OUR FOREST



forestsontario.ca

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SPRING 2023

Field Advisors Integral to 50 Million Tree Program

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Meet Paul Roedding, Wildlife Photographer

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A Message from our CEO

Taking time to reflect on the incredible people and moments that made the past 21 years amazing



Spring is a time of renewal, growth, and excitement for things to come in nature – just as it is this year at Forests Ontario. After 21 years with the organization (which was originally known as Trees Ontario before a 2014 merger between Trees Ontario and the Ontario Forestry Association created Forests Ontario), it is time for me to step down.

In the next issue of *Our Forest* magazine, you'll get to meet new Forests Ontario CEO Jessica Kaknevicius. Rest assured, Forests Ontario is in good hands and our Board of Directors and staff have made every effort to ensure we continue to grow and flourish.

In fact, it is because of some of our recent growth and successes that I feel the time is right for me to step aside (not to mention the fact that I'm now the grandfather of two boys and am more than happy to embrace that role).

In April, we signed a five-year partnership agreement with One Tree Planted, a global restoration project developer that works directly with an extensive network of quality field planting partners, foresters and monitors to oversee the planting of tens of millions of trees around the world.

Our agreement with One Tree Planted will support the planting of 17.5 million trees across Ontario and Canada over the next five years and also comes on the heels of announcements of support by the Federal government in November as part of the 2 Billion Trees program, as well as the Ontario government in February.

In fact, Graydon Smith, Minister of Natural Resources and Forestry and MPP for Parry Sound–Muskoka, made the announcement at our 2023 Annual Conference, which was held both virtually and in-person for the first time

since the start of the pandemic. The opportunity to meet in person with our speakers, attendees, exhibitors, and sponsors was wonderful and deeply inspiring and having the support for our tree planting programs once again from the provincial government is greatly appreciated.

One thing that I found so apparent as our Annual Conference proceeded was the skill and dedication of our entire staff. We have continued to grow our programs in recent years and with that our staff and I can confidently say I am leaving Forests Ontario with the most capable staff complement we have ever had and I can't wait to see what they accomplish moving forward. I want to take this opportunity to thank our Board of Directors and our entire staff for everything they've done and continue to do to help grow healthy forests. I'd also like to pay a special thanks to our COO, Elizabeth Celanowicz. It was only with her passion, dedication, and fortitude that we weathered some very interesting times since she started with Forests Ontario only three-and-a-half years ago.

Over my more than 40 years as a practicing Forester, and certainly my 21 years with Forests Ontario, I have had the pleasure and good fortune of engaging with so many incredibly dedicated individuals. I truly believe that ours is a unique sector in which everyone is deeply caring and committed to the work we do. I have been fortunate to have had this opportunity and the success of Forests Ontario and Forest Recovery Canada would not have been possible if it weren't for all our partners across the nation.

Forests Ontario's 50 Million Tree Program was announced in August of 2007, with the first trees planted in the spring 2008. Since that time, we have planted over 41 million trees through our various programs—more than one for every person in Canada. We simply couldn't have done it without our planting partners, nurseries, seed collectors, First Nations, local community groups and municipalities, so thanks to you all — and thanks to my family for their love and support over the years.

Before I sign off, I'd just like to encourage everyone to stay positive as we tackle the problem of climate change. I understand that it can be overwhelming and feel like it is too big of an issue to face on your own, but I truly believe that every action matters and that we all have a role to play. Together, we can make a difference.

The very best to all,

Rob Keen, RPF

CEO of Forests Ontario and Forest Recovery Canada

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On the cover: Moose, Algonquin Park. Photograph by Paul Roedding. See story, page 25.

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We do more than just plant trees, we grow forests for greener and healthier communities. Follow Forests Ontario on social media for the latest news and daily updates on all our programs.







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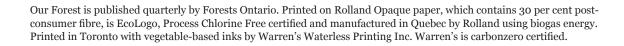
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Tree Bee Champs Take a Bow

Team of Grade 6 students wins tree identification challenge

BY ST. BRENDAN GRYPHONS

We are a group of Grade 6 students from St. Brendan Catholic Elementary School, in Stouffville, Ontario. We are very pleased to be the winners of the 2022 York Region Tree Bee competition.

The annual York Region Tree Bee allows teams to demonstrate their knowledge about our environment and forestry industry by answering questions and identifying trees based on their characteristics. The Tree Bee website is a useful tool to aid in the identification of trees by their features. The team began with the sole intent of learning about our environment and having a good time. We spent many hours in preparation, leading up to the competition. Who knew there would be so much to learn about trees!

The team gained many valuable skills and was able to collaborate while having a great time! We are glad that we participated and are very proud of everything we have been able to accomplish. We are grateful to have had this opportunity. Thank you, Forests Ontario!



Victorious St. Brendan Gryphons Tree Bee team poses with a White Spruce tree in front of the school. Photo courtesy of St. Brendan Catholic Elementary School.

Making Our Forests Greener

Ontario government invests \$2.1 million to plant trees

BY MATTHEW BROWN





At Forests Ontario's Annual Conference in Alliston, Ontario on February 17, the Honourable Graydon Smith, Minister of Natural Resources and Forestry and MPP for Parry Sound–Muskoka, announced that the Ontario government is investing \$2.1 million in tree planting through Forests Ontario.

"We are proud to support Forests Ontario's mission to make our forests greener," Minister Smith says. "With this investment, our government is taking action to ensure the long-term sustainability of Ontario's forests and forest sector businesses, while creating stability for workers, families and communities that depend on this sector."

The one-year investment will support tree planting through Forests Ontario's tree planting programs.

Pictured (left to right): Rob Keen, RPF and Forests Ontario CEO; Malcolm Cockwell, Forests Ontario President; Matt Mertins, RPF, Wood Fibre Manager, Roseburg Forest Products; Elizabeth Celanowicz, Forests Ontario COO; and the Honourable Graydon Smith, Minister of Natural Resources and Forestry and MPP for Parry Sound-Muskoka. Photo: Forests Ontario.

Nature-Based Climate Solutions

MP discussed 2 Billion Trees program at Annual Conference

BY MATTHEW BROWN

On February 16, Julie Dabrusin, MP for Toronto–Danforth and Parliamentary Secretary to Minister of Natural Resources Jonathan Wilkinson, spoke at Forests Ontario's Annual Conference about the need for a healthy future.

