, C.A.E., Executive Director & Registrar

In response to growing member requests for a secure, digital document-stamping option, the OPFA has partnered with Portage Cybertech to launch an official digital signature for R.P.F.s and Associate R.P.F.s starting September 2026.

Key Benefits & Technology

Unlike simple electronic image stamps or scanned signatures, which can be copied, pasted, or reused, the new digital signature acts as a digital seal that relies on cryptographically protected certificates linked directly to a member's verified identity, increasing security.

Use of the OPFA digital signature to seal documents authenticates:

- Member name and professional designation
- Member number and verified email address
- That the R.P.F. or Associate R.P.F. is an active member of the OPFA

This technology also ensures document integrity by making any post-signature changes immediately evident, preventing document tampering. Use of the OPFA digital signature will be revoked if a member's certificate of registration is suspended or cancelled or if they resign. Digital signatures are widely being adopted across Canadian professional regulatory bodies (including engineering, architecture, agrology, and accounting) as a trusted standard for authenticating professional work.

Important Details

- **Optional Adoption:** Signing up for a digital signature is voluntary, though recommended for any member who regularly stamps electronic documents. Traditional physical seals and previously approved electronic seal methods remain fully acceptable. R.P.F.s and Associate R.P.F.s are encouraged to review their needs and options and discuss with their employers where applicable to determine the most suitable method to use.
- **Cost & Employer Reimbursement:** Portage Cybertech charges an annual fee of $215-$219 to utilize the digital seal. Registrants wishing to sign up may want to discuss reimbursement with their employers, as organizations can directly benefit from the increased security and operational efficiency.
- **Updated Guidance:** Practice guidance documents are currently being updated to incorporate OPFA digital signature standards and will be distributed shortly.

Upcoming Webinar A live webinar will be hosted soon (date TBC) to walk members through how to sign up, set up credentials, and use the digital signature in daily practice. Registration details will follow in an upcoming email notice. The webinar will be recorded and made available to members who are unable to attend.

You can find more information here: https://www.portagecybertech.com/en/certifio/ontario-professional-foresters-opfa/

*Note: Portage Cybertech is currently offering a discounted $50 sign-up fee for the Desktop version to celebrate the launch of the official OPFA digital signature.

Forests Canada

Plant Today. Benefit for Decades.

Forests Canada's Tree Planting Program makes increasing forest cover easier and more affordable with funding and technical support.

Learn more at:
ForestsCanada.ca/PlantTrees



Check out our many resources about tree planting and forest stewardship.
ForestsCanada.ca

Previously published in The Ontario Woodlot Association's newsletter: The Ontario Woodlander, Issue 124, Fall 2026, pg. 8-9.

ON THE HOME STRETCH

PRIVATE LAND ADVANCED FOREST RESOURCE INVENTORY PROGRAM UPDATE

Communications Committee

It is hard to believe that the Ontario Woodlot Association's (OWA) Private Land Advanced Forest Resource Inventory (PLAFRI) program is in its final stages. The original funding for the five-year program was garnered in 2022 from Environment and Climate Change Canada (ECCC) and leveraged with funding through a number of other partner organizations, including the Ontario Ministry of Natural Resources (MNR).

Since that time, OWA staff, particularly our Advanced Inventory Forester Ben Gwilliam and Program Manager Sionaid Eggett, have worked tirelessly to ensure high-quality private land inventory data is modelled and produced from available remotely sensed LiDAR* and satellite imagery, calibrated and validated by extensive field data collection.

AN ONGOING NEED

As forests are constantly changing over time, forest inventory work is always ongoing and can never be truly complete. Updates to the data representing recent naturally disturbed areas, harvests, tree planting, and newly built roads, amongst many other changes to the forest, are regularly required. It is also best practice to create a new forest inventory for any given area about every 10 years, so that it is up to date and accurately reflects the forest's true state, representing its attributes and conditions correctly, and with precision. Forest management and operations must be based on a high-quality, current inventory.

WHAT HAS BEEN ACCOMPLISHED

To date, the OWA team has inventoried more than 1.5 million hectares of forest cover on more than 9 million hectares of private land. In addition to computer analysis and modelling, field crews have completed more than 650 LiDAR calibration plots that have informed the algorithms used in said modelling. These crews have included OWA staff and volunteers, exchange foresters from both Germany and New Zealand, and, to date, more than 150 students from Ontario forestry programs at Algonquin College, Fleming College, the University of Toronto, and Collège La Cité.

Starting plot data collection in eastern Ontario and steadily working west, our field crews have now completed Hamilton and Niagara regions and are nearly finished with the Kawartha region. Current fieldwork is focused on the Greater Toronto Area and the regions around Georgian Bay and Lake Huron.

It is expected that early next year, the MNR will transfer available forest resource inventory data for private lands that fall within areas in central and northern Ontario (where they produce forest inventory for public land) to the OWA. This data will be added to and eventually made available for use by landowners and forest service providers through our interactive web tool, which is in the final stages of development and testing.

The PLAFRI webtool maps all inventoried forest land and allows public users to delineate an area of interest to view key stand-level summaries of total basal area, carbon storage, and forest types. OWA members can gain access to deeper forest analytics, including basal area and volume by size class, average diameter and height, biomass, stem density, canopy cover, and other industry-standard attributes on any number of forest stands.

WHAT IS NEXT?

