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The OPFA at 60: Foresters in Changing Climates

Conference Recap

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60th OPFA Conference and AGM May 15-18, 2017

Terry Schwan, R.P.F.
Conference Co-Chair

uthor's note: This article is highly biased with unabashed cheerleading.

A very successful OPFA annual meeting and conference wrapped up in Guelph May 18 with barely a hitch. The theme this year was *The OPFA at 60: Foresters in Changing Climates*. To celebrate this 60 year anniversary, a special logo was designed and used throughout the conference and on the personal bag supplied to all full registrants. Caroline Mach, R.P.F. and Kerry McLaven, Provisional Member, developed a historical display of facts and photos and a forestry timeline. As well, Ken Armson, R.P.F. (Retired) and John Cary, R.P.F. (Retired) provided a ride through OPFA history at a special session during the banquet on Wednesday night. The conference was held at the Delta Inn in Guelph and members were pleased with the freshness of the facility, the staff and the food. The banquet and award presentations run by Greg Pawson, R.P.F. and Sarah Bros, R.P.F. were superb.

On the topic of Foresters in Changing Climates we presented a program on three different themes: Foresters and the Changing Biophysical Environment, Foresters and the Changing Socioeconomic Environment and Foresters and the Changing Human Security Environment. The kickoff Plenary Session featured Steve Newmaster from the Biodiversity Institute of Ontario talking about the Barcode of Life and Paul General from Six Nations of the Grand discussing some Indigenous issues in southern Ontario. There was also a session on the Integration of the *Endangered Species Act* and the *Crown Forest Sustainability Act*.

Based on our themes we looked for presenters who we knew had good information and/or research results to convey. There was a wide variety of presentations, including some speakers you would not normally hear from at an OPFA meeting, and some research you might not have had the time to keep up on. Many of the presentations were about how we can mitigate and adapt to physical climate change. Others described changes in forest policy, and yet others, the science behind this policy. Presentations ranged from urban forests to the boreal forest and from the genome and DNA to Pope Francis. Members appreciated the variety and choice of speakers and topics. (Andy Gordon, R.P.F. and I looked after program details.) Caroline Mach, R.P.F., using her 'Professional Forester newsletter' skills put together the fantastic collectable souvenir program. Most presentations are available on the OPFA website.

Three field tour were offered: one to the Halton/Milton area, one to Waterloo/St. Jacobs area and a third in and around Guelph. Just over 70 people took part. The tours were ably coordinated by Perter Williams, R.P.F. with leadership from Bill Gaines, Associate Member, Timea Filer, Provisional Member, Albert Hovingh, R.P.F., Nathan Munn, R.P.F., Kevin Pangborn, R.P.F., Ron Reinholt, R.P.F., and Ron Wu-Winter, R.P.F. Timing was perfect such that each tour finished with ample time to taste the flavours of three local breweries.

The registration table was run by Martin Litchfield, R.P.F. (Retired) with help from Beth Litchfield, Ken Van Every, R.P.F. and other committee members. Martin also provided sage advice when needed. Waseem Ashiq, Provisional Member, coordinated volunteers on the floor and ensured that all presentations were loaded and working. Not a hitch there. Albert Hovingh, R.P.F. made sure that the sound system was working, and he and Caroline put together the speaker gifts. Kerry was liaison with Forests Ontario to get the on-line registration running. Timea Filer, Provisional Member, looked after getting sponsorship money and Don Willis, R.P.F., looked after exhibitors (for the second year in a row). He coordinated the Passport Program where many more prizes were provided by exhibitors. Ron Wu-Winter, R.P.F., set up the 'Down-South' Dendro challenge which stumped a few northern foresters. Great prizes were awarded - beer.

Our OPFA liaison, Fred Pinto, R.P.F., looked after hotel arrangements, guest bags, and finances and Priscilla Doyle worked with Forests Ontario on registration, worked at the registration desk and was all around helpful!

There was a post-conference workshop coordinated by Peter Williams, R.P.F. Alan Siewert and Stephanie Miller from the Ohio Department of Natural Resources presented their work on the Urban Site Index. It was filled to capacity with 40 participants.

Overall, the Organizing Committee worked very well together and did a great job in bringing the first ever annual meeting of the OPFA to Guelph. We thank all who attended, because it was really you that made the 60th AGM the success it was.

Editor's Note: There will more material from the 60th Annual Meeting and Conference appearing in upcoming issues of *The Professional Forester*.

Cover Photos: Denis Gagnon, R.P.F. and Mike Clarke, R.P.F.

60s and On - A Brief History of the OPFA

Ken Armson O.C., R.P.F. (Retired) and John Cary, R.P.F. (Retired)

Based on a conversational presentation at the Annual Meeting, Guelph, May 17, 2017.
Sources: OPFA office files; Mack Williams, R.P.F., "CIF Role in Founding of OPFA", Professional Forester, March, 2007.

The origins of the OPFA go back to the Canadian Society of Forest Engineers (CSFE), founded in 1908. In 1941 a group of foresters from the CSFE's Ontario sections met in North Bay to form an Ontario Society of Forest Engineers (OSFE). Their purpose was to draft a Bill for the government to introduce licensing of the practice of forestry in Ontario. At that time the majority of foresters were employed either by the Ontario Department of Lands & Forests or the pulp and paper companies in the province. The Bill (#34) received second reading in the Legislature in 1944 but was withdrawn because of objections to it by a small number of foresters and coincidentally a dissolution of the legislative session. In 1949 the subject was reopened and at the annual meeting in 1950 of the newly formed Canadian Institute of Forestry (CIF), successor to the CSFE, Dean J.W.B. Sisam, representing the southern Ontario section of the CIF, gained support from the national body to proceed towards a new Bill. As a first step, a ballot was sent out to the known foresters in the province (544) asking for their support, 383 responded positively, with only two negatives. The intent was to have a government Bill and in 1953 a draft was circulated to all Ontario foresters but the government proved reluctant, based on the 1944 experience, as a result legislation for the registration of foresters, not licensing, came into being as a private member's (Mr. Wardrope MPP) Bill (#10) in April, 1957.

There have been 41 Presidents to the present, the majority serving for two terms with the exception of Art Herridge (1963-65, 1966-67) and Carl Corbett (2008-2011). Initially, staff consisted of Secretary-Treasurers (two) then an Executive Secretary followed by five Executive Directors, currently Fred Pinto R.P.F. In the 1960s the anti-logging groups focused on the Department of Lands and Forests zoning proposal for Algonquin Park. In 1968, when a Toronto newspaper asked what the OPFA's policy on the proposed zoning was, the directors at the annual meeting in Toronto produced a policy response within hours, noting that the stated no cutting reservation around all shorelines of 500 yards was unrealistic and should be 500 feet. Another issue in the same period was when the Association struck a committee at the request of Dean Sisam to garner support from the Province for the faculty at Toronto. The Minister of Education was Bill Davis at the time. The committee, chaired by Art Herridge, made two recommendations: first, that the undergraduate program in forestry should be generalist and second that the faculty should be moved from Toronto with suggested locations in preferential order of Laurentian, Guelph, Trent and Waterloo Universities. At this time (1969) Lakehead University was already providing the first two years of forestry and there was pressure to expand it to a four year program. The result – Ken Hearnden, R.P.F., who was the OPFA's President in 1969, left to head up the new program at Lakehead.

The importance of continuing education was recognized early by the OPFA and in the late 1960s and early 1970s a series of one week courses were provided for members on topics such as herbicide use, computers and scenic silviculture. Later, in the early 1990s, a major program with support from the Ministry of Natural Resources and the CIF was provided at Lakehead University under the direction of Laird van Damme, R.P.F.

One of the most important events in the OPFA's history was the drafting, introduction, passage and royal assent of the licensing Bill (#110) in 2000. It originated as a private member's bill sponsored by Ted Chudleigh MPP. Licensing also resulted in a legal action by the OPFA against a non-member for practicing forestry which was both unsuccessful and costly. The Association also had an office embezzlement affair from which it emerged relatively unscathed but learned to have better control over finances.

The greatest change in membership has been the shift from foresters being predominantly employed by either the Ministry or large forest companies to the present when there are a large number of consulting and urban foresters. For the future, we see the rising number of regional and community forests and their management as important and innovative opportunities for the profession as well as the large number of privately owned woodlands in southern Ontario. Public education about forest management and career guidance have been, and will continue to be, important venues for members' activity. The Association and its members have contributed to society in many ways and we're sure it will continue to do so for the next 60 years.