Dabrusin stated that nature-based climate solutions and seeing nature as an essential ally are critical to those efforts. She acknowledged that planting two billion trees through the Government of Canada's 2 Billion Trees program is an ambitious goal but said that, ultimately, the success of the program will come down to its partners — including Forests Ontario.

In November, Minister Wilkinson and Forests Ontario CEO Rob Keen announced that Forests Ontario had partnered with the Government of Canada's 2 Billion Trees program to plant 7.2 million trees over three years.

"We don't just plant trees, we grow forests, and it is exciting to be contributing to the 2 Billion Trees program as partners with the federal government. The 2 Billion Trees program will benefit communities across our country for generations to come," Keen said.



Left: Julie Dabrusin, MP for Toronto-Danforth and Parliamentary Secretary to the Minister of Natural Resources and the Minister of Environment and Climate Change. Seated: Rob Keen, CEO of Forests Ontario. Photo: Forests Ontario.

Students Get Their Hands Dirty

Ontario Envirothon returns to in-person competition

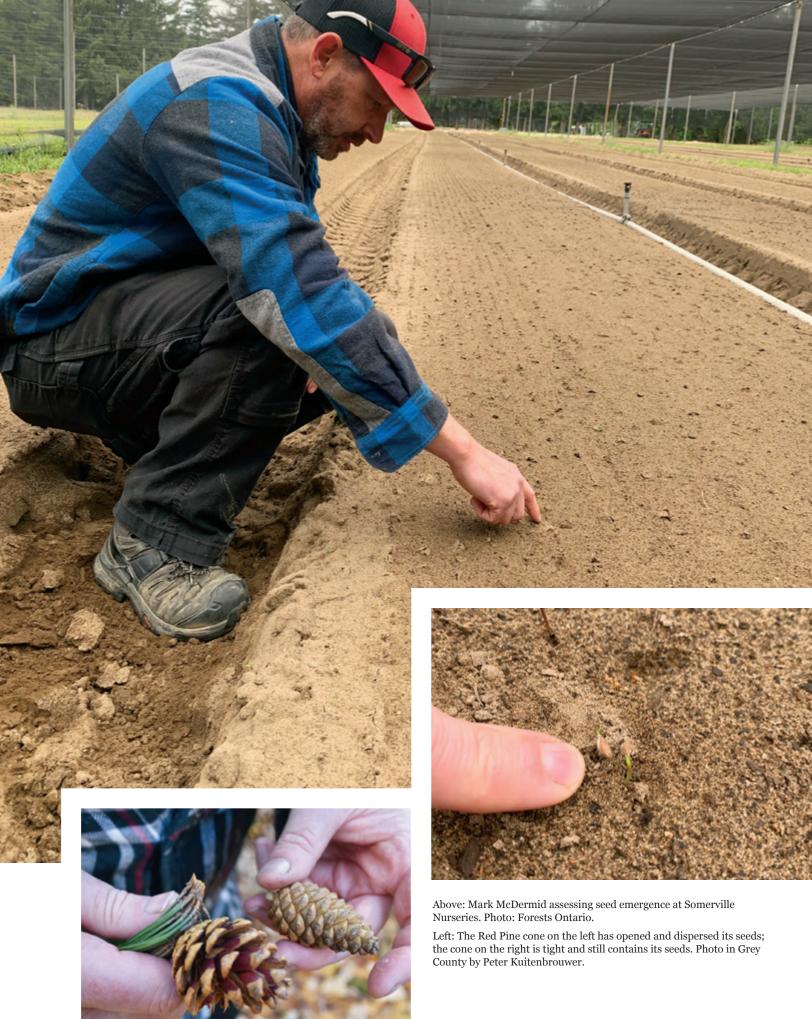
BY MADELEINE BRAY



The Ontario Envirothon has returned in a big way this year with in-person learning experiences in Algoma, Grand River, Grey/Bruce, Southwestern Ontario, Toronto, Thunder Bay and York Region, and the chance to compete for a spot at the virtual provincial competition. In this exciting return to regular programming, teams of five high school students got their hands dirty by examining the natural world, and were

tested on their knowledge of aquatics, forestry, soils, and wildlife. This year, the Ontario Envirothon program explored species at risk – how to classify them, and how to protect them.

Regional events took place throughout spring, culminating in a virtual competition at the end of May. To learn more about Ontario Envirothon, visit **forestsontario.ca**.



From Seed to Healthy Forest

Collectors, processors, nurseries, planters: a chain of custody is a guarantee of success

AN INTERVIEW BY SANDRA IACOBELLI WITH MARK MCDERMID, Seed and Stock Coordinator with Forests Ontario and Forest Recovery Canada

Tell me more about your role with Forests Ontario.

Before I came to Forests Ontario, I worked for 15 years at a large-scale bareroot tree nursery in central Ontario, specifically in seed acquisition and tree propagation. This gave me a solid foundation for when I joined the Forests Ontario team in 2014, where I have been directly involved with seed and stock related activities for the last several years.

Forests Ontario has one of the largest seed banks of native tree seed in Ontario with over 2,000 kg of seed and 205 million viable seeds - this requires significant time to manage and evaluate seed quantity and quality. A large amount of my time (June to December) is coordinating and administering new collections of seed and cones with our seed collector base and working with processing facilities to get seed extracted.

Below: Red Pine cones cut and cached by squirrels. Photo provided by Seed and Cone Collector Heather Reynolds.

Most seed collections are destined for our tree seed bank, which we use for the 50 Million Tree Program and other planting programs. But there has also been a rising interest by some municipalities to have known and appropriate source-identified seed and stock grown for their tree planting programs. Efforts to help secure and increase the availability of source-identified seed and stock have been made possible through Forests Ontario's Seed Diversity Program. This program includes the collection of a variety of native trees and shrubs that are not as common in afforestation initiatives. This program also provides Forests Ontario with the opportunity to collaborate with seed collectors, seed processing facilities and growers who specialize in collecting, handling, processing, and growing many different types of species, ensuring a quality product in which municipalities can be confident.