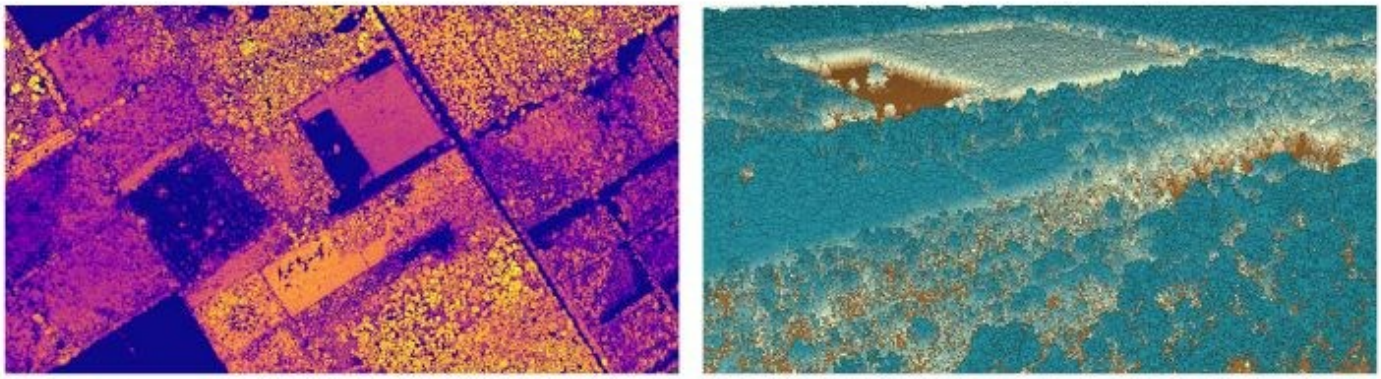
While we are on the home stretch with respect to the five-year PLAFRI program, the reality is that there is a long-term, permanent niche for the OWA to manage, update, and create new forest resource inventory for private land. It is indeed a never-ending, essential process, and it has the potential to become a self-funding revenue stream for the OWA. Further, there will be a need to help and support both landowners and forest service providers to use the inventory to its full potential.

Given the vital importance of private land forest resource inventories and the growing recognition of their foundational role in achieving sustainable forest management, there will undoubtedly be opportunities for the OWA to enhance and expand this program, now and in the future.

LiDAR is an acronym for **Light Detection and Ranging. It is a technology that uses laser light pulses to measure distances and create precise, three-dimensional georeferenced maps of objects and environments, including forest structure.*



Algonquin College Forestry Technician Students learn how to collect LiDAR calibration plot data from Jamila Milne, exchange forester.



This LiDAR data is displayed as a top-down view canopy height model (left) and a bird's-eye view point cloud (right) of the same area in our Huronia Chapter, showing a patchwork of plantations, natural forests, and agricultural fields. This data is used to accurately measure tree heights, canopy density, and canopy complexity. From this, we can model further attributes such as basal area and volume.

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GREENBELT FOUNDATION

THE FOUNDATION DEDICATED TO ONTARIO'S GREENBELT

Possibility grows here.

ABOUT THE GREENBELT

Ontario's Greenbelt is two million acres of protected farmland, forests, wetlands, rivers, and lakes in the Greater Golden Horseshoe, one of the fastest-growing regions in North America. One of the world's largest, Ontario's Greenbelt consists of multiple ecologically and agriculturally significant areas, including the Niagara Escarpment, Oak Ridges Moraine, protected countryside, urban river valleys, and the Holland Marsh and Niagara Tender Fruit and Grape specialty crop areas.

For more than 20 years, Ontario's Greenbelt has been:

- Supporting sustainable agriculture and local food systems
- Safeguarding our precious water resources
- Protecting diverse natural ecosystems
- Mitigating against the impacts of climate change
- Providing world-class outdoor recreation and tourism opportunities
- Sustaining thriving rural economies

The protection and prosperity of Ontario's Greenbelt is critical if we are to continue meeting the needs of our growing province for generations to come.

ABOUT THE GREENBELT FOUNDATION

The Greenbelt Foundation is the only charitable organization solely dedicated to ensuring Ontario's Greenbelt remains permanent, protected, and prosperous. The Foundation is focused on native tree, shrub, and other vegetation plantings that increase natural cover in the Greenbelt, contribute to biodiversity, and create greater climate resilience for Ontario residents. Through strategic grant-making and philanthropic partnerships, community education and engagement, and research-informed policy recommendations and programs, the Foundation invests in the Greenbelt's interconnected natural, agricultural, economic, and cultural systems, ensuring a working, thriving Greenbelt for all.

GRANT FUNDING

The Greenbelt Foundation funds programs that strengthen the interconnected natural, agricultural, economic, and cultural systems within the Greenbelt and address priority opportunities and challenges facing the region and Greenbelt communities.

Through a partnership between Kawartha Land Trust and the Greenbelt Foundation, the OWA has contributed to the restoration and stewardship of vital ecosystems along sections of the Oak Ridges Moraine located in the City of Kawartha Lakes and Peterborough County. This project was funded through the Greenbelt Foundation's Resilient Greenbelt stream, which funds projects that work with nature to create and improve public benefits provided by the natural systems of Ontario's Greenbelt.

BRIEF HISTORY OF THE GREENBELT

1973–2001

The Niagara Escarpment Planning and Development Act was passed in 1973, ensuring any development that occurs along the ecologically significant Escarpment is compatible with the natural environment. In 1981, the Ontario Municipal Board passed the first set of protections for the Niagara Specialty Crop Lands, including 15,000 acres of tender fruit land and 20,000 acres of grape land in the Niagara region. Twenty years later, in 2001, the Oak Ridges Moraine Conservation Act was passed, protecting approximately 470,000 acres of land that is home to 1,760 different species, forms the headwaters of 66 rivers and streams, and provides world-class recreational opportunities.