Re-Thinking Riparian Forest Buffer Configurations for Sustaining River Ecosystems

David Kreutzweiser, Ph.D.
Scientist Emeritus
Natural Resources Canada, Canadian Forest Service

Much of the last few years of my career in the Canadian Forest Service has been focused on optimizing riparian forest buffer configurations to make them more ecologically-relevant and potentially more effective for conserving riparian forest habitats and their adjacent water bodies. An immediate question that comes to mind is, "why care about riparian forests?". There are several reasons, but a primary one is the recognition that among the environmental sustainability criteria that the forest sector is increasingly called upon to achieve and demonstrate is the conservation of water resources and biodiversity. And it turns out that riparian forests disproportionately influence both of those. These are critical ecotones, transitional ecosystems, that mediate a host of land/water linkages such as nutrient cycling, water regulation and energy subsidies. They provide critical habitats and movement corridors for an array of plant and animal species.

In recognition of the importance of these riparian ecosystems and their influences on receiving waters, all jurisdictions provide some degree of protection for riparian areas in forest management regulations and practices. Those regulations vary across Canada, but they generally default to fixed-width, no-harvest buffers around lakes, ponds, and mapped streams. Studies have shown these to be pretty effective at preventing or minimizing change in adjacent water bodies. But some recent discussion forums and research have suggested that these fixed-width protection buffers may not be the best configuration for sustaining long-term ecological integrity in riparian areas or their adjacent aquatic systems.

The emulation of natural disturbance (END) paradigm for forest management is increasingly being applied across North America. Under this paradigm, fixed-width no-harvest buffers may actually conflict with the targets of an END approach. That's because fixed-width buffers applied on managed forest landscapes result in rings around lakes and ribbons along streams of mature forest that do not in any way resemble natural residual forest patterns on landscapes after natural disturbances. Natural residual forest patterns, such as those arising from fire, are much more patchy along shorelines, with some riparian areas having only scattered residual forest and others having significant patches of residual forest that extend well beyond a conventional buffer width. Therefore, using forest harvesting to emulate natural riparian forest patterns would include intentional harvest closer to water in some areas than previously considered appropriate, as a means of promoting shoreline vegetation succession. Our studies have shown that fire-influenced shoreline forests have early successional forest conditions that increase riparian habitat complexity, promote plant biodiversity, and provide important renewal processes through increased energy fluxes to streams. These have been linked to enhanced stream habitat conditions, increased aquatic invertebrate richness, and are probably essential for long-term ecological integrity. We also found that these effects were suppressed by no-harvest buffers in harvested watersheds.

This idea of using forest harvesting near water to emulate natural riparian forest patterns seems best suited to disturbance-prone landscapes, such as the eastern Canadian boreal, where natural disturbance return intervals are more or less comparable to harvest rotation lengths. So our studies into the effectiveness and feasibility of applying END to riparian forests have focused on boreal mixedwood forests of northern Ontario. Much has been learned (and published, see below), but many questions and issues persist, some of which our group continues to explore and some of which have yet to be addressed.

And now at the end of my career, I have begun to shift positions on many of these issues. For example, I spent most of my career doing "forestry impact studies" in which we compared harvested watersheds to nearby pristine watersheds with no recent disturbances, and when differences were detected, they were construed as undesired forestry impacts. I now recognize that it is unreasonable, even undesirable, to expect a managed watershed to look and behave like a protected or pristine watershed. In fact, aquatic ecosystems across any given forest landscape will occur in varying stages of ecological condition as they respond to their last natural disturbance. I have learned that many of our response measurements that we previously would have considered as impacts in harvested watersheds and streams are simply indicators of change analogous to those in naturally disturbed watersheds. I suggest that under the END paradigm, harvest-induced changes to riparian forests and adjacent aquatic systems that were previously considered harmful alterations may now be expected and acceptable. Many of these changes reflect important renewal processes in riparian forests and water bodies that lead to long-term ecological sustainability.

The trick is to determine when a change becomes an impact, an undesirable outcome. I suggest that an expectation of no change in streams after harvest is not a relevant management target, but rather the management objective should be to keep changes in stream hydrology, water quality and biological communities within a reasonable range of natural variability. Management objectives to achieve forest conditions within a natural range of variation is widely accepted among forest ecologists and managers, but a similar objective for the

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conservation of water resources is still (based on my observations and discussions) highly resisted among aquatic ecologists and regulators.

This is not to suggest that there is no need for riparian buffers in forest operations. Intentional shoreline harvesting should not be conducted everywhere. There will always be constraints by the protection of other values (e.g., critical riparian species habitats), by operational conditions and feasibility, and especially by natural disturbance patterns and frequency in a given landscape. But I do believe it is time that riparian buffer configurations (i.e., their placement and widths) should be more strategic. They should be placed on the landscape in accordance with natural patterns and with their degree of hydrological connection in mind (hydrologically-adjusted buffers is another current research topic among our group and others). In many cases this will mean narrower buffers (essentially to water's edge) where riparian areas are dry and wider buffers where stream sides have wetter soils. Recent advances in wet soil prediction and mapping tools and in GPS-guided operational equipment will facilitate this optimization of buffer configurations.

Acknowledgements: The evolution of my thinking on riparian buffers benefitted greatly from discussions among colleagues (although they may not all agree!), especially those of Paul Sibley, Brian Naylor, Rob Mackereth, John Richardson, Andy Gordon, R.P.F., and Lenka Kuglerova. Research studies underpinning many of these ideas were supported by the Forest Futures Trust, the Forest Ecosystem Cooperative, and the NSERC Canadian Network for Aquatic Ecosystem Services.

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results of a number of studies, increased mercury mobilization appears to be more likely in harvested areas with high levels of soil disturbance, either from machine traffic or activities such as stump removal, mounding or scarification. In response, the Swedish government has introduced a number of forest management guidelines to reduce disturbance to soil and wetland areas in order to both reduce the risk of mobilizing mercury and creating areas where methylation may occur.

In Ontario, the *Forest Management Guide for Conserving Biodiversity at the Stand and Site Scales* (the *Stand and Site Guide*) provides guidance to minimize soil disturbance and prohibits activities that impede, accelerate, or divert movement of water along drainage paths or in wetland areas. These measures, although not specifically designed to mitigate mercury mobilization, are reasonable steps to minimize the risk of exacerbating mercury problems. Current research is also working to improve the ability to predict water movement patterns on the landscape and develop operational guidance to reduce disturbance to these areas (Figure 1). Incorporating new knowledge and technology into forest operations will further reduce the risk of increased mercury movement and is part of responsible and sustainable forest management in Ontario.

Mercury in Ontario's Boreal Forest: Implications for Forest Management

Rob Mackereth, Centre for Northern Forest Ecosystem Research, MNRF

Since 1956 when the devastating health effects of mercury contamination were first documented in Minamata Japan, mercury pollution has been a significant concern. Humans are exposed to mercury primarily through the consumption of fish and seafood. High levels of ingested mercury may impact human health, adversely affecting neurological, cardiovascular, reproductive, and immune systems. Many jurisdictions have recommendations and guidelines to limit the sale and consumption of fish based on mercury levels. The *Guide to Eating Ontario Fish*, produced by the Ministry of Environment and Climate Change, provides fish consumption advisories due to contamination and more than 85% of advisories on inland lakes are due to mercury contamination.

Mercury is a naturally occurring element that is released by volcanic activity and can circulate in the atmosphere and be deposited globally. Since the late 1800s industrial activity, mainly coal burning, has increased the amount of mercury being released, circulated and deposited. Although mercury emissions by many developed countries have been reduced over the last 30 years, coal burning in Asia and artisanal gold processing in a number of developing countries continue to release mercury. Past and ongoing emissions have resulted in mercury levels in the environment that are more than double background levels, although mercury contamination levels are highly variable around the world.

Mercury deposited from the atmosphere mainly binds with organic material in the upper layer of soils. Soil-bound mercury represents the largest pool in the global cycle of mercury and it may remain in place, be re-emitted to the atmosphere or be mobilized by surface or subsurface water movement. Any land use activity that disturbs the soil layer has the potential to increase mercury mobilization. Soil bound mercury is in an inorganic form and when it is mobilized it can move to areas where it may be converted to methylmercury, a much more toxic form. Methylmercury is the organic form of mercury and is mainly produced through bacterial processes. Methylation occurs in wet areas with high amounts of organic material and low oxygen such as wetlands or lake sediments. Unlike inorganic mercury, methylmercury is biologically active; it binds with proteins and fats in plants and animals at a greater rate than it is eliminated so concentrations can increase over time (bioaccumulation). In addition, mercury levels increase at each step in the food chain so top predator fish such as walleye may have methylmercury concentrations hundreds or thousands of times higher than that of algae or plankton at the base of the food chain (biomagnification).

It is well understood that forest management activities can disturb soils and alter the amount and pattern of runoff within watersheds and operational guidelines have been developed to help mitigate these changes. However, the linkage between forest management activities and mercury mobilization has only recently been investigated. The first documented studies done in Finland and Sweden beginning in 1990, showed an increase in the concentrations of both inorganic and organic mercury in surface and subsurface runoff water following harvest. Research in Quebec observed higher methylmercury levels in zooplankton in lakes with partially clear-cut compared to lakes with burned or undisturbed watersheds. A related study found that the average mercury level in northern pike was higher in lakes with logged catchments than in lakes with forested catchments, while mercury levels in pike from lakes with burned catchments spanned the range of observed values.