Since 2017, Forests Ontario and our partners have taken on a greater role in seed acquisition. One of the functions that was lacking after the closure of the Ontario Tree Seed Plant in 2018, was a system to store and manage seed related information. Forests Ontario took the lead on creating a seed database that records pertinent information related to seed acquisition and inventory management and captures the chain of custody from the initial collection right through to the tree being grown at the nursery. This information is vital for tracking seed quality and how the seed performs in the nursery and eventually on the landscape. We can evaluate the seed and determine if we want to target these collection areas in the future, or if there is a failure, look back at the records to see what may be influencing the quality. I was fortunate to have worked closely with the development and IT team at Forests Ontario to create the database. It is very rewarding to help develop something that is capturing useful information and that will benefit the tree industry right away, and over the long term. We continue to work with our partners to modify and improve our system so that it is functional, relevant, and creating usable information.

How and why is seed collecting important to Forests Ontario's many initiatives, including the 50 Million Tree Program?

It basically comes down to this... if we do not have seed; we cannot grow trees. In order for our partnering nurseries to produce 2.5 to 3 million trees annually for Forests Ontario's

various planting programs, we need to ensure there is sufficient supply of high-quality, source identified seed available to achieve these targets.

Forests Ontario's leading infrastructure ensures we have sufficient seed inventory and the right seed available to meet tree planting targets. For planning purposes, the most usable information comes from historic planting records where trees are archived by species, seed origin and where they are planted (seed zones and/or ecodistrict). Once we get a sense of what species are being grown, we can calculate how many seeds are needed to continue to attain those targets. It requires a certain number of seeds to produce a tree, and once we review this information and compare it to what seed we have in long-term storage, we can determine our sustainability status. Ideally, we would like to have a five-year seed supply of all the different species and seed zones we plant through Forests Ontario programs. The main reason for this desired surplus is that some tree species have a three-to-five-year recession between good-quality seed crops (called periodicity). This means that a certain tree species, such as White Pine for example, may only yield a productive harvest of cones every three-to-five years.

However, careful planning can all be for naught if there are no cones on the landscape to collect! There have been several years wherein select species did not produce any cones at all, even across the entire province in some instances. Timing is key in seed collection. Cone collectors often rely on red squirrels as partners. The squirrels cut the cones of most conifer species and hide the cones in caches for winter. Tree seed collectors locate the squirrels' caches



and take some of the cones, replacing them with peanuts or sunflower seeds so the squirrels have something to eat. However, if there is a sudden increase in fall temperatures, the cones may open on the trees and disperse the seeds before collectors are on-site to collect them or squirrels have an opportunity to cut the cones. An early onset of winter – with snow covering cone caches – can also make them unattainable to collectors. Seed collectors are very resilient people and travel hundreds of kilometres a year to forecast and collect cones.

Are there areas of the province where you are most active?

We collect seed based on where trees are being planted. In the past, a high percentage of afforestation tree-planting has been in southern Ontario, and it continues to be where 80 per cent of trees are being planted today. As such, this is where Forests Ontario focuses our seed collection targets and activities. However, within southern Ontario, a high percentage of collections occur in the central area of the province and span out to eastern Ontario along Lake Ontario. Urban areas and regions with highly productive agricultural land have less demand for tree planting and a lower forest cover percentage, therefore, less seed is typically available and collected in those areas.

Over the past several years, Forests Ontario's 50 Million Tree Program has expanded into northern Ontario, and we have started to network with the forestry sector in those areas to acquire processed seed, or piggy-back on some of their annual cone collections, to build our seed bank for northern partners. Forests Ontario works closely with the Forest Gene Conservation Association (FGCA), and they developed a report, titled *Creating Resilient Forests in Ontario*, to review what species are currently being planted in certain areas of the province, and how these species and seed sources will fare in the future with a changing climate.

It was very interesting, and somewhat unsettling, to see what potential impacts a changing environment has on our landscape. The severity varies across the province. This document has given Forests Ontario and our partners a tool to revisit what we collect and plant and from where. One of the approaches to adapt to these environmental changes is *seed transfer*, or moving more southern source collections north. There are models developed to forecast these movements. All being said, we are reevaluating where we collect from, our species mix, and how our current seed bank supports these changes.

What is involved in collecting and storing seeds to ensure they have the best chance to survive and thrive once seeded?

It starts with having good quality seeds/cones collected by individuals that understand best practices. We are fortunate to have a group of seed collectors that do just that. Most of our collectors have years of experience, and in some cases,

Right: Young Bur Oak seedlings at Pineneedle Farms nursery. Photo: Forests Ontario.

Opposite page: White Pine plugs at Ferguson Tree Nursery. Photo: Forests Ontario.



come from multi-generational collector families. Most of our collectors have also taken the Certified Seed Collector course offered by the FGCA, which teaches the biology of seed development, best practices, and practical collection workshops. The collectors not only know how to locate and collect cones properly, but show their due diligence by giving detailed collection site information and perform cone quality ½ cut tests (in which they bisect a cone and count the number of seeds it contains). These collectors also use proper handling and storing procedures until the cones can be transported to seed processors. Proper cone handling is paramount to ensure seeds have the best chance to retain



Forests Ontario COO Elizabeth Celanowicz inpsecting spruce seedlings at Somerville Nurseries.

vigour and health. If cones are stored improperly, or allowed to overheat in bags or piles, then all the effort of collection could be wasted.

Once processors receive the cones, they store them on perforated racks to allow for good air flow in a cool, dry location. The cones are kept there until they can be processed several weeks later. After seeds have been extracted and cleaned, they are tested for purity, seeds per weight, and moisture content. If moisture in the seed is too high, it will freeze, expand, and damage the seed itself. For example, if conifer seeds start out as good quality with high vigour, and the moisture content is brought down to the range of four to eight per cent, these seeds can last for decades and be a viable source for years! We in fact still use seeds from the 1980s that produce good quality stock annually.

What do you find most rewarding about the work you do?

When I worked as a propagation forester early in my career, the most rewarding time was seeing new trees start to germinate in the seedbeds. It takes a lot of hard work planning, collecting, processing and sowing seed, and to see millions of new germinates sprouting out of the ground gave me a real sense of accomplishment. To know that in three to four years, these newly emerging plants would be the next generation of trees planted on our landscape, is very satisfying! That's a very rewarding part of being a plant propagator. As the Seed and Stock Specialist here at Forests Ontario, I feel very privileged to be able to work with all our different partners and still play a significant role planting trees and providing numerous benefits to our community and planet.