2005–2007

On February 28, 2005, the Ontario Government established a provincial Greenbelt, adding one million acres of farmland and environmentally sensitive areas to the already protected Niagara Escarpment and Oak Ridges Moraine. Now a world-class model for preservation, Ontario's Greenbelt is one of the largest of its kind, spanning over two million acres of protected farmland, forests, wetlands, rivers, and lakes. From 2006–2007, the Endangered Species and Clean Water Act were passed, providing additional levels of protection for Greenbelt lands to prevent species extinction and protect Ontario's precious water resources.

2017–2022

In 2017, Greenbelt protection was extended to 21 major Urban River Valleys and seven coastal wetlands, further protecting Ontario's water systems and the communities and species who depend on them. The Greenbelt Area increased by 9,400 acres of land in 2022, including 13 Urban River Valleys and lands in the Paris Galt Moraine area.

A THRIVING GREENBELT. A THRIVING ONTARIO.

WHAT NEXT?

Edward McDonnel, CEO of the Greenbelt Foundation, said, "As we look towards the future, we need what the Greenbelt offers more than ever; it protects the lands that feed us, cleans the waters that sustain us, and provides the natural spaces that inspire us. Our collective commitment to the Greenbelt will ensure it thrives and stays permanently protected."

ADDITIONAL READING

For more information about the Greenbelt, including its impacts on Ontario's natural, agricultural, economic, and cultural systems, visit www.greenbelt.ca/learn.

To become informed about current legislation, visit: Greenbelt Act, 2005, S.O. 2005, c. 1

https://www.ontario.ca/laws/statute/05g01.



A map of Ontario's Greenbelt. Source: The Greenbelt Foundation: https://greenbelt.ca/.

Previously published in The Ontario Woodlot Association's newsletter: The Ontario Woodlander, Issue 124, Fall 2026, pg. 16.

WOODLOT MANAGEMENT PRACTICES IN THE GREENBELT

Communications Committee

Resource management in the Greenbelt is governed by three pieces of legislation: the *Greenbelt Act, 2005**; the *Niagara Escarpment Planning and Development Act, 1990*; and the *Oak Ridges Moraine Conservation Act, 2001*. These three pieces of legislation are not intended to micromanage what landowners and managers can and cannot do on the land. On the contrary, they take a "10,000-foot view."

The overarching purposes of these three pieces of legislation can be found in the 12 objectives laid out in the Greenbelt Act. These include sustaining the countryside, contributing to the economic viability of farming communities, preserving agricultural land, protecting the hydrological function of the Greenbelt area, and controlling urbanization within the Greenbelt while also providing tourism opportunities for urban dwellers. Additionally, and this is important for woodlot owners, the objectives include promoting sustainable resource use. Readers are encouraged to read all three acts that govern the Greenbelt and review the simply stated objectives (online versions are easily searchable with interactive tables of contents).

In 2017, a comprehensive review of the Greenbelt Plan, originally established under the *Greenbelt Act*, 2005, was finalized, and protections were extended to urban river valleys. This Plan is a little more specific about renewable resource activities. The guidance given is in line with the objectives of OWA members for their woodlots. Policy three in the Renewable Resources Policies sums it up:

> "Within a key natural heritage feature, key hydrologic feature or key hydrologic area, renewable natural resource activities should be carried out in a manner that maintains or, where possible, improves these features, areas and their functions."

The management activities that woodlot owners in the Greenbelt carry out are guided by the *Greenbelt Act*, the *Oak Ridges Moraine Conservation Act*, and the *Niagara Escarpment Planning and Development Act*. Specifics are governed by county and regional forestry by-laws, similar to any area of Ontario having forestry by-laws. Most forest conservation by-laws reference "good forestry practices" that originated in the *Ontario Forestry Act of 1990*. Good forestry practice has the same overarching goals for the Ontario forest as the goals of the Greenbelt, putting most municipal tree conservation by-laws in harmony with the Greenbelt Act.

FOR DETAILED INFORMATION

The *Greenbelt Act*, 2005:
https://www.ontario.ca/laws/statute/05g01

The *Niagara Escarpment Planning and Development Act*:
https://www.ontario.ca/laws/statute/90n02

The *Oak Ridges Moraine Conservation Act*:
https://www.ontario.ca/laws/statute/01o31

The *Greenbelt Plan (2017)*:
https://www.ontario.ca/document/greenbelt-plan

* https://greenbelt.ca/history/



Photo credit: Greenbelt Foundation

Previously published in The Ontario Woodlot Association's newsletter: The Ontario Woodlander, Issue 124, Fall 2026, pg. 17-19.

NATURAL ASSET ACCOUNTING:

REALIGNING ECONOMIC ACTIVITY TO ECOLOGICAL REALITIES

Elliott Groen, R.P.F. in-training with scope, Kawartha Chapter

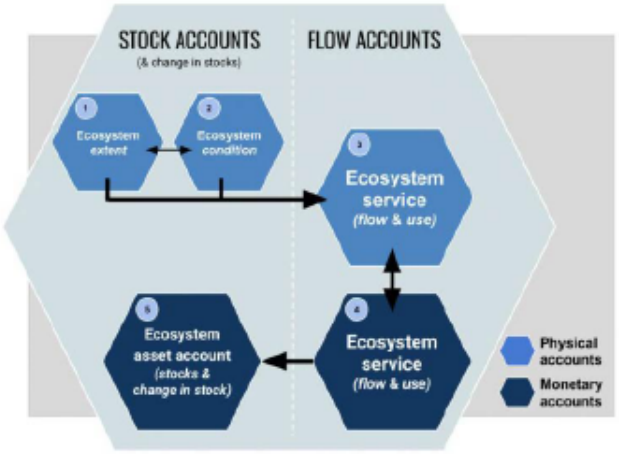
We are a part of nature, which has inherent value that can never be fully detailed on a spreadsheet. Yet many parts of our economic systems do not fully account for ecosystem conditions and services. This can lead to degradation that impacts not just the environment, but also our socio-economic prosperity. For example, unsustainable development in the headwaters of a watershed can lead to downstream flooding and affect water quality, requiring higher insurance premiums and water treatment costs. Natural asset accounting is an emerging effort to change that: a way of measuring what ecosystems provide so that our economic activity can be checked against ecological limits.