Results from these early studies raised concerns for resource managers and the public about fish mercury levels in forest management areas. However, subsequent research has shown that the relationship between forest harvesting and mercury mobilization is not predictable and is extremely complex and influenced by many environmental factors. A number of studies in Sweden and Finland have shown that in some cases mercury concentration in runoff increases while in other studies no change is measured. Similarly, research in Ontario did not measure a consistent increase in mercury in surface or subsurface runoff following forest harvest. Analyses of province wide fisheries monitoring data in Ontario and Quebec also found no relationship between recent forest harvesting in a lake's watershed and the mercury levels of common sport fish in the lake. In general these studies suggest that there is a relatively low risk of forest management resulting in significant increases in fish mercury under most circumstances.

The high degree of variability in mercury levels and mercury response to forest management activities is in part related to differences in contamination levels, aquatic community structure, soil and vegetation type and likely many other factors. Researchers in Sweden have suggested that, based on the

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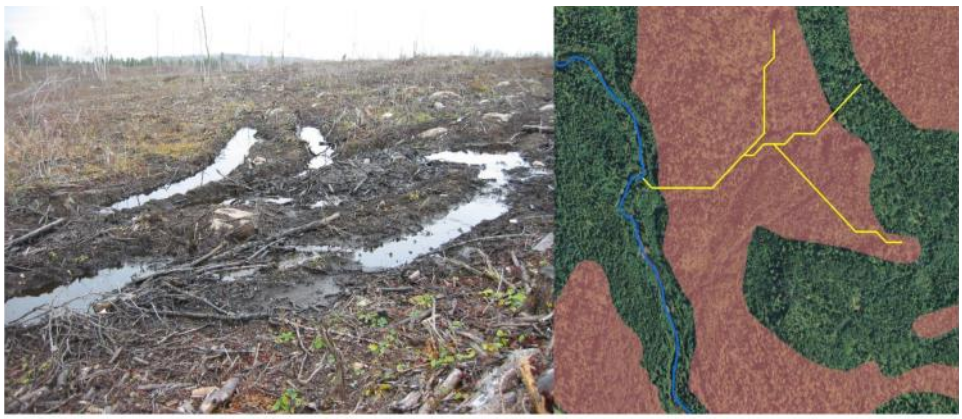

Figure 1: Areas of soil disturbance (photo left) may increase mobilization and methylation of mercury in forests. Flow path models (yellow line in right panel) may help predict areas where risk of soil and hydrologic disturbance is high and guide planning and operations to minimize impacts.

The Forester's Role in Natural Heritage Protection

Bill Crins, Ph.D.

Natural heritage protection involves the preservation and/or conservation of natural features and the processes that sustain them, at multiple scales. In some landscapes, such as those of central and northern Ontario, where forests and wetlands still predominate, natural heritage protection simply involves ensuring that the ecosystems are managed properly, to maintain the natural diversity that exists there, and to ensure that natural processes such as hydrological flows, nutrient cycling, succession, movements of species, and predator-prey dynamics can continue within the bounds of natural variation. In such environments, the roles of foresters are still relatively traditional, involving good forest management planning, employing appropriate silviculture, ensuring that damage is minimized, and maintaining healthy and diverse forest ecosystems.

However, in southern Ontario, where substantial losses in the extent and quality of natural heritage have occurred across the landscape, natural heritage protection takes on a different dimension. Here, protection of what is left and enhancement of degraded ecosystems (i.e., ecological restoration) are required. The idea of maintaining core natural areas, and re-building ecologically functional connections between them, is central to natural heritage protection. This idea even extends to protected areas such as provincial parks, in which degraded ecosystems also occur.

Protected areas take on many forms in southern Ontario, including conservation areas, private reserves owned by land trusts and other conservation groups, conservation easements on private lands, and broader designations such as Biosphere Reserves and Important Bird Areas that provide partial levels of protection. Ontario's Planning Act and its policies (e.g., the Provincial Policy Statement) enable municipalities to provide some level of protection to significant wetlands, areas of natural and scientific interest, species at risk habitat, woodlands, etc. In its most recent version, the Provincial Policy Statement also mandates the development of Natural Heritage Systems in all municipalities, thus providing an avenue for the protection of core areas and the building of connections between them.

I believe that foresters in southern Ontario can play significant roles in re-building and restoring the landscape, within the context of the Provincial Policy Statement and its direction on Natural Heritage Systems. This may require non-traditional partnerships and business relationships, but there is a niche here for the knowledge of forest ecosystems and associated concepts relating to forest health, effective regeneration, silviculture, stand improvement, tree marking, and plantation management and conversion, that foresters can bring to the table when natural heritage systems are being designed and implemented. The re-building of forests appropriate to site conditions and capable of supporting populations of native species will be critical, particularly with regard to building connections between remaining core natural areas. These connections eventually will facilitate the movement of native species across the landscape while also providing habitat in their own right. Foresters can work with municipal planners, protected area owners, and other restoration experts to share their knowledge and expertise.

Many of the principles, practices, and tools used by foresters in their more traditional activities will also be relevant to ecological restoration activities in the south. Resources such as the tree-marking guide, silvics guides, etc. will be helpful. Fire management guidance will be extremely useful in some areas (many potential partners are using fire to manage their properties to regenerate oak savannahs, for example). The knowledge already gained in some parts of the south with regard to conversion of conifer plantations to hardwoods and/or mixedwoods will be very useful in many areas, as well. The expertise of foresters will also continue to be required as additional landowners enrol in the Managed Forest Tax Incentive Program and as they renew their existing agreements and have their plans reviewed.

Although there is a great need to re-establish functional connections on the landscape, and much of this will occur on private land, there will also be a need to conduct ecological restoration activities within protected areas, including within some provincial parks. There are parks in southern Ontario that contain old fields (some even contain agricultural fields that have only recently been retired from production), plantations, and other non-natural habitats that require conversion to more natural ecosystems. Although this may not seem to be an obvious link to the forestry profession, foresters can contribute to the effective restoration of such areas within parks through the provision of their expertise, as noted above. This is an opportunity that both protected area and forestry professionals should take advantage of.

Richard Raper, R.P.F., planting trees in Sandbanks Provincial Park.

In conclusion, foresters have a significant role to play in the development of natural heritage systems and the re-building of the landscape. It may take some creative partnership building, but the forestry profession has significant knowledge and on-the-ground expertise to contribute, and working with other restoration professionals should enhance the results of natural heritage system design and implementation projects throughout southern Ontario.

A Forest Industry Perspective on Harmonization and Other Options to Consider

Matt Mertins, R.P.F.
General Manager,
Mazinaw-Lanark Forest Inc.

The forest industry has been operating under an exemption to the *Endangered Species Act* (ESA) which has allowed the industry to continue using the Forest Management Planning (FMP) process to manage for species at risk (SAR). Areas of concern prescriptions for each species at risk are approved through the forest management planning process and give us the direction for mitigating the negative impacts from forestry operations. The exemption that has allowed for the industry to use this approval process to protect species at risk ends in 2018. The Ministry of Natural Resource and Forestry (MNRF) is tasked with the challenge of developing viable alternatives for implementing the *Endangered Species Act* in Crown land forestry.

The industry, justifiably so, is concerned about how they will be expected to demonstrate protection of species at risk in the future and the administrative process and operational impacts that will result from this.

With regards to the integration exercise that the MNRF is currently working on, it is important to understand the main thrust of the two acts that are to be integrated. The two acts have fundamentally different mandates for protecting species and their habitats. The *Crown Forest Sustainability Act* (CFSA) is an inclusive act that was set up to minimize negative impacts on plant life, animal life, water, soil, air and social and economic values including recreational values and heritage values. A forest management plan is written for each forest management unit to balance multiple objectives all at the same time. A Registered Professional Forester must be the plan author of the Forest Management Plan.

The main thrust of the *Endangered Species Act* is to protect all species that are at risk and their habitat, and to promote the recovery of species that are at risk. This means that each member of each species at risk and their habitat is protected. This is implemented through a variety of different permits under the act.

When it comes to integrating the two acts, something has to give. One act is about balancing multiple objectives and providing for long-term forest health. The other act is designed to provide full protection for each member of each species and their habitat no matter what.

The MNRF has also stated some objectives for the integration process but it is unclear how this process will achieve many of the stated objectives at this point. As professional foresters I think we need to be concerned as integration of the ESA with the CFSA stands to erode our ability to manage the forest and unlike the CFSA, the ESA will put many other things at risk without the right balance. In some cases, even species at risk will be disadvantaged by the lack of balance.