The Outdoor Advantage

Environmental education encourages curiosity and community connection

BY MEGAN THOMSON

As a child, I became immersed in learning about and from the environment. I was fortunate to go to school near an outdoor education centre in Lion's Head, on Ontario's Bruce Peninsula, in the heart of a UNESCO World Biosphere. We played games in the woods, dissected owl pellets to determine what the owl had eaten, and made crafts using natural materials that we harvested. I still remember the chaos and fun of those games where, assigned either predator or prey animal, you searched the forest to find the resources needed to survive without being caught. This laid the foundation for my love of the environment.

"One of my favoured classrooms of my youth was a canoe."

One of my favoured classrooms of my youth was a canoe. We used canoes in high school to explore Killarney Provincial Park, and I was fortunate enough to attend two of these five-day outings. On these trips, we learned to monitor the acidity, temperature, and many other abiotic and biotic factors of three different lakes in the park, adding to a wealth of data collected by students in years prior. The skills that I learned on these trips have been an asset to me in my career, but the beauty of fall colours in Killarney were just as unforgettable. Upon our return, we learned to interpret the data, showing that lake acidity levels were decreasing as the years went on. This hands-on field work served as inspiration for my own teaching practice now. This data gathering in the park and in the forest built my confidence in my science, technology, engineering, and math (STEM) skills and taught me lessons I will not forget. Through my school, Bruce Peninsula District School, I also competed in the 2014 Ontario Envirothon, an experience which fed my interest in the environment and contributed to my decision to study geology and ecology at university.

Environmental education may seem like a task too large to incorporate into a traditional classroom. It takes planning and time to get students out of the classroom and into nature, and natural spaces may not be easily accessible to everyone. These barriers can be overcome with support from schools and communities, and with the drive of teachers and students. Environmental education is an incredible way to engage students' curiosity and creativity. Students can, for example, collaborate to solve a problem, such as trying to reduce flooding in their local park, working with municipal partners and nearby homeowners. Students can spearhead a tree-planting

initiative in a recently developed area, or work with local community groups to teach more people about the environment and sustainability.

As an educator, I strive to give my students those same types of experiences. Environmental education is not a "maybe" for me, but a "when." We will build projects together, such as environmental outreach related to recycling or a more environmentally friendly method of winter ice removal for the school. When we go to explore a natural area, we will discuss and actively incorporate traditional ecological knowledge into our work. This gives students time to connect with the land and work alongside Indigenous leaders. When students get to drive their own learning in the great outdoors, where they can explore and grow, they become empowered to do more for our environment.

Megan Thomson plans to teach high school science, focusing on the environment and geology.



Megan Thomson (seated) on a rock outcrop while out on a field course learning geological field mapping near Whitefish Falls, Ontario. Photo: Megan Thomson.

Member Spotlight

His boyhood in Thunder Bay taught Elving Josephson to love the outdoors

BY BROOKE MCCLELLAND

Elving Josephson, a Forests Ontario member for more than 15 years, has a love for the outdoors that developed when he was a young boy in Thunder Bay, Ontario.

Growing up on a farm, where more than half the land was forested, fueled Josephson's love for trees and the forest. Skiing in the open field and tobogganing down the hill on the property only enhanced his affinity for the outdoors, so it was only fitting that when his father encouraged him, in 1963, to purchase a 97-acre property just down the road from where they lived, he did so.

To this day, Josephson has planted thousands of trees on that land with the help of family and friends, and his niece now lives on the original piece of land that he grew up on, bringing it full circle. Home to family picnics, walks, hikes, breathtaking views of the Slate River Valley, and 25 years of corn roasts, his property is very much enjoyed by his family, including his wife and son. If he's not gardening, fishing, camping, or engaging in other outdoor activities, Josephson also enjoys collecting local sports memorabilia.

Being surrounded by trees for most of his life, it was an obvious fit for Josephson to become a member of Forests Ontario, and he advises others to do the same. Another perk he enjoys is Our Forest magazine. "I read it from beginning to end because it's so close to my heart. I get so excited about it," he says.

In talking to him, I can hear the passion in his voice and sense the love and pride that he has for not only his property, but for trees and our environment. "With global warming, I can't think of a better way for anyone and everyone to get involved than by planting trees," Josephson states.

When asked why taking care of our environment is important, he simply says "trees give off everything that's good in the world." To Josephson, it was a natural choice to plant trees. "I'm 80 years old, and I may not get to see them grow, but they'll be my footprint," he says.

Forests Ontario would like to thank Elving Josephson and all our members for their valued support. Your contribution continues to make our urban and rural communities healthier through the creation, preservation and maintenance of new forests and grasslands. Forests Ontario will be highlighting our members in each issue of Our Forest magazine. If you are a Forests Ontario member and would like to share your story in our magazine, please contact <code>bmcclelland@forestsontario.ca</code>.

Josephson in his forest near Thunder Bay. Photo courtesy of the Josephson Family.



The Fantastic Four

Each of Forests Ontario's Field Advisors knows what trees will thrive in their region

BY PETER KUITENBROUWER

Forests Ontario's Field Advisors are integral to the largescale effort to increase forest cover across the province with each one a regional specialist - soil, climate, native species. threats, and landowner needs vary greatly from east to west, north to south. For example, Forests Ontario, together with its partners, plants an abundance of broadleaf trees in the clay of the Carolinian zone in southwestern Ontario, whereas sandier soil in the east and north more often suits conifers.

Every application to Forests Ontario's 50 Million Tree Program (50 MTP) goes first to a Field Advisor in their region. The advisor assesses the project's eligibility and then connects the applicant to a suitable Planting Delivery Agent (PDA), to get trees in the ground.

All together, the Field Advisors represent well over a century of experience planting trees, and they have forestry in their blood – in early spring, three of them set aside time to make maple syrup just before tree planting season kicks in.

This past winter, the four gathered to speak of their passion for growing new forests, and the unique challenges of each region. "I think the motivating factor for me is the small role I can play in the natural legacy for my children's children," says Jim Hendry, the Field Advisor for eastern Ontario. "I just like to see the forests grow, the carbon being sequestered, the wildlife in there."