THE BASIC SYSTEM

The United Nations System of Environmental-Economic Accounting: Ecosystem Accounting (SEEA EA), adopted as an international statistical standard in 2021, sets out the rules that were adopted and built on by Statistics Canada to produce the Canadian System of Environmental Economic Accounts[1] and the Census of Environment[2].

Just like a house or vehicle is considered an asset, natural assets are defined by geographic extent based on ecosystem characteristics (soil, temperature, vegetation, and so on) and socio-economic land use. For example, a woodlot is a natural asset that produces a variety of flows or services, such as carbon sequestration, water filtration, wildlife habitat, and provisioning of goods such as timber and maple syrup. Stocks and flows are compiled into larger accounts, and changes in their condition are tracked over time and linked to socio-economic decision-making.

Services can be direct or intermediary depending on who receives them. A sustainable timber harvest on your property is a direct service. Your woodlot also maintains habitat for insectivorous birds; that habitat is an intermediary service, a flow that describes the condition of the bird population rather than a direct benefit to any person or business. Those birds, however, could deliver pest control to a neighbouring farm, and because that lands on an economic beneficiary, the pest control is a direct service. The distinction guards against double-counting: you do not tally the habitat and the pest control separately, since the first leads to the second.



Sourced from United Nations. (2021). Ecosystem accounting. https://seea.un.org/ecosystem-accounting

Disclosure runs along a spectrum and does not require putting a monetary value on everything. At one end is qualitative description, for example, a conservation area with recreation trails. In the middle sits quantitative-physical measurement, for example, hectares of forest cover in a watershed. At the far end is monetary valuation that can be done through various methods. For example, a timber harvest value is determined through market pricing, whereas the value of bird pest control to the farmer could be valued through an avoided damages method, basically detailing the difference in yields and operating costs when pest control is present or absent.

CARBON: A FAMILIAR ASSET WITH ACCOUNTING FRAMEWORKS

Most people have already met natural asset accounting in the form of carbon. There are voluntary markets and federal pricing schemes for industry. Carbon accounting alone is not enough. When only one ecosystem service flow is accounted for, monoculture plantations may be favoured over diverse mixedwood native stands that deliver higher biodiversity and water quality. This highlights the need to look at environmental assets as a coherent system and link them to all the services they provide, including socio-economic ones.

LARGE-SCALE EXAMPLES OF NATURAL ASSET ACCOUNTING

A classic large-scale example comes from New York City. Rather than build a filtration plant, the city protected more than 140,000 acres of forested watershed for an average cost of roughly $100 million annually, avoiding an $8–$10-billion water filtration plant plus some $365 million in annual operating costs. Intact natural assets simply outcompeted grey infrastructure in market pricing.

A recent study on the Greenbelt found the region's ecological value reaches all Ontarians and is especially important in the Greater Golden Horseshoe. The Greenbelt delivers about three times the biocapacity (the ability of farmland, forests, and other areas to provide goods and services) per hectare compared to the rest of the province. However, due to increasing land development, this value is decreasing. Ongoing accounting and measurement of biocapacity/ecosystem conditions and services, and their incorporation into decision-making, can ensure that we continue to live in harmony with natural areas.

CURRENT ONTARIO ENVIRONMENTAL-ECONOMIC ACCOUNTING MEASURES

The Managed Forest and Conservation Land Tax Incentive Programs (MFTIP and CLTIP) recognize the benefit that forest lands have for all Ontarians. This is a value judgement that creates a fixed incentive: 75 percent and 100 percent property tax reductions, respectively, on eligible lands. These programs are not natural asset accounting; they do not track stocks and flows systematically or produce standardized environmental-economic accounts. The incentive is based on property value assessments, not ecological value. A highly diverse carbon-rich forest receives the same incentive as a recently planted forest. These programs and the information within individual management plans could be used to inform ecosystem accounts and conditions, but this would require further standardizing, aggregating, and publishing data.

Other existing datasets are more ready to generate natural asset condition accounts. Two examples include the Conservation Authority Watershed report cards and the Lake Partner Program run by the Ontario Ministry of the Environment, Conservation and Parks and the Federation of Ontario Cottagers' Association. These produce repeated, standardized, publicly available datasets that track water quality metrics including nutrient loading, benthic macroinvertebrate populations, groundwater levels, and land-cover changes. Additional high-quality citizen science data can contribute further to natural asset accounting and highlight the role we all can play by sharing observations.