The three main concerns that the industry has with the integration process are:
1. The permitting process and what kind of added risk this puts on the industry regarding obtaining yet another permit from the MNRF.
2. The extra administrative burden and costs with obtaining permits. The industry already engages in a three year planning process to get operations approved in a forest management plan.
3. The suite of species at risk prescriptions that will be imposed on the planning process and the implementation issues that will continue if reasonable and workable prescriptions are not developed.

The industry is frustrated with the integration exercise as it stands to make things more complicated and restrictive for the industry. This will result in added administrative burden and costs for the industry.

A lot of uncertainty around how each prescription will translate to operations on the ground still exists. For example, a very restrictive prescription applied in only a few areas across the management unit is generally not an issue for the industry. However, restrictive prescriptions, such as for blandings turtle, which is found across a large landbase, have a massive impact on the industry by essentially constraining harvest to a small part of the year.

We have also seen first hand the difficulties in making changes to policy documents such as the Stand & Site Guide. So making sure that we get these prescriptions right the first time needs to be a priority. We also need nimbler mechanisms to allow for changes to prescriptions through time as we gain experience in applying them. We also need to be able to apply new science as it comes out. Currently, forest management guides such as the Stand & Site Guide are reviewed every five years. How often will prescriptions developed in this process be reviewed? Overall Benefit permits are proposed to be obtained through the Forest Management Planning process. These permits can be contested by the public – how will this impact the FMP process which already has ample opportunity for issues to be brought forward by the public through the Issue Resolution Process.

The ministry, and especially the industry, have learned a lot through the application of areas of concern for species at risk. The value in the sharing of information about the impacts that the prescriptions have on industry and what really matters to species conservation in the end has been invaluable. Constructive conversations around protections for species that we have learned about are resulting in better protection for these species and flexibility for the industry to continue operating. The industry is hopeful that these conversations will continue as we feel progress is being made.

Foresters are the only licensed natural resource professionals in Ontario. Their ability to make the right decision on the ground when encountered is being compromised by the rigid prescriptions being put in place in the name of species at risk prescriptions. These prescriptions aren't always based on a whole lot of hard science and rely on a lot of expert opinion. These experts are accountable to their employer first not the

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sustainability of the forest. Professional foresters exist to protect the public interest and possess a unique set of competencies that allows them to assess the right path forward given the conditions encountered on the ground. With existing legislation already in place to govern these professionals, wouldn't we want to put their unique experience and professionalism to work?

There should be more consideration given to additional flexibility in the FMP planning process for locally-developed prescriptions under existing CFSA processes and exceptions monitoring. This approach would encourage innovation and learning by assessing alternative approaches under appropriate professional and government oversight.

Consider changes to the portion of the ESA that allows for research permits – currently you cannot get a research permit for instances where you stand to benefit economically from carrying out an activity that impacts a SAR. This puts major barriers around MNRFs (and society's) ability to learn from what we do. Gaining new knowledge from performing activities near a SAR can help to inform future ESA permits and forestry prescription development.
Industry understands that some adjustments to operations are necessary for species at risk. The industry has been supportive of adjustments to their operations in sensitive areas (such as for water, bird nests and human social values) before.

Conservative approaches to prescriptions for some species at risk could do more harm than good. We need better science to ensure that we aren't just avoiding the issue but are allowing ourselves the opportunity to find the answers.

Knowing the challenges in trying to bring these two acts together, we need to put in place the process that will ensure the best bet when it comes to protecting species and allowing the industry to continue operating so that society can continue to benefit from Ontario's most sustainable industry. The *Crown Forest Sustainability Act* is our best bet to make sure this happens.

Down South Dendro

Ron Wu-Winter, R.P.F.

At this year's OPFA Conference approximately 60 brave OPFA members took the 'Down South Dendro – Forester Challenge.' From a list of 20 species, participants tried to identify 14 unique Carolinian Canada tree and shrub species (Decidious Forest Region 7e). Given that many of the foresters in attendance would not have worked with or even ever seen many of these species, prizes were awarded through a random draw. The three lucky prize winners were Nick Moss–Gillespie, R.P.F., Aaron Palmer, R.P.F., and Joshua Breau, R.P.F.

Fourteen participants were able to identify all of the species accurately and were awarded absolutely nothing, other than bragging rights and the honour of being listed here:
Meghan Clay
Donald Craig, R.P.F.
Ken Elliot, R.P.F.
Helen Hermansen, R.P.F. (Retired)
Nancy Houle, R.P.F.
Steph Miller
Kevin Pangborn, R.P.F.
Tim Payne, Associate Member
Jennifer Roberts
Alan Siewert
Terry Schwan, R.P.F.
Ken VanEvery, R.P.F.
Carol Walker, R.P.F.
Dan Westerhof

Our Common Future (Revisited)

Dr. Anne Bell
Director of Conservation and Education
Ontario Nature

Thirty years ago the World Commission on Environment and Development published *Our Common Future* and championed the concept of sustainable development. The book made the case that "development cannot subsist upon a deteriorating environmental resource base," a perfect premise for the integration of Ontario's *Endangered Species Act*, 2007 (ESA) and *Crown Forest Sustainability Act* (CFSA). Recovering species at risk is an essential ingredient of truly sustainable development.

We only have one Earth, and our responsibility is to learn how to live sustainably and equitably in ways that allow all life on the planet to flourish. Yet, as a society, our consumption of resources is anything but sustainable and equitable. If everyone consumed at the rate that we do in Ontario it would take 3.7 planet Earths to support humanity.

One of the clearest symptoms of our unsustainable patterns of consumption is the decline of biodiversity worldwide. We are in the throes of a mass extinction the like of which has not been seen since the extinction of the dinosaurs 65 million years ago. We are losing species at 10 to 100 times the normal rate, and human activity is the primary cause.

Since 1976, when scientists first started assessing the status of species in Canada, well over 700 have been listed as at risk. During that time, only 20 have recovered sufficiently to be removed from the list.

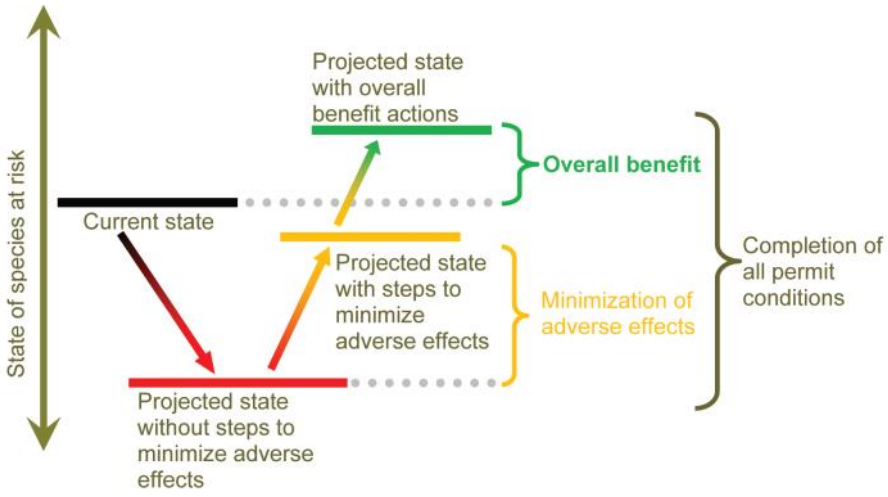
The passing of the ESA ten years ago, with all party support in the Legislative Assembly of Ontario, was intended to respond directly to our shared responsibility to prevent species loss. In light of that commitment, what does the integration of the CFSA and the ESA need to accomplish?

When integrating these two laws, I believe we need to prioritize the recovery of species at risk. For these species, we are past the point of balance. Many species' populations continue to decline, despite management efforts, and some are now facing extirpation.

I have many concerns with the Ontario government's proposed approach to integrating the ESA and the CFSA. First, the draft prescriptions are riddled with loopholes and exceptions to the protections that the ESA is supposed to offer to species at risk and their habitats. Second, mitigation of harm often trumps avoidance of harm – even though the ESA is based on avoiding harm to species and their habitats. Third, the protection of habitat is inadequate and focuses on Areas of Concern rather than on the areas species depend on to carry out their life processes. Finally, the ESA requirement to provide an overall benefit to a species in situations where harm occurs is not consistently upheld.

Overall benefit is a basic premise of the ESA. In a nutshell, harm to a member of a threatened or endangered species or its habitat is allowed to occur *only if* actions are undertaken to compensate for the harm and provide an overall benefit to the species. Achieving an overall benefit is different from minimizing harm, which simply entrenches decline. Overall benefit is about getting a species on the path to recovery, as the MNRF graphic below illustrates (from *Endangered Species Act Submission Standards for Activity Review and 17(2) c Overall Benefit Permits*, February, 2012, p. 3).

I recognize that the forestry industry and forestry-dependent communities face many urgent challenges. Together, Ontarians need to find solutions to these challenges. But the solutions need to be sustainable. Watering down the ESA does not fit the bill if we are genuinely committed to species recovery.