A Family Affair

Eleanor Reed, RPF, Norland, City of Kawartha Lakes: Field Advisor, Central Ontario

Eleanor Reed graduated in forestry from the University of Toronto in 1983, a time when few women became foresters, and recalls, "I was the only lonely woman at meetings for years." Reed persevered and built a thriving business as a forester. Reed joined the 50 Million Tree Program during its first planting season in 2008, as a Planting Delivery Agent (PDA). Her dedication to tree planting has proven infectious - all three of her children have helped her plant trees. Her husband, Paul, retired from his career as a minister, and now works part time planting trees. In 2019, the year Reed planted her millionth tree, she became a Field Advisor with Forests Ontario.

Reed fears the development plans of municipalities and the province could impact afforestation goals. "In my central Ontario region of the greater Toronto area, there's going to be a lot of pressure to build houses on vacant land rather than plant trees," Reed says. At the same time, another more recent trend has been more positive for getting trees in the ground. "There's been a large transfer of younger baby boomer folks to properties in the country. They are not interested in farming, they're concerned about the environment and the future, and want to plant trees," she adds.

Reed takes pride in her own 400-acre property, a home to her family and a small flock of turkeys and sheep. The family cuts firewood, maintains trails, including a ski trail, and makes maple syrup. And, of course, they plant trees. "We planted trees here between 1997 and 1999, and there was no funding program at the time," Reed says. "I have a one-kilometre trail through the plantation now, with 30-foot-tall White Pines. You can hear the wind in the pines. It's full of moose tracks, and natural regeneration of Sugar Maple and ash and Black Cherry. There are wildflowers and Wild Turkeys. I imagine for every landowner that they'll have a forest like that, it is so satisfying."



Top left: Eleanor Reed and another Junior Ranger at Esker Lakes Provincial Park during the summer of 1978. "That summer, I learned that steel-toed boots would prevent one from losing a toe to a Sandvik (brush axe), how much damage Black flies can do one's ears, and that DEET melted the plastic on my hard-hat," recalls Reed.

Top right: Eleanor Reed poses with her dog, Willow, while conducting a survival assessment of pine trees she planted years ago.



The Fruits of his Labour

Peter Gagnon, RPF, Sault Ste. Marie: Field Advisor, Northern Ontario.

Peter Gagnon is a child of the north. In the 1920s, Gagnon's grandfather, Rupert Napoleon Gagnon, bought a piece of forest in a rather remote spot: 250 kilometres north of Thunder Bay, near Armstrong Station. Later, Gagnon's father, Rupert Edwin, bought the land next door, a place Gagnon grew up visiting – and later inherited.

Gagnon graduated in forestry from the University of Toronto in 1974. He started his career as a unit forester for the Ontario Ministry of Natural Resources in Red Lake, about 2,000 km northwest of Toronto. He left as Forest Management Supervisor and moved to Sault Ste. Marie in 1985, where he worked in Fire Management until returning to the Forest Management branch in 1992. After early retirement in 2003, he was asked to direct an environmental research network, and spent three years teaching forestry at Sault College. In 2015, he joined Forests Ontario when the 50 Million Tree Program came to northern Ontario.

Long before, in the 1970s, Gagnon planted his first trees. "I had a fortunate trip last fall to go and work with a new tree planting partner up in Red Lake. I was able to see the place where I planted my first trees. The White Spruce, Black Spruce and Jack Pine that I planted in 1975

had been harvested in 2021 and replanted. It's kind of exciting to experience that in your career," Gagnon says. Typically, one hears that in the north a tree takes a century to mature, he notes. "We helped the Red Lake trees along and cut those numbers in half. So that was pretty exciting on my part."

Gagnon's biggest challenge is the tremendous size of his territory, which spans two time zones: from Mattawa to Kenora, and from Manitoulin Island to Red Lake. When a landowner in the north wants to plant trees, Gagnon is their first point of contact. "We can give them an idea of where the best areas would be to plant, discuss what they're proposing, have a look at the property and give them the general idea of what we could provide," Gagnon says. "Then we go over next steps and connect them to a Planting Delivery Agent."

Gagnon's love of trees extends to his personal life. A few years ago, he got his hands on 32 used poles discarded by Great Lakes Hydro. The Western Red Cedar poles were still in good shape; Gagnon had them milled into lumber (up to 32' long), which he used to build a new camp on the Armstrong Station site. "We plant trees because it's in our blood," said Gagnon.

Retirement Proved Short-Lived

John Enright, RPF, London: Field Advisor, Southwestern Ontario

John Enright worked 36 years for the Upper Thames River Conservation Authority (UTRCA), based in London, Ontario. Then last summer, he retired-- briefly. In November, Forests Ontario hired Enright as a Field Advisor. "We let him enjoy his retirement for three or four months," laughs Nick Courtney, Restoration Programs Coordinator with Forests Ontario, who has worked with Enright for several years in southwestern Ontario. "John not only knows the soil type and the tree species, but also the landowners in his region."

Tree species and sites differ in every region. Whereas Forests Ontario often plants pine or spruce in other parts of the province, broadleaf trees are often the best choice on southwestern sites. Buffers along creeks, shelterbelts and windbreaks, usually an acre or two, are the most common tree plantings.

the association, I participated in the butternut recovery program, managing the Southern Ontario Butternut Seed Orchard."

Having worked in tree planting in the London area for nearly 40 years, Enright loves to watch the growth of the forests that he helped to create. A few years ago, he got to oversee the thinning of a forest he helped to bring to life about 25 years ago. The wood went to a local mill for lumber. "That site was a 50-acre planting on Conservation Authority land, planted with Norway Spruce, which did exceptionally well," he says.

Enright notes that today, more than ever, reforestation efforts require the skills of people who can ensure the trees will thrive. "I've always been a big advocate of proper site preparation and tending, and especially when planting hardwoods it becomes that much more critical," Enright says. "Over the years, the price of stock has continually gone up, therefore, we can't afford to [plant trees] more than once. We must do it right the first time. Site prep and tending in our part of the province is so, so critical."



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Optimistic About the Future

Jim Hendry, RPF, Ingleside: Field Advisor, Eastern Ontario

A graduate in forestry from the University of New Brunswick, Jim Hendry began his career in the forest industry in that province. In 1989, Hendry moved to Ontario to work with the Ministry of Natural Resources based in Cornwall. Later, he worked for South Nation Conservation Authority and then the Eastern Ontario Model Forest. He became a field advisor with Forests Ontario in 2018.