Payment for ecosystem services (PES) examples are still limited in Ontario and mostly occur on a project-by-project basis. Examples include Quinte Conservation's carbon sale of 10,000 hectares under the American Carbon Registry's Improved Forest Management Methodology. Payment is needed when maintenance or restoration of natural areas becomes financially prohibitive but provides real benefits. For example, when a timber sale in a plantation cannot begin to cover the cost of controlling invasive species in the understory, PES pays for the service instead of the product. Ontario's clearest program example is ALUS (Alternative Land Use Services)*. ALUS helps producers restore wetlands, reforest, plant windbreaks, install riparian buffers, manage sustainable drainage systems, create pollinator habitat, and establish other environmental stewardship projects on their land. ALUS makes per-acre annual payments to participants to recognize their dedication to managing and maintaining the ALUS projects on their land in exchange for the ecosystem goods and services their projects produce, governed locally by farmer-led Partnership Advisory Committees. The payments are often modest, and participants have long valued the recognition of their stewardship as much as the cheque.

NEXT STEPS

Natural asset accounting can show the value of nature and how it provides for our socio-economic well-being (see Table 1). The field is still young, with few operational examples. OWA's forthcoming Private Land Advanced Forest Inventory (PLAFRI) will provide a much-needed dataset with a higher level of detail and quality than current large-scale forest inventories on private land. We have also started a project under Forest Stewardship Council Canada's Verified Impact program where we will conduct habitat improvement work in a certified forest while tracking functional biodiversity through habitat features (see page 50 for the article on the Forest Integrity Assessment Tool). We are aiming to further explore and develop funding pathways for forest stewardship activities that improve the condition of "natural assets and services" through our Woodlot Stewardship Program. This will be especially critical in southern Ontario, where many municipalities' ecological footprints are exceeding the biocapacity of their land and waters.

** ALUS is a registered Canadian charity that provides direct financial support and resources to farmers and ranchers, helping them to build nature-based solutions that lead to improved environmental health and enhanced biodiversity. For more information about ALUS, please visit https://alus.ca/.*

1 Statistics Canada (2025). *Canadian System of Environmental-Economic Accounts-Ecosystem Accounts*. https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&Id=1568948#a1

2 Statistics Canada (2026). *Census of Environment*. https://www.statcan.gc.ca/en/census-environment

3 United States Environmental Protection Agency (2026). *The economic benefits of healthy watersheds*. https://www.epa.gov/system/files/documents/2026-04/economic-benefits-of-protecting-healthy-watersheds-april-2026_508.pdf

4 Greenbelt Foundation (2026). *The ecological value of Ontario's Greenbelt*. https://greenbelt.ca/wp-content/uploads/2026/07/GBF_EcoValueGreenbelt_FINAL.pdf

5 Conservation Ontario (2026). *Ontario's Watershed Report Cards*. https://conservationontario.ca/policy-priorities/science-and-information-management/watershed-reporting/

6 Federation of Ontario Cottagers' Association (2025). Lake Partner Program. https://foca.on.ca/lake-partner-program/

7 For example: Birds Canada Nature Counts, EDDMapS and iNaturalist.

8 Greenbelt Foundation (2026). *The Ecological Value of Ontario's Greenbelt*. https://greenbelt.ca/wp-content/uploads/2026/07/GBF_EcoValueGreenbelt_FINAL.pdf



A headwater creek in springtime.

Community type	Number of communities	Land area (sq km)	Biocapacity (Gha/capita)	Ecological Footprint (Gha/capita)	Biocapacity balance (Gha/capita)
First Nations	147	6,746	13.4	4.7	8.6
Rural	329	852,225	31.4	6.3	25.1
Urban	101	33,441	0.8	6.4	-5.6
Ontario	577	892,412	6.0	6.3	-0.3

Table 1. Sourced from Rural Ontario Institute (2023). Environment Dashboard. https://www.ruralontarioinstitute.ca/wellbeing/dashboard/environment.aspx

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THE MULTI-USE GANARASKA FOREST:

PROTECTING AND ENHANCING THE OAK RIDGES MORAINE AND BEYOND

Bella Machan-Dixon & Lauren Ward, Ganaraska Region Conservation Authority (GRCA) Forest Health Assistants

OAK RIDGES MORAINE / PRE-GANARASKA CONSERVATION HISTORY

During the last glaciation period, approximately 12,000 years ago, the Oak Ridges Moraine was formed.

Glaciers deposited large quantities of rock, sand, and debris, creating a substantial ridge north of Lake Ontario. This ridge is best known for its water systems—aquifers supplying drinking water to numerous communities and supporting countless, diverse habitats, while also home to numerous river systems providing the building blocks for healthy forests. As settlers arrived, they did not see or appreciate the rich and beautiful land before them, leading to extensive environmental degradation, flooding, and severe erosion.

GANARASKA WATERSHED HISTORY

From the 1800s to the early 1900s, intensive agricultural pressure and deforestation turned what we know as the Oak Ridges Moraine, and much of southern Ontario, into a barren landscape. This resulted in devastating mass flooding and heavy erosion throughout the watershed.

By the 1930s, a solution to these problems was required, leading to the birth of Ontario's Conservation Authorities. Locally, a large-scale study of the Ganaraska watershed, spearheaded by one of Ontario's conservation pioneers, A. H. Richardson, was undertaken to better understand the environmental degradation afflicting the province.

BIRTH OF THE GANARASKA REGION CONSERVATION AUTHORITY AND GANARASKA FOREST

The first task of the newly formed Ganaraska Region Conservation Authority (GRCA) was to acquire and reforest 20,000 acres (~8,094 hectares) of land at the headwaters of the Ganaraska River in an effort to restore and replenish the watershed. Tree planting and management of the new woodlots was administered via the Department of Lands and Forests—now the Ministry of Natural Resources (MNR)—through the 1921 *Reforestation Act* and its Agreement Forest Program allowing local municipalities, conservation authorities, and private landowners to partner with the provincial government to restore and manage degraded, tax-delinquent lands into healthy, productive forests.