Our collective challenge is to bring forward real solutions that serve the long-term interests of communities and the natural world, of which we are a part. The Forest Stewardship Council (FSC) voluntary certification system is one such solution. It brings Indigenous peoples and stakeholders to the table to ensure that certified forests are managed according to strict social and environmental standards. Protecting species at risk is built right into the requirements.

We need more than this, of course. The big question is whether the will exists to develop sustainable solutions for communities that will also serve to protect and recover species at risk.

The Forest Genome Explained

Dr. Amanda Roe, Ph.D.
Research Scientist, Canadian Forest Service,
Natural Resources Canada

Genomics is everywhere these days. New genomic advancements are being announced every time you turn on the television or open a newspaper. Genomics can give us access to a wealth of knowledge, but the public must understand what genomics is and what it can do for it to reach its full potential.

So, what is a genome? A genome is an instruction manual for building an organism. These instructions are encoded on a special molecule called DNA (a.k.a. deoxyribonucleic acid). DNA is made up of strings of letters called nucleotides or 'base pairs', written as -A, -G, -C, and -T for short. These strings of letters are wound up into increasingly denser packages all contained within the nucleus of a cell. Reading the whole genome is like reading a book from cover to cover. This book can vary in length depending on the organism, and is determined by the total number of DNA base pairs it contains. Counting the number of DNA bases is like counting the number of letters in a book. *War and Peace*, for example, contains approximately 2.9 million letters. Just like books, genomes also vary in length (Fig. 1). The smallest known genome is from a bacterial symbiont in aphids (160 000 base pairs) and the largest known genome is a rare Japanese flower (150 billion base pairs). Trees tend to have large genomes. White spruce has a genome that is 20.8 billion base pairs, one of the largest known genomes.

How does genomics differ from genetics? Often these terms are used interchangeably, despite having distinct meanings. As described above, genomics deals with the entirety of an organism's DNA, genes, gene interactions, and organization – it is the whole book. Genetics, on the other hand is focused on understanding how a limited set of traits is passed along from one generation to the next. Usually it examines only a single gene, or a limited number of genes. It would be like reading a single sentence or paragraph, rather than the entire book. Many techniques fall on a continuum that exists between these two extremes, from single gene to whole genome. For example, next generation sequencing (NGS) is a snap shot of random pieces of the genome - a CliffsNotes® version of the whole book. NGS can give you genome-level detail on an organism, without the need to sequence the whole shebang. There is a wide array of genomic approaches, each tailored to different questions, organisms, and fields. Selecting the appropriate option is not straightforward and requires careful consideration of the question you are asking.

So what can you do with all this information? Genomics is a portal into a world of data. Working with genomic data means working with large amounts of information. This can be daunting. It requires extensive computational infrastructure and bioinformatics experience to handle these data. While it is getting easier and easier to produce large amounts of genomic data, the computational hurdles keep growing. Therefore, it is imperative to ask whether you really need all that data in the first place. Not all questions require a genomic approach. For example, simple diagnostics can be easily achieved with single genetic markers (Broders & Boland 2010), or through field identification by a well-trained forester. What genomics can do is help document diversity within the forest, whether it is identifying exotic genes (Roe et al. 2014), tracking the spread of invasive species (Wu et al. 2015), or delimiting seed transfer zones (Hamilton et al. 2013). A genomic approach is certainly needed if you are trying to identify adaptive traits that may help breed trees with disease resistance (Merkle et al. 2007) or resiliency to environmental stress (Holliday et al. 2017).

Genomics has the power to unlock hidden knowledge within our forests. This knowledge reduces the uncertainty around management decisions and can help us grow forests capable of surviving future environmental change. Genomics is not a magic bullet, but thoughtful application of genomic techniques will open a hidden world of forest diversity and unlock the full potential of the forest genome.

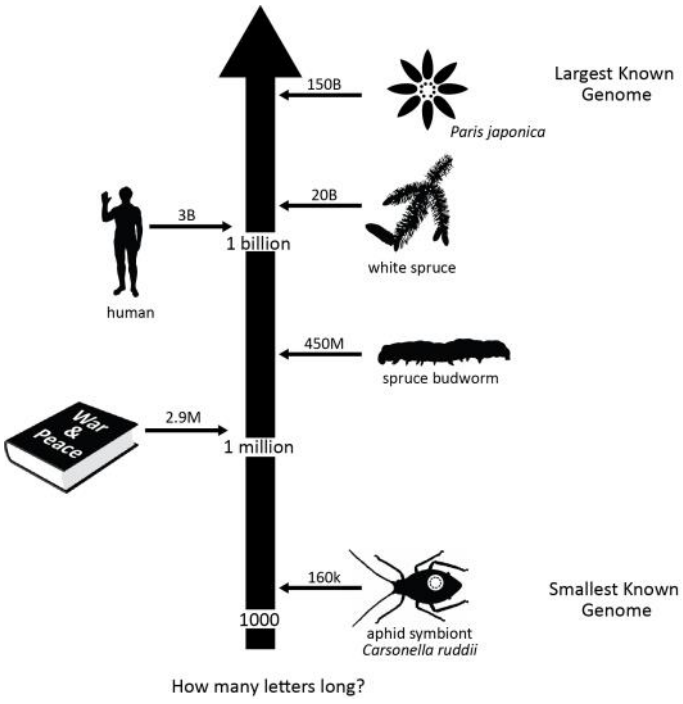


Figure 1: Genome size is described as the total number of nucleotide base pairs that comprise the genome, comparable to the number of letters in a book. Genome size can range from 160 000 letters long (Carsonella ruddii) to 150 billion in the largest known genome (Paris japonica).

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OPFA AGM - Guelph Field Trip

John Harvey, R.P.F.

he Guelph trip was a very busy and interesting day and focused on a variety of different topics including: bioenergy, agroforestry, short rotation woody crops, and genetic approaches to tree conservation in Southern Ontario.

The first stop on the tour was the well-known University of Guelph (U of G) Arboretum. At the Arboretum we visited the American Elm Recovery Project, which is determining whether disease-tolerant traits exist in elms that have withstood decades of Dutch Elm Disease exposure; the Rare Woody Plants of Ontario Gene Bank, which was one of the first botanical gardens to establish living gene banks and presently has over 20 species of rare woody plants archived; the World Trees Collection, a comprehensive collection of woody plants from around the world; and the E.J. Zavitz Historical Nursery, a white pine and Norway spruce plantation from 1907.

Following the Arboretum visit, the tour continued at the U of G Agroforestry Research site. For those unfamiliar with agroforestry, it can be simplified as "the incorporation of trees into farming systems", or more simply "farming with trees". Examples of farming with trees include Christmas trees, beside woodlands and intercropping (trees and crops). At the Agroforestry Research site, we discussed intercropping systems; this is when, between rows of agriculture crops, trees are planted so that the farmer can derive another form of revenue (e.g., maple syrup, nuts, or Christmas trees).

Another interesting stop at the Agroforestry Research site was the short rotation wood crops demonstration site. Here, shrub willow stems were planted with the intent of this crop having very short rotation ages (short when compared to a typical forestry rotation cycle) of three years. At three years the shrub willow is harvested with a baler, its end product being a pellet which can be used for energy.

Later in the day, the group stopped at Riverside Park and received a demonstration of an ash tree being treated with TreeAzin systemic insecticide. Like many of Ontario's cities with ash populations, Guelph's approximately 10,000 city-owned street and park trees are at risk due to emerald ash borer (EAB).The excitement didn't stop at Riverside Park – following the demonstration treatment of TreeAzin, the group took a ride on the famous Riverside Park carousel! After the carousel ride, we headed to the Arkell Springs Forest Stewardship Project, a 900 acre forestland, which is the home to six wells plus a shallow glen collector system that supplies 60 percent of Guelph's water.

Water management and conservation is not the sole purpose of the Arkell property; the group also observed a recent red pine plantation thinning/strip cut.

The last forestry-related stop on the tour was Preservation Park where the group saw how EAB was being managed once the ash trees have shown symptoms. The big challenge here is safely removing infected trees in a place that has a very high volume of users. As the dead ash trees are being removed, new trees are planted in their place.

Preservation Park is also home to many of Guelph's 103 permanent sample pots (PSPs). The intent of these plots is to monitor how ash tree loss impacts forest composition and structure over time. Guelph is one of the first municipalities in southern Ontario to establish PSPs. Findings from PSP measurements and subsequent re-measurements are also used by Guelph to adaptively manage its forests – both urban and rural.

The last stop on the tour was the Wellington Brewery, Guelph's oldest microbrewery. A great way for foresters to have a drink and process all of the fascinating information they learned during the day!

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OPFA AGM - Halton Tour Highlights

Bill Gaines, Associate Member and Ron Reinholt, R.P.F.