Hendry has noticed that landowners in eastern Ontario have planted fewer trees in recent years compared to 30 years ago, and he is helping to reverse this trend with Forests Ontario's 50 Million Tree Program. "When I started, the five eastern counties were planting two million trees a year. Now, it's down to maybe 200,000," Hendry says. "It relates to a few factors such as smaller planting sites, agricultural commodity prices and land prices."

As a participant in the 50 Million Tree Program himself, Hendry planted 10,000 trees on the family property in Perth in 2021. "It's just a wonderful Canadian Shield area. It's got a creek at the back, wetland, sugarbush and open fields. There is also an apple orchard. It's a lovely property and we are planting it up with pine and spruce and of course maple and oak."

Each spring, the Hendry family makes maple syrup for family and friends. As for landowners' interest in tree planting, Hendry is optimistic about the future. "In the last year, I certainly have seen the demand increase," he says. "It may partly be fueled by the overall concern around our climate and wildlife habitat."



about 10 years ago on the family farm in Perth.



From left to right: Elizabeth Celanowicz, COO, Forests Ontario, speaks while Collin Phillips, Judi Tetro, Kerry McLaven and Eric Boysen look on.

2 Billion Trees

Quality seed, lots of land and "industrial athletes" needed to hit targets

BY PETER KUITENBROUWER

The federal government's pledge to plant two billion trees across Canada in a decade appears quite ambitious, reforestation experts told a panel in February at Forests Ontario's 9th Annual Conference. The speakers agreed the commitment will require a collaborative effort to find the right seeds and cones, plenty of tree planters, and lots of land to meet this important step forward in tackling the impacts of climate change and biodiversity loss in our communities across the country.

The Friday afternoon panel, Working Together to Support the 2 Billion Trees Program and Climate Action, on February 17 capped the two-day conference at the Nottawasaga Inn in Alliston. "You need to start with the land, and Southern Ontario is largely owned by private landowners," said Eric Boysen, formerly with the Ontario Ministry of Natural Resources and Forestry and now a consultant with Newleaf Forest Services.

Ontario's previous successful tree planting efforts relied on seed collectors, seed orchards and a provincially-owned tree seed plant to process and store seeds, Kerry McLaven, Chief Executive Officer of the Forest Gene Conservation Association, reminded those in attendance. "Seed is the foundation of a successful planting program," McLaven said, "extra value has to be placed on the seed itself. We should consider investing in the infrastructure of tree seed collectors."

Key to any tree planting efforts is an army of tough young people who are ready to go on an adventure, Judi Tetro of Brinkman Reforestation Ltd. told the conference. Having planted trees herself as a youth, Tetro can attest "It's really hard work. You need to be an industrial athlete. There is no way I could do a day of tree planting anymore."

Tetro estimated that, to reach the two-billion-tree target, Canada will have to double the number of seasonal tree planters hired each year. "We are facing a decrease in the number of people that can do the kind of work that we need them to do," Tetro said. Even so, she remains optimistic about Ottawa's tree planting target. "This is inspirational," Tetro said. "We can get creative with 2 Billion Trees and get more things like this happening."

Anne-Hélène Mathey, Executive Director of Natural Climate Solutions at the Canadian Forest Service, part of Natural Resources Canada, spoke to the conference remotely from her office in Ottawa. She says Ottawa's goal is to create healthy forests and seeks to sign a series of multi-year agreements to get the trees in the ground through Indigenous and urban tree planting projects as well as plantings on private land. "This requires cost-sharing," Mathey said. "We need to take a long view so people can plan. We have consulted with people to unlock some of the bottlenecks in the supply chain."

Collin Phillips, Chief Commercial Officer at PRT Growing Services, the B.C.-based company that is North America's largest producer of container-grown seeds, told those assembled that with proper planning, he believes Ottawa can meet the tree planting target.

Elizabeth Celanowicz, Chief Operating Officer at Forests Ontario, reminded the panel of the ultimate goal of creating diverse, resilient, healthy forests across Canada, and the importance of collaborating with seed collectors, nurseries, planting partners, and property owners to ensure healthy forests and healthy communities for our future.

Annual Conference Awards Ceremony

Forests Ontario congratulates all its 2023 winners

BY MATTHEW BROWN

To inspire collective action to grow a healthy tomorrow, Forests Ontario held its 9th Annual Conference on February 16 and 17 both virtually and in person in Alliston, Ontario. The annual event is the largest forestry conference of its kind in the province and featured 37 forest sector leaders, government officials, and more than 750 registrants, speakers, moderators, sponsors, and exhibitors, all coming together to ensure a greener and healthier future.

The conference also included an Awards Ceremony which recognized important contributors to forestry and the environment. Forests Ontario would like to thank everyone who attended and congratulate all our award recipients.





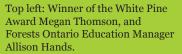


Above: Forests Ontario Field Advisor Eleanor Reed (second from left), with Most Valuable Planter Award winners Art Marvin, Bill Newell, and Glenn McLeod (award recipient not pictured: Laird Nelson).

Left: Winners of the Forest Stewardship Award Dr. Isobel Ralston and Dr. Jan Oudenes of MapleCross with Forests Ontario's Kim Sellers.

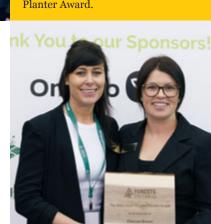
Below: Forests Ontario COO Elizabeth Celanowicz with Cheyene Brunet, winner of the Most Valuable Planter Award.





Above Right: Green Legacy Award winner Bass Pro Shops and Cabela's represented by Bass Pro Shops General Manager Rick Hunter, and Forests Ontario Director of Business Development Kim Sellers.









Above: Forest Gene Conservation Association CEO Kerry McLaven, and Forests Ontario Award winner Brian Swaile.

Left: Maple Leaves Forever's Ken Jewett, winner of the Susan Wiecek Forestry Education Award, with Forests Ontario CEO Rob Keen.