Red pine was the species-of-choice for reforestation efforts, selected to stabilize the sandy soils due to its tolerance of the harsh, sandy conditions. These plantations were planted with a 100-year lifespan in mind. Over the next century, routine selective thinning treatments would be implemented to improve the quality of these pine plantations, while simultaneously improving understory light conditions so native species could become established underneath the protective cover of the pine canopy. This strategy would help accelerate the natural succession process, which would normally take hundreds to thousands of years to complete on its own.



Historic terracing to facilitate tree planting, Ganaraska Forest. Photo credit: Ganaraska Region Conservation Authority Archival Photo.

The GRCA assumed management duties of the Ganaraska Forest in 1997, as the MNR shifted focus away from the community forests of southern Ontario. While management resources became more limited with the shift, the initial restoration goals and strategies persisted.

THE GANARASKA FOREST TODAY: FOREST AND ECOLOGICAL MANAGEMENT

While the original goal of 20,000 acres was not fully achieved, the Ganaraska Forest has grown to approximately 11,000 acres in size. This area is divided into three primary sections: the West, Central and East Forests, with the two former totalling an approximately 9,000-acre contiguous, forested core.

Habitat is diverse across the Forest. Initial plantations have matured, towering over abundant understories of oak, hickory, and pine. The hills of the moraine are dominated by swaths of red oak, while lower pockets and core parts of the Forest shift toward a more shade-tolerant sugar maple composition with scattered cathedral white pines.

The youngest sections of the Forest demonstrate the story of the land's agricultural past with pioneer species, such as poplars, aspen, white birch, and the charismatic Scots pine, hiding the odd relic foundation of an old homestead. And, as one progressively moves eastward toward the Rice Lake Plains, more hints of rare tallgrass prairie and oak savannah remnants can be found—white oak, black oak, big bluestem, New Jersey tea and more all become more prevalent. However, the greatest example of these tallgrass relics is found in the core of the Central Forest with the 25-acre Ochonski Tallgrass Restoration Site.

These habitats are all managed under the direction of a long-term forest management plan that sets out the GRCA's management priorities for the future of the Ganaraska Forest. Objectives may vary in specificity but, ultimately, contribute toward several broad forest management goals:

- Continuing the original reforestation goals by maintaining protective forest cover over the sensitive headwaters of the watershed.
- Conserving, enhancing, and restoring the health and native conditions of the Forest and the Moraine itself.
- Managing for a diverse, healthy, functional forest against the impacts of climate change.

The GRCA implements annual timber harvest operations as the primary tool to achieve many of its management goals. This strategy allows the GRCA to capture the economic value its long history of good management has built up, which also helps to support initiatives across the Forest and the Authority as a whole.

Timber operations are dominated by the management of the plantations that are now at the lifecycle stage that yields the high-quality utility poles used in electrical and telecommunications infrastructure. The wood products generated in the Ganaraska Forest support logging businesses, sawmills, and local economies across central and southern Ontario. These products also serve as a means of locking carbon otherwise emitted through natural decomposition, an important tool to help stymie the projections of climate change.

MORE THAN JUST TREES

What makes the Ganaraska Forest particularly special is its multi-use nature.

Along with recreational trail use, the GRCA offers outdoor education programs to provide younger generations with the necessary knowledge and inspiration to help protect our natural areas into the future.

With hundreds of kilometres of trails throughout, the Ganaraska Forest supports a vibrant motorized and non-motorized recreational community. Central Forest trails are reserved for non-motorized uses, including hiking, mountain biking, horseback riding, snowshoeing, and cross-country skiing, while both the West and East Forest provide opportunities for motorized users, such as dirt bikes, side-by-sides, and off-roading. This approach to multi-use ensures all users have a chance to enjoy the beauty of the Forest in their favourite ways.

Meeting the needs of many competing interests and priorities is no easy task and some challenges do arise from this multi-use nature. Ecological impacts, such as erosion and the spread of invasive species, can be exacerbated by recreation and timber harvesting. However, revenue generated from both uses greatly supports the GRCA and its capacity to manage these issues.

Both educational and recreational uses have countless social benefits. Forest trail usage can inherently come with health and safety concerns with hazard trees, such as those created by invasive emerald ash borer or beech bark disease.

The GRCA remains committed to combatting these challenges, ensuring everyone can continue to enjoy the Ganaraska Forest. Having adopted an opportunistic and collaborative mentality into the Forest's management approach has allowed significant progress toward the GRCA's forest management goals. Some ongoing and recently completed projects include:

- A Greenbelt Foundation partnership focused on re-routing and improving trails to protect species-at-risk, while improving trails for users.
- Ongoing partnership with the Invasive Species Centre to build and expand the management of invasive species, including European buckthorn, dog-strangling vine, Japanese knotweed, and so on, and restoring logging landings with native meadow species to support pollinators and habitat diversity.
- Ongoing work with Trees Canada to replant areas impacted by the 2022 derecho storm, and jump-starting the natural succession of plantations before invasive species can take hold.

Now is the time to visit the Ganaraska Forest, especially if you have never had the opportunity to explore the Forest's trails. Come say hi, enjoy the trails and take in the natural history of this living example of southern Ontario conservation.



Double Track Trail, West Forest. Photo credit: Craig Smith, Ganaraska Region Conservation Authority.



Cooper's Hawk (Astur cooperii), Ganaraska Forest. Photo credit: Craig Smith, Ganaraska Region Conservation Authority.