The Halton Tour "OPFA at 60", was hosted by the Region of Halton, Dufferin Aggregates/ CRH Canada Group, Conservation Halton, and the City of Guelph. The tour delegates travelled from Guelph, through the Guelph drumlin field physiographic region, and nearing the outskirts of Milton, caught sight of the Niagara Escarpment, a World Biosphere reserve designated by the United Nations, which recognizes the significant natural features of an area and range of human uses such as aggregate extraction, agriculture and forest management.

STOP 1.
Dufferin Quarry. Upon arriving at Dufferin Quarry, owned by the CRH Canada Group, quarry staff provided an overview of the site history, operations and rehabilitation projects. The quarry began operation in 1962, on the 770 ha site, and today processes on average of 3-5 million tonnes annually. The quarry south section has the largest man made reservoir in the GTA, spanning some 70 ha. Rehabilitation began in the early 1990s, now with 120 ha completed, consisting of a variety of diversified ecosystems including wetlands, lakes, islands, vegetated slopes, shallow shorelines, wading areas, submerged marshes and rock piles. More than 125,000 native trees and shrubs have been planted in the last 20 years. After travelling across the expansive quarry floor, the tour arrived at the Cox Tract regional forest, owned by the Region of Halton. In order for the quarry to access its licensed extraction area to the north of the Cox Tract, Dufferin and the Region of Halton agreed on the creation of a haul road through the regional forest property, virtually separating it in two. Dufferin Aggregates pays the Region of Halton an annual fee for use of the haul road. Upon extraction completion in this section of the quarry, the haul road will be rehabilitated. The Cox Tract is a second growth upland mixed forest of 40 ha, acquired by the Region of Halton in 1939. It was previously managed by the MNRF Cambridge District as an Agreement Forest. Harvesting history includes an MNRF 1980 selection/row thinning of softwood; 12 ha of selection/row thinning of softwood in 2009 and a 2011 21 ha hardwood selection harvest.

Dufferin/CRH Canada Group, in its opening of the North Quarry, (the Cox Tract area), had to remove several butternut. Realizing the significance of the species, Dufferin was proactive in this matter, approached MNRF, and entered into a butternut replacement program. This was prior to the 2007 *Endangered Species Act*.

STOP 2 and 3. Kelso Conservation Area, Rattlesnake Point Conservation Area.

Stop 2 was at the Kelso Conservation Area group campground. The site is in a floodplain of the Sixteen Mile Creek and borders a steep glacial spillway side slope. The side slope was formerly cleared for agriculture, abandoned and succeeded to an ash dominant canopy, with an invasive species understory. This scenario is not uncommon in Southern Ontario fragmented woodlands. Discussion at this tour stop involved management options, given the heavy recreational use of the area, salvage of timber, risk aversion and public safety, invasive species control, restoration options and processes. Harvesting, under the Good Forestry Practices permit issued by the Region of Halton is scheduled for late fall-early winter of 2017. Restoration efforts will take place in the spring of 2018, using SZ 34 appropriate native plant materials.

Stop 3 was at the Rattlesnake Point Conservation Area. This conservation area is one of the most visited in Southern Ontario because of its natural cliff features, scenic trails, spectacular vista points, camping and rock climbing. Rattlesnake Point also features sections of the Ancient Cedar Forest Ecosystem where white cedars of 600 years + grow from the scarp face. Amid these recreational endeavours and pressures, Conservation Halton continues to carry on forest management activities. The stop centred around a red oak/sugar maple dominated hardwood stand. The stand was recommended for thinning in 2004, and a stand improvement harvest was prescribed, targeting poor quality stems exhibiting major defects. Given the significance and sensitive nature of the site, a conservative tree marking approach was undertaken. The thinning provided crown openings for increased regeneration and established a healthier, more vigorous and diverse understory, with improved stand structure.

Most recently, Conservation Halton staff have carried out hazard tree removals along trails and EAB infected ash tree removals near park infrastructure assets such as trail heads, campsites, pavilions, and parking lots. TreeAzin injections for the control of EAB have been completed since 2014 on selected amenity and woodland ash trees. Ice storm damage cleanup from 2013 is still ongoing along the greater trail system.

STOP 3 was also our lunch break. We would like to extend our thanks and appreciation to Dufferin Aggregates/CRH Canada for sponsoring the lunch for this tour.

STOP 4.
Stop 4 on the Halton tour was back in the Guelph area, located at Arkell Springs, where the Arkell Springs Forest Stewardship project was discussed. This project has its beginnings in the previous century, with Edmund Zavitz pioneering afforestation projects to increase forest cover on the Arkell Springs grounds. MNRF and the Grand River Conservation Authority have continued to afforest this area over the years. These projects serve to achieve the common goal of protecting and recharging underground aquifers and preventing undesirable surface water runoff flowing into local waterways. The water collection system of six wells supplies 60% of Guelph's water. After looking at plantation management, thinning harvest, understory planting and invasive species control, all part of the ongoing stewardship initiatives of the City of Guelph and Bartram Woodlands, the tour ended with a social gathering.

OPFA AGM - Urban Site Index Workshop

Timea Filer, Provisional Member

In a time when increasing tree canopy cover is a priority objective for many communities, the need for simple, efficient and inexpensive tools and methods for establishing trees in sites best suited for their optimum growth can be the key to success.

The urban environment can be one of the most restrictive factors in the successful establishment and growth of healthy trees. This is particularly true in areas with increased pressure from urbanization as a result of development and construction, which are known to have poor soil quality and restrictive growing conditions.

In an attempt to meet the challenge of difficult planting sites, the most common practice in urban tree planting is to plant urban tolerant or 'tough' trees. The obvious result is the overplanting of a limited selection of tree species. It is well known that a low diversity in tree species leaves the urban forest vulnerable in the face of stressors such as pests and drought.

The Urban Site Index (USI) is a standardized, practical planning tool that is available for the evaluation of urban sites for the purposes of matching suitable growing conditions of sites to a diversity tree species. Alan Siewart and Stephanie Miller, both Urban Foresters with the Ohio Division of Forestry developed the USI, which is applicable to any size of community.

USI is simple, efficient and inexpensive. It requires few tools and is very easy to understand. The systematic evaluation of a site takes indirect soil factors (vegetation, surface compaction, soil probe penetration and soil development) and traffic factors (speed limit, number of lanes, existence of on-street parking, and length between traffic control devices) into consideration and assigns a total score of 0 to 20. The higher the score, the better the planting site. What this helps to achieve is not only to ensure that urban tolerant trees are planted on the lowest scored sites but also that trees less tolerant of urban tolerances are planted on sites scored higher. Essentially, ensuring that a high quality site is planted with the best tree possible and taking full advantage of the site potential.

One of the advantages of using the USI is the ability to develop a Master Planting Design. This is done by combining the USI score and site size limitations (small, medium, and large) based on factors that would limit tree growth and then cross-referencing the scores with a corresponding list of tree species (predetermined by urban tolerance and mature size of tree) to assign a species suitable for the site. Species can then be assigned to street segments or groupings (of 7 to 11 trees) to ensuring spatial diversity is achieved by separating Family, Genus and Species by 2, 4 and 6 segments/groups respectively along roadways. Once tree groups are determined, planting priority of segments/groupings can be assigned. Through this undertaking, USI allows for the evaluation of not only individual sites, but also of the landscape as a whole.

The tree species lists can be customized to specific regions and should be revisited regularly to adjust for factors such as invasive pests or diseases. One of the discussions that have come up as a result of planting site planning and growing needs for trees is the need for improved soil quality, soil volumes and soil preservation/protection during development and construction. Poor USI scores could indicate a need for soil remediation in order to support tree growth.

USI is best used as a planning tool for tree species selection - immediate and long-term. While it does not consider all factors in selecting planting locations (i.e., underground utility conflicts) it is a quick method of assessing site conditions and simplifies the decision making process. With tools like USI available, the potential of successfully planting an urban forest that will survive and thrive increases.

2017 OPFA Award Winners

Sarah Bros, R.P.F.
Chair, Awards & Recognition Committee

The Awards and Recognition Committee is comprised of members of the Association who represent different facets of forestry. The committee includes: George Graham, R.P.F., Chief Forester – Hearst Forest Management Inc.; Rob Spence, R.P.F., Administrator, Managed Forest Tax Incentive Program – MNRF; Graeme Davis, R.P.F., Forester, Forestry Department – County of Simcoe; and, Sarah Bros, R.P.F., Consulting Partner – Merin Forest Management Inc.