Forest Health Showcase 2023

Westwind Forest Stewardship Inc. innovates in effort to manage Beech Bark Disease

BY TERI HOANG



Left: Using a trimmer to tend a beech forest on private land in the Muskoka River watershed. Above: Javier Cappella of Westwind

In February, Forests Ontario, Natural Resources Canada, and the Ministry of Natural Resources and Forestry co-hosted the virtual Forest Health Showcase, attended by over 150 people. Speakers included experts from the Ministry of Natural Resources and Forestry's Provincial Forest Health Monitoring Program, NewLeaf Forest Services, and the Canadian Food Inspection Agency's Plant Health Science Services Division. Rounding out the session, Javier Cappella, Registered Professional Forester with Westwind Forest Stewardship Inc., addressed the challenge of Beech Bark Disease (BBD).

BBD is caused by a combination of an insect and a fungus. Beech scale insects infest Beech trees and make them more vulnerable to the *Neonectria faginata* fungus. This fungus invades the stem of Beech trees through feeding holes made by Beech scale insects, killing the surrounding tissue, leading to eventual tree death. The disease leads to high levels of Beech tree mortality and a decline in Beech populations. BBD does not just kill mature Beech trees. After a mature Beech tree dies, young trees sprout from the roots and germinate from seed - this growth can create Beech thickets. Unfortunately, these young trees may never reach maturity due to the disease. In addition, as Beech is a shade-tolerant tree species, thickets that develop outcompete other species, impeding growth of Sugar Maple, Yellow Birch and other trees.

In an effort to ensure regeneration of desired tree species in hardwood forests affected by BBD, Westwind Forest Stewardship Inc., (Westwind) has been undertaking a Beech regeneration management project over the past five years in the French-Severn Forest. This project has seen the treatment of 1,400 hectares of tolerant hardwood forest. Site selection focused on areas with BBD, and where advanced regeneration of desirable trees, such as Sugar Maple, Yellow Birch and other hardwood trees, was occurring. Ninety-five per cent of the treatment was basal

bark herbicide application, while five per cent was hack and squirt herbicide application. All treatments were completed post timber harvest. These treatments give a leg up to species that are already established, helping to retain the ecosystem function, services, and biodiversity of a hardwood forest.

Forest Stewardship.

In some cases, new regeneration needs to be established. To explore this, Westwind is undertaking a pilot project on 75 hectares of private land to manage Beech dominated tolerant hardwood forests in high-value areas within the Muskoka River watershed. On these sites, forest managers used brush saws to reduce Beech thickets growing in openings of forested areas created by dead and dying mature Beech. This spring, 33,000 tree seedlings will be planted in these openings across all private land sites to promote a future forest condition that is biodiverse and will continue the same ecosystem functions and services of a hardwood forest but with a reduced Beech population.

Foresters at Westwind anticipate some challenges with this pilot project, which include vigorous stump sprouting, root sprouting, lack of sufficient planting micro sites (no scarification), established regeneration competition with seedlings, and partial shade growing conditions for the new seedlings.

Future Beech regeneration management considerations also include brush saw tending around seedlings and using basal bark herbicide application to reduce competition and promote seedling growth.

Westwind Forest Stewardship Inc. has been practicing sustainable forest management in the French-Severn Forest since 1998, and its important work and research on Beech Bark Disease continues. For more information about Westwind Forest Services visit **westwindforest.ca**.

To view the recorded Forest Health Showcase session, please visit the Events page of Forests Ontario's website at **forestsontario.ca**.





Cultivating a Forest Career

Student-Employer Engagement Day returns for fifth year

BY ALLISON HANDS

Forest Ontario's Student-Employer Engagement Day, also known as SEED, returned on February 16 with more than 125 youth, educators, and future forest sector workers logging in virtually. SEED is a growing event, hosted in conjunction with Forests Ontario's Annual Conference, which explores pathways, in-demand skills, and employment trends in the forest sector. At the same time, this initiative provides insight to employers to help them better understand the issues and values which are most important to the emerging workforce.

Since SEED's launch, we have worked with our partners to reach more than 400 students and graduates, making a meaningful contribution to a healthy forest workforce and future. SEED directly supports the Ontario Forest Sector Strategy and is one of the many ways Forests Ontario is working to address ongoing and significant workforce shortages within the sector.

SEED speakers took the opportunity to share with participants their forest sector experiences and insights, highlighting some of the many paths which can lead to a rewarding forest sector career. Speakers encouraged participants to grow their experiences, take on new challenges and learn what they like, and don't like, in a career.

While transitioning from a post-secondary environment to the workforce can be a challenge, the future of forestry is bright, with this year's cohort of SEED participants demonstrating great potential and drive.

Forests Ontario would like to thank our generous SEED sponsors whose support helps to make this event possible: Government of Ontario, Project Learning Tree Canada and Weyerhaeuser. We also wish to acknowledge speakers from The City of Timiskaming Shores, First Resource Management Group and Domtar, who graciously donated their time and expertise.

"SEED offered a wonderful space for employers and prospective employees alike to engage and share information.

As a (somewhat) recent graduate myself, I thoroughly enjoyed the opportunity to share what I have learned so far in my journey. I was very pleased by the follow-up conversations and feel confident that measures like SEED will continue to move us in the right direction."



- Natalie Heyblom, SEED Speaker, RPF



"There are so many different pathways within forestry, and because it is such a diverse, field it can be difficult to figure out your place in it. SEED is an amazing resource for new talent entering the workforce and industry leaders alike to put the right people in the right roles for a more vibrant industry."

- Maddie Kennedy, SEED Speaker, Operations Forester, Weverhaeuser



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Dog-Strangling Vine May Be Creeping Into Your Woodlot

How can you prevent the spread of this aggressive invader?

BY MADISON STURBA, INVASIVE SPECIES CENTRE

Dog-strangling vine (DSV) is an invasive perennial plant found throughout most parts of Ontario. Brought to Canada from Europe in the late 1800s as an ornamental, the plant has spread rapidly. Despite its name, the vine does not pose any real threat to dogs. It "strangles" neighbouring vegetation and outcompetes native trees, shrubs, and seedlings for access to resources, which threatens forest communities and ecosystems.

How can landowners prepare for the battle against DSV? Proper identification of the invader is a great place to start. While DSV prefers to grow in openly sunny areas (e.g., roadsides, ditches, and hillsides), it can also creep along the forest floor and quickly dominate understories. Its woody rootstalk can reach up to two metres high, with hairy stems that twine around trees (and themselves) as they climb. DSV has opposite leaves that are oval with a pointed tip and wavy margins. The leaves are often mistaken for milkweed, particularly by reproductive monarch butterflies trying to lay eggs.