Previously published in The Ontario Woodlot Association's newsletter: The Ontario Woodlander, Issue 124, Fall 2026, pg. 35-36.

RECOGNIZING THE NEED FOR ECOLOGICAL CORRIDORS AND WILDLIFE HABITAT CONNECTIVITY

THE LEGACY OF ALICE THE MOOSE

John Pineau, Near North Chapter

Any encounter with a moose (*Alces alces*) is usually exciting and memorable. I consider myself very lucky that in almost 50 years of driving highways and bush roads, many in northern Ontario, I have never hit one, despite several very close calls. Although some consider them not to be the most beautiful of creatures, they are spectacular nonetheless, and uniquely handsome… to me at least.

Moose are the world's tallest, largest, and heaviest species of the deer family (*Cervidae*) and the only existing member of their genus (*Alces*). They are also the second-largest land animal in North America, with only the American bison (*Bison bison*) surpassing them in weight. Moose populate the circumpolar boreal forests and the temperate broadleaf and mixed forests of the Northern Hemisphere, inhabiting generally cooler, temperate areas as well as subarctic climates.

WHAT ABOUT ALICE?

The intriguing story of Alice the Moose dates from more than 25 years. She was a 700-pound female (cow) who journeyed 570 kilometres between 1998 and 2000 from New York State's Adirondack Park to Ontario's Algonquin Provincial Park. Alice was live-captured, radio-collared, and released back into New York State's Adirondack Park in 1998 at the Huntington Wildlife Forest. Tracked by scientists for two years, she headed north and west toward the Canadian border, crossing farm fields, major roads, and swimming across the St. Lawrence River in the spring of 2000 and then safely negotiating our country's busiest highway, our four-lane Highway 401. By the winter of 2000–2001, she had entered Algonquin Provincial Park in central Ontario, completing the journey. Wow! And I thought some of my canoe trips (portages included) were long and challenging! Alice's accomplishment is nothing short of epic!

ABOUT TELEMETRY AND WILDLIFE TRACKING

Telemetry is the broader science and method of automatically collecting and sending data from a remote source to a receiver. Radio collaring is one specific way to attach a telemetry device (a radio transmitter) to an animal. It first came to my attention during a university biology class in the early 1980s when my professor described a marine biologist who would access data through an old-style phone and phone booth to track killer whales (*Orcinus orca*) he was studying, which were tagged using radio telemetry.



Female moose.

Since the 1960s, scientists have been using radio telemetry to locate animals and track their movements. Radio telemetry uses radio signals, which are made up of invisible and silent electromagnetic waves, to determine location. The general process involves a transmitter on a remote object sending data via radio waves, and a receiver/antenna picking up those signals.

Telemetry can be used for many purposes, including space flight, weather monitoring, and medicine. In wildlife, telemetry tags can be glued to insect backs, implanted inside fish, or mounted on bird backpacks, with no collar required. Amazingly, engineers have developed a transmitter that weighs a mere 60 mg, approximately 12 percent of a monarch butterfly's (*Danaus plexippus*) weight and have used it to track monarch

migration from the northern USA to their winter forests in Mexico.

The data transmitted by radio telemetry can range from simple beeps to gauge distance to precise GPS locations or physiological data like heart rate and body temperature.

ECOLOGICAL CORRIDORS AND HABITAT CONNECTIVITY

Wildlife habitat connectivity is the degree to which a landscape allows animals and ecological processes to move freely between separated natural areas. Ecological corridors are strips of land or water that link separated natural areas, parks, and green spaces, preventing population isolation and supporting population diversity. These corridors are vitally important for a number of reasons, including daily survival; animals must travel to find food, water, and shelter.



A map of Alice's amazing 570-kilometre journey. Source: Algonquin to Adirondacks Collaborative.

Seasonal movement also often occurs for many species, as they migrate across larger ranges with changing weather. As well, safe pathways are essential so that young animals find new territory and unrelated mates, keeping populations genetically healthy. Corridors allow for gene flow between separated populations, preventing genetic isolation. This increases genetic diversity, which in turn improves population resilience, enabling a species to better adapt to environmental threats such as climate change.

Threats to habitat connectivity include fragmentation due to roads, railways, fences, and cities, breaking up larger wild and natural areas into small, trapped pockets. Traffic, noise, and artificial lights often stop animals from crossing their established trails.

LESSONS LEARNED FROM ALICE'S JOURNEY

Aside from the sheer magnitude of the feat itself, Alice the Moose's 570-kilometre journey proved that wildlife need connected regional habitats; demonstrated that animals naturally cross human borders and busy highways; and inspired the creation of the cross-border conservation group known as the *Algonquin to Adirondacks Collaborative*. Her journey underscores the importance of the ecological corridors that run through the Thousand Islands/Frontenac Arch Biosphere region and the need to understand wildlife's inherent 'right to roam'.

Alice proved that a vital and functional ecological corridor exists between the U.S. and Canada, and she highlighted how many animals must travel across vast landscapes to find food, shelter, and diverse mates. Alice also showed the major risks wildlife face when crossing international borders, farmlands, and busy roads like Highway 401. Alice inspired the Algonquin to Adirondacks (A2A) Collaborative (https://mvfn.ca/a2a-collaborative/) conservation corridor and the concept of a 400-mile cross-border hiking and wildlife preservation trail.