At this year's banquet and awards ceremony in Guelph, it was the Committee's pleasure to present the 2017 awards to the following members and non-members:

Fernow – *awarded to foresters practising less than 10 years who are making a mark on their profession.* This year's award winner is **Jesse Henrich, R.P.F.** Jesse graduated with a BScF from Lakehead University in 2006 and, in addition, holds a BA degree in Environmental and Resource Studies, Trent University. He began working for Lands and Forests Consulting (L&FC) and, within 10 years became owner of the firm. Jesse is responsible for coordinating the tree marking division of L&FC on both private and corporate woodlots, Grey and Bruce County forests and Conservation Authority properties. He also looks after private woodlot management, tree marking prescriptions and assessments. As a Planting Development Agent for the Forests Ontario 50 Million Tree Program, he supervises tree planting and spraying crews. He has personally planted over 250,000 trees and overseen the planting of half a million more. He is a Managed Forest Plan Approver, writing personalized forest management plans for many private landowners taking part in the Managed Forest Tax Incentive Program (MFTIP). He takes part in the prescribed burns completed by L&FC across southern Ontario as an SP-100 trained wildland fire fighter.

Jorgensen-Morsink – *this award is presented to members who have made significant contributions to the field of urban forestry*. This year's recipient is **Lloyd Burridge, R.P.F.** Lloyd graduated with a BScF from University of Toronto in 1966. He was the CIF Gold medal winner and recipient of the Commonwealth Forestry bureau prize that year as well. A professional forester by training, Lloyd worked in the parks departments of both the City of Hamilton and the City of Windsor. In the City of Windsor he rose to the position of General Manager of Parks and Recreation. Early in his career, he served as a regional forester in Uganda. Lloyd Burridge became Zone 1 Director for City of Windsor in 2011. During his term, Lloyd served as Secretary and Vice-President. Lloyd held many senior positions in international parks management and forestry organizations and continues to be an active member.

John being presented his award by Ken Elliott, R.P.F. (right)

Zavitz – *this award is presented to members who have made their mark in forest conservation*. The 2017 receipient of the Zavitz award is **John Enright, R.P.F.** John graduated from Lakehead University in 1980 with a HBScF. He is a Managed Forest Plan Approver, a certified tree marker and certified butternut assessor and a tree seed collector. John began his career in Kirkland Lake with MNRF doing timber cruising. In 1982, he moved to Cornwall District MNRF as a contract forester in charge of the silviculture program, including the delivery of a 2 million tree plant on private land. By 1986, he had joined the Upper Thames River Conservation Authority in London as their forester. As the Authority's forester, John is responsible for developing and implementing forestry programs on private lands, Authority lands and public lands including tree planting, tending, pruning, thinning and other aspects of sound forest management practice that enhance natural restoration within the Upper Thames River watershed. In his position John is also responsible for promoting forest conservation activities through demonstrations, workshops, presentations and publications. John is also

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responsible for representing the Authority as an expert in forestry practices through liaison with landowners.

Sellers - *awarded to a member who has furthered the face of the Association through their efforts*. The 2017 recipient of the Sellers Award is **Lacey Rose, R.P.F**. As a member of the Career Awareness Committee 2011-2014 Lacey took on the role of developing the OPFA Facebook page and, with other members, managed the page over the next few years as well as actively posting her forestry days on Twitter. Lacey graduated in 2006 from the University of New Brunswick. Lacey began her career with Domtar in Folyet, moving on to MNRF as a forestry intern in Pembroke. She worked briefly with Ontario Parks in Algonquin Park before becoming the planning forester for the Bancroft-Minden Forest. After the FMP was completed she accepted a job with the County of Renfrew where she is today. Lacey has served as Chair of CIF – Algonquin section 2013-2016, is the co-founder of Women in Wood, and is an Advisor to Shaw Woods Outdoor Education Centre. She developed the Renfrew County outreach with over 20 forest industry and interested stakeholders with a mandate to educate and inform the public about forestry and designed Ottawa Valley Wood which is an online wood directory of local wood producers designed for use by the public.

Bayley - *awarded to non-members who are champions of our profession*. The winner of the 2017 Bayley award is **Jessica Kaknevicius.** This year's award winner crossed my path as the representative for Forests Ontario on the Career Awareness Committee. She received a Masters in Forest Conservation from the University of Toronto in 2008, after which did a brief stint as an FSC auditor before joining Forests Ontario. Jessica has held the position of Program Development Manager and more recently Director of Forest Education and Awareness for such programs as Envirothon, Forestry in the Classroom, TD Tree Bee, Focus on Forests and It Takes a Forest to name a few. As a volunteer, she has worked on the Forest History Society, National Forest Week working group, Women in Wood co-founder, Carolinian Canada Coalition Board Member, and Biodiversity Education and Awareness Network Committee Member.

Herridge – *this award recognizes one or more significant accomplishments in professional forestry and acknowledges a forester who has gone "the extra mile in both his profession" at the mid-point in their career*. **Gord Cumming, R.P.F.** is the recipient of this year's award. Gord, a graduate of Lakehead University's class of 1986, has had a varied career thus far. He began as a Harvesting Supervisor and then Assistant Planning & Control Superintendent with Great Lakes Forest Products in Thunder Bay, then a short stint with the Ministry of Northern Development and Mines as a mine claims inspector, he spent five years at Domtar Chapleau as the Planning Forester and then two years with Tembec as their private and public lands forester before working with Nipissing FRMI and Vermillion FM for the next four years before joining the Algonquin Forest Authority as Chief Forester. Gord can be described as the "forestry face" of the AFA often seen manning the AFA booth at many conferences (Forests Ontario, Sawtek) including the OPFA, or at speaking engagements, Forestry in the Classroom and volunteering at Loggers' Day in Algonquin Park. Most recently this forester was awarded the 2016 Ontario Forest Industries Association's Forest Sector Champion award.

Honoured Professional - *this award honours professional foresters who have made an impact over their career through their contributions to their profession and to the OPFA*. This year's award recipient of the Honoured Professional award is **Mike Willik, R.P.F.** Mike is a graduate of the University of New Brunswick, and has had a wide range of executive experience in the Ontario government, including policy and program development, stakeholder relations, negotiations and operations. He established the Forests Division within the Ministry of Natural Resources as Assistant Deputy Minister. Mike thrived on the challenges of balancing the division's responsibilities to advocate for the forest industry while, at the same time, being part of a Ministry that was the primary regulator of that sector. Key successes during this assignment included: ensuring Ontario's interests were protected while he acted as the Ontario lead for the softwood lumber negotiations with the United States, being the champion for moving the forest products sector in Ontario towards forest certification

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and spear-heading the implementation of the Ontario Forest Accord resulting in environmental peace in the forest at the time.

In 2014, Mike was elected as the Chairman of the Board of Directors for CRIBE. CRIBE is a not-for-profit corporation established with funding from Ontario to create economic opportunities in Northern Ontario through the development of new products and processes using bio-fibre. Mike has also managed a lumber firm very successfully by diversifying the product mix and growing the customer base resulting in a three-fold increase in annual sales over a seven year period.

Currently he runs his own consulting firm that specialises in forest industry development, tenure reform, government relations, negotiations, policy analysis and policy impacts in addition to providing professional advice to forest companies, mining firms, First Nations and municipalities regarding forest licencing, softwood lumber negotiations, wood supply, environmental approvals and government relations. He has also led negotiations for companies regarding the establishment of enhanced Sustainable Forest Licences.

On behalf of the Committee and members of the Association, congratulations to all the award winners.

Photos: Mike Clarke, R.P.F. and Lacey Rose, R.P.F.

Paths to Forestry: College or University? What About Both?

Joseph Williams, Future R.P.F.

I'm asked by many people (especially those in the natural resource sector) why I made the decision to pursue both college and university education in forestry. There is no one short answer to this question and I typically give a different reply each time. There are many reasons for this plan of attack to start a career and put some food on the table.

Three years ago when I started in Fleming College's Forest Technician Program, I never had the slightest intention of doing anything at university. Four years of postsecondary education in a lecture hall sounded all too mundane for my liking. However, that original sentiment slowly changed as I became very passionate about forestry and natural resources at college. By the end of my two year time at Fleming, I didn't feel that I was finished with formal studies. In fact, I was ever thirsty to learn more. And so, I'm still in school, this fall going into my second year of the BScF (Bachelor of Science in Forestry) program at the University of New Brunswick (UNB) in Fredericton.

As many people are aware, college and university have rather different approaches to teaching their curriculum which sets graduates up to perform different occupational roles. University delves into matters of "this is why we do it" with the primary emphasis on theory and less "doing" than college. College is more "this is how we do it" and doesn't focus so much on the "why?". It provides very practical hands-on skills to do a variety od forestry related jobs. Learning both ways compliments each other and gives a very well rounded education with experience from both sides of the forestry educational spectrum. I think one is perhaps not quite complete without the other, sort of a metaphorical yin and yang.

If an aspiring woodsman/woman asks me which of the two they should pursue if they only want to do one, I tell them to try college first. This advisement is not just because they can spend more time timber cruising the bush, but has some very practical and economical reasoning. Attending college first is a cheaper way of giving good exposure to a field of study as tuition is typically much less expensive. If by two years of university a student decides that they don't want to continue (God forbid), college will give them a diploma rather than half of a degree and dropping out with substantial debt and nothing to show for it.