DSV's pinkish-purple flowers bloom in clusters from May through July. Yellow-green seed pods develop in pairs at leaf axils around the same time, typically appearing as early as June. These long, slender seed pods split open by late summer to release white feathery seeds, light enough to be spread by the wind. Don't be deceived by this beautiful climber. DSV can cause a lot of harm if left unattended. Early detection and rapid response are two key practices that limit DSV's spread and reduce its impacts on the local environment, economy, and society. Eradicate small populations manually by simply digging to remove newly established plants and their roots. Prioritizing isolated first year plants with weaker roots can limit resprouting and prevent additional spread. Place uprooted plants in a sealed construction grade garbage bag and leave them to 'cook' in direct sunlight for one to three weeks, which prevents the accidental release of seeds. While composting may seem like a great eco-friendly option, it can actually encourage the growth and spread of DSV. Instead, burn the sunned plants or throw them in the garbage.

Mowing, clipping, tarping, and seed pod removal can all be effective control measures to reduce seed production for DSV. Though these methods will not eradicate infestations, they can successfully limit the growth of new plants year-to-year when repeated. Consistency and teamwork are key in reducing the impacts of DSV vine in your woodlot. For more information, please visit **invasivespeciescentre.ca**.

Madison Sturba is a Program Development Coordinator at the Invasive Species Centre where she focuses on training and outreach, particularly on forest and agricultural invasives.

Left: Dog-strangling vine has oblong leaves and long slender seed pods. Two seed pods can be found at each leaf axil. Photo: Greg Bales.

Bottom Left: The flowers of Dog-strangling vine emerge in clusters of five-20, each with five purple petals. Photo: Regina Varrin.

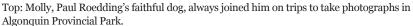
Bottom Right: Dog-strangling vine dominating the forest floor. Photo: David Nisbet.











At right: Molly in the bow of Roedding's canoe. All photos courtesy Paul Roedding.



Inspiration Comes in Many Forms (even Four-Legged Ones)

How bird feeders, father-son trips, and a nature-loving dog inspired photographer Paul Roedding

BY MATTHEW BROWN

For London, Ontario's Paul Roedding, a love of nature was sparked early on in life thanks to backyard bird feeders, fishing lessons, and early mornings spent with his father at local Environmentally Significant Areas (ESA).

"I have loved the outdoors for as long as I can remember. My dad introduced me when I was only a few years old. Dad would take me for hikes or bike rides at the local ESA early on Sunday mornings where we would enjoy nature while my mom and sisters were still sleeping," Roedding says.

As Roedding grew up, he continued to be drawn outdoors into the fresh air and felt that going for a hike or a paddle in nature was a great way to relieve stress and stay active. He could feel the physical and mental benefits of spending time outdoors – which also led to him wanting to be able to capture those moments through photography.

"It's one thing to have a memory in my head, but being able to look at photos I've captured helps me remember the moment even more or refreshes a memory I may have forgotten," Roedding says. Roedding's photographs have been featured in National Geographic's Daily Dozen, and in a variety of books, magazines and field guides designed to help with the identification of native species – and it all started online.

"I am self-taught through watching hours and hours of YouTube videos," Roedding says. "My style of shooting where I am always on the move differs greatly from other nature photographers who often sit in one spot, so I had to piece it all together to come up with something that worked for me. After years of trial and error, I've learned what camera settings work best and how to adjust quickly to best suit my style."

Roedding advises budding photographers not to get too caught up in gear. He understands the temptation to dream of more expensive cameras or lenses but feels that taking the time to learn how to use the equipment you currently own is the best way to improve your photography. Simple adjustments to your camera settings will improve images more than a shopping spree, he says.



Roedding's career as a medical transcriptionist means that he can make his own schedule and often works late at night or early mornings so that he can spend more time in nature during daylight hours. That freedom has also allowed him to spend a lot of time exploring the majesty and beauty of Ontario's Algonquin Park.

"When I'm in Algonquin Park, I feel calm, completely relaxed, happy, and free. There's no better feeling in my opinion than being surrounded by trees and water with no human-made structures around," Roedding says.

From mid-May to mid-October, Roedding stays 15 minutes outside of Algonquin Park in a small travel trailer, so that as soon as he finishes work, he can make his way into the park for a hike or a paddle, with camera in hand. For years, Roedding was joined by his faithful dog Molly, who not only helped him learn to love nature even more but also to become an even more dedicated photographer.

"I know every dog owner says their dog is the best, but Molly truly was. She was my motivation for getting out with my camera so much. Even on days when I didn't feel like going, I couldn't say no to her eyes. She picked me up when I was down and made every day better with her unconditional love and constant tail wagging," Roedding remembers. "Before Molly, I was never a fan of winter, but her love of the snow got me to embrace this season. She taught me how much fun winter can be."

Heartbreakingly, Molly passed away in April 2022 after a diagnosis of osteosarcoma. In time, Roedding's grief has slowly started to turn to incredible memories of Molly and the adventures that they shared.

"She absolutely loved being outside as much as I do and it made it special to see her so happy," Roedding says. "Listening to her tail bang on the side of my canoe as she wagged while I paddled always put a smile on my face."





You can see Paul Roedding's work at www.facebook.com/
PaulRoeddingPhotography
and get tips on birding and
nature photography at www.
paulroeddingphotography.com.



Birds and Trees Q&A with Paul Roedding

Q: What is your favourite bird?

A: I love all woodpeckers but the Redbellied Woodpecker is my favourite as it is easy to find. They make their presence known with a loud call, which I love. Also, being a big hockey fan, their black, white, and red plumage is the same as Team Canada colours.

Q: What is your favourite tree?

A: My favourite tree is the White Birch because the white, paper-like bark is so unique. In fall, when all other trees have lost their leaves, the birch leaves change to a beautiful yellow and when you combine that with the white bark, it really adds beauty to the landscape. Birch seeds found in the tree's catkins provide food to many birds and birches are also a great place to find many of the beautiful finches that only frequent our area during the winter months.



When you support our tree planting, grassland restoration, education, and awareness initiatives, you make a vital contribution to growing a greener, healthier future.

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