FOR MORE INFORMATION:

https://rewilding.org/following-alice-the-moose/

Trekking hundreds of kilometres in the footsteps of Alice the moose | CBC News

Special Note from the Author: I have canoed many miles and seen many moose in Algonquin Park over the decades… However, alas… *Alice doesn't live there anymore!* The average lifespan of a moose in the wild is about 8–12 years, though some can live up to 20 years or more under ideal conditions. As well, the average home range of a moose covers approximately 14–130 square kilometres depending on the availability of browse and the season.



sml-law.com/resources/grey-areas/

SML's Grey Areas newsletter has been in publication since July 1992 and discusses the latest developments in professional regulation. New issues are published monthly.

Recent articles:

July 2026, Issue No. 316 – Unanticipated Consequences

Technology often brings unanticipated consequences. AI is no exception. A recent article called Synthetic Grievances: AI-Generated Bar Complaints and the Chilling of Criminal Defense by American law professor Ashley Krenelka Chase illustrates the point. While the paper has a narrow focus (complaints against criminal defence lawyers), it points to a potentially much larger issue.

August 2026, Issue No. 317 – Regulators' Role in Addressing Racism

Few would dispute that a regulator should discipline registrants who engage in overtly racist behaviour. However, beyond overt acts, racism also includes unconscious bias, micro-aggressions, and disparate outcomes for patients/clients. In addition, registrants themselves experience racism from their colleagues and clients. What is the role of a professional regulator in addressing this?

September 2026, Issue No. 318 – Case Study on Intimate Partner Violence

Regulators are called upon to assist registrants to identify and intervene appropriately when they encounter intimate partner violence (IPV) in their practice. The November 2025 report of the Domestic Violence Death Review Committee (under the auspices of the Ontario Office of the Chief Coroner) made several recommendations...

Member News

New Full Member-R.P.F.:

Jeremy Calhoun
Ryan Garbutt
Matthew Guenther
Stephanie Horsfield
Gordon Kayahara (from Inactive Membership)
Cole Lavaway
Tanice Mackenzie
Alexander Martin
Mariah Nodin
Julia Reale
Melissa Schumacher
Yuki Yung

New Associate Member-Associate R.P.F.:

Haven Jerreat-Poole

Please welcome and support the following people who have been admitted into the OPFA but are not yet entitled to practice professional forestry in Ontario:

New Provisional Members (R.P.F. in Training): (may practice if under the direct supervision of a qualified member)

Yifan Cao
Tyler Dallner
Mustafa Erdurmus
Cael Ewen
Seyed Ahmad Jafari
Jephin Mathew
Brianne Mayer
Emmanuel Nkrumah
Samuel Raymond
Tristian Sault
Tori Toriseva

New Student Members:

Rachana Bhandari
Navdeep Kaur
Jordan Mcauley
Sarah Jane Poole
Shakshi Salaria
Alexander Smith

Provional Membership (Resigned):

Michael Sample

Provisional Membership (Revoked):

Karen Bayduza

Continuing Education

Webinars and Other Resources

Websites that offer free webinars to earn CEUs for your membership maintenance.

- Canadian Institute of Forestry (CIF-IFC) - Offers considerable resources and ongoing lecture series
  https://www.cif-ifc.org/e-lectures/
- Ontario Ministry of Natural Resources and Forestry. MNRF Science Insights, contact Kristy Mckay, Science Transfer Specialist at Kristy.McKay@ontario.ca
- Forestry and Natural Resources Webinars
  http://www.forestrywebinars.net/
- Conservation Webinars
  http://www.conservationwebinars.net/
- Urban Forestry Today
  http://www.urbanforestrytoday.org/
- Climate Webinars
  http://www.climatewebinars.net/
- Cornell University
  http://blogs.cornell.edu/cceforestconnect/subscribe/
- Forestry Chronicle
  http://pubs.cif-ifc.org/journal/tfc
- Canadian Journal of Forest Research
  http://www.nrcresearchpress.com/journal/cjfr
- FPInnovations
  https://web.fpinnovations.ca/blog/
  https://wildfire.fpinnovations.ca/index.aspx
- Tree Research and Education Endowment Fund (TREE Fund)
  https://treefund.org/webinars
- Eastern Ontario Model Forest LDD Moth Webinar Link to the recording on YouTube Channel: https://youtu.be/U4BZOM8GtyU
- Ontario Woodlot Association Oak Wilt Webinar Link and passcode to the recording: https://us06web.zoom.us/rec/share/1xAH8qHGgwVV9ki-78A83oQMbcIlZKbH5uHqHtP7xLfEJ8l8mNJE7U4iGx2nZuFp.3LYLtY_SIGeCzRor
  Passcode: 8Mnwb+@J
- Ontario's Centre for Research & Innovation in the Bio-economy (CRIBE) - Forest EDGE. Decision support tools, projects and case studies.
  https://www.nextfor-forestedge.ca/
- Canadian Partnership for Wildland Fire Science (Canada Wildfire).
  https://www.canadawildfire.org/
- Invasive Species Centre webinar series
  https://www.invasivespeciescentre.ca/learn/webinar-series/
- PlaniIt Geo Urban Forestry Webinars
  https://planitgeo.com/urban-forestry-webinars/

Coming Events

Why Trees and Which Trees? Perspectives from Two Tree People.

September 24, 2026, 6:30 - 8pm

University of Toronto, The Daniels Building, 1 Spadina Crescent, Main Hall DA170

https://www.daniels.utoronto.ca/events/1790289000/why-trees-and-which-trees-perspectives-two-tree-people

Ontario Forest Health Review

October 27-28, 2026

Barrie, ON

https://forestscanada.ca/en/event/ontario-forest-health-review

Forest Recovery Summit

November 25-26, 2026

Toronto, ON

https://forestscanada.ca/en/event/forest-recovery-summit

Please send any upcoming events to opfanewsletter@gmail.com