I was once told by one of my college professors that college will get you a job and university will let you run with it! If you're passionate about forestry and serious about having the best career possible, then university is essential in today's job market. From my own job searching experience and speaking with numerous professionals and professors, having that forestry degree is often very appealing to employers and in some cases a requirement; especially for supervisory or management roles as that is the nature and mentality of university. A degree ensures that there is no ceiling for advancement on the employment ladder and keeps a lot of doors open. Not to mention you'll see higher salaries for jobs requiring a university education which is obviously more desirable for me, the employee.

One of the greatest benefits for me continuing my education at university, which I've neglected to mention thus far, is it gives you the credentials to obtain a Registered Professional Forester (R.P.F.) designation. College graduates can achieve R.P.F. status, but additional training is required and from what I understand can be more of a hassle and a difficult process depending on the situation.

This dual diploma/degree route to success that I've taken is definitely not untrodden. I'm anything but some anomaly in the stream of new forestry grads. It has, in fact, become very common with forestry and there are some good reasons why. It has become quite a simple process to go from one school to another. Colleges and universities are working together and developing transfer agreements between institutions. In all honesty, the vast majority of my fellow forestry peers at UNB are also transfers from various colleges from all over Canada. Agreements recognize courses already completed as direct credit transfers reducing the amount of time that it takes to complete your degree or diploma. Exact transfer agreements vary depending on the school and contract agreement at any given time. In some cases, a diploma and degree can be completed in as few as four years (mind you, with a heinous course load). In my particular case, I found that these agreements are well marketed to students and information is fairly easily available.

Joseph explaining the difference between trembling aspen and largetooth aspen on a tree identification walk.

This dual diploma/degree path to forestry may not be for everyone, but I truly believe that if you're passionate about forestry, it's the best start you can get.

Nominate Your Peers for an OPFA Council Position

OPFA Council December 1, 2017 to November 30, 2018

Nominations should be:

- for a specific position,
- provide a short description of the knowledge and skills the Nominee would bring to the position,
- in writing (e-mail, fax, mail), and
- made by one or more eligible Members in the Nominee's OPFA region (other than the Nominee).

Please note that only Full, Associate, Inactive, Non-Resident or Life members may serve on Council.

Positions for which nominations may be submitted are:

Officers:

President	1 year term
Vice-President	1 year term

Elected Councillors:

North East	2 year term
North West	2 year term
South West	2 year term

Send nomination(s) to Nominations Committee Chair Astrid Nielsen, before close of business August 31, 2017.
E-mail: opfa@opfa.ca; fax: 905-877-6766

Photos: Denis Gagnon, R.P.F.

Executive Director's Update

Fred Pinto, R.P.F.
Executive Director

I will be brief with this update as there is a lot of OPFA business to conduct over the summer. Here are some of things being worked on at the OPFA:

1. An information sheet is being prepared that describes the role of professional foresters and how they can help in forest management related to municipalities. A number of members have asked the OPFA to explain what a professional forester does and the role they play in protecting ratepayers and their municipalities. Please send me the contact information for specific individuals that work for municipalities that are involved in the administration of work in the forest. The information sheet will be sent to these individuals so that they are aware professional forestry is a regulated profession and that their organization can benefit from our members.

2. Presentations made at the 2017 OPFA conference have been posted on the OPFA's website. You can find them attached to the conference program: https://secure.opfa.ca/sites/default/files/2017%20Annual%20Conference%20Program%202017%20May%20WITH%20PRESENTATIONS.pdf

3. The dust has hardly settled from a successful and fun 2017 OPFA Conference when members are already working on plans for the 2018 Conference. Mark these dates in your calendar: the conference and associated field trips will be held May 15 to May 17, 2018 in Timmins. It will be a fun and informative event. Please remember to add this conference to your training plan at work. As a regulated professional you are required to spend a specified number of hours each year maintaining or growing your professional competencies. OPFA conferences are excellent events to obtain your professional training.

4. The OPFA has commented on the future of the Faculty of Forestry at the University of Toronto. The letter sent to the University has been distributed to all members. Please send in your own comments. You can do so here: https://forms.provost.utoronto.ca/consultation-forestry/

5. I need to keep this message short so will end here by telling you that a number of members are working on specific tasks such as updating the governance of the OPFA, developing plans for the future of the OPFA (this combines the various activities that were concerned with the retirement of members, growing membership and dealing with excluded occupations), and using information technology to make OPFA business activities more effective and efficient.

Finally an update on TV Ontario and coverage of forestry:

In the last newsletter I shared my letter to TVO, Ontario's educational television network. My letter described my disappointment with the network's coverage of forestry. I am pleased to now inform you that TVO broadcast an interview with three people involved in the forest products sector. This interview described the long term role of this industrial sector in Canada and the benefits it has created. You can watch this interesting interview here: http://tvo.org/video/programs/the-agenda-with-steve-paikin/forestry-builds-communities

Registrar's Update

Susan Jarvis, R.P.F.
Registrar

id you attend the 2017 **OPFA annual conference** *in Guelph May 16-19?* Attendees received exceptional professional development and enjoyed many networking opportunities. Members can record up to six (6) hours of continuing education per day for any new learning during field trips, conference presentations and informative dialogue with other members.

Many of the **conference presentations** are posted on the OPFA website, if you were not in Guelph, or if you are interested in presentations that you did not attend. You can view these presentations at your convenience. Reviewing posted conference presentations also counts toward annual continuing education hours. Remember to record your continuing education as it occurs. Practicing OPFA members (Full, Associate and Non-resident) will report 2016-2017 continuing education (to Nov. 30, 2017) before Jan. 15, 2018.

Bridge Training Program for Foresters (competencies for registration as professional foresters) - New training is now available online from Lakehead University for required competencies in Standard 3: **Forest Management**. On page 23 (and on the OPFA website), see the table of all Bridge Training modules being offered by our two suppliers: Lakehead University and the Canadian Institute of Forestry. Modules for Standard 4: Economics will be available soon; all other training modules are being delivered online or "in the field" (depending on the competency).

The development stage of the Bridge Training Program for Foresters will be complete in July 2017. Delivery of these training modules will be continued by the Canadian Institute of Forestry and Lakehead University.

The **OPFA Member Binder** is an electronic document that contains relevant information for OPFA members, including general OPFA information, legislation and by-laws, and practice guidance. The OPFA Member Binder is a "living document" that will be updated as information or documents are revised. The OPFA Member Binder is available on the OPFA website. Download your copy and check back regularly for updated versions.

Updates in the May version of the OPFA Member Binder include:

- Enhanced OPFA general information;
- OPFA By-laws revised effective May 18, 2017; and
- Newly finalized Information Sheets for Certified Arborists and Forest Auditing. These information sheets give guidance to members and the public with respect to the scope of practice of professional forestry, particularly as it overlaps with activities of other forest practitioners.

Competency Review Working Group (CRWG) (left to right): Peter Marshall, R.P.F., Lorne Riley, R.P.F.(Ret.), Susan Jarvis, R.P.F. (Chair), Roger Roy, Ph.D., f.a. (N.-B.), Marielle Coulombe, ing.f., Randy Trerise, R.P.F. Absent: Germain Paré, ing.f., Uldis Silins.

New **Practice Guidance** is being developed by OPFA staff for (1) general professional practice and (2) for practice on private lands in Ontario. These documents will replace the existing Practice Bulletins, and will provide clear and comprehensive guidance to members. Draft practice guidance will undergo review this summer and will be reviewed by OPFA Council for approval in Fall 2017.

Work of the national **Competency Review Working Group** was completed in May 2017. This major project, over the past 2.5 years, resulted in the development of revised **Certification Standards** (required competencies) for professional foresters in Canada. The revised Standards have been reviewed and approved by a majority of provinces with regulated professional foresters. Responses from the remaining provinces are expected in the next month.

If approved for national implementation, there will be a multi-year phase-in of revised 2017 Certification Standards and a multi-year phase-out of the current 2008 standards. This transition process could take up to four (4) years to implement. Rest assured that current Provisional Members and applicants (those that need a Credential Assessment) will be well informed before this transition occurs, to ensure ample time to complete the current assessment process.

As Working Group Chair, I wish to express my sincere thanks to the other members of the Competency Review Working Group for their expertise, efforts and enthusiasm throughout this project.

The Competency Review would have not been initiated, nor successfully completed, without the continued support and funding by the Canadian Federation of Professional Foresters Association (CFPFA) and the Association of University Forestry Schools of Canada (AUFSC). It was truly a national effort.

Important Registration Dates:

July 27, 2017	Deadline for application materials for Registration Committee Meeting August 10, 2017.
Sept. 28, 2017	Deadline for application materials for Registration Committee Meeting October 12, 2017.
Nov. 26, 2017	Deadline for application materials for Registration Committee Meeting December 8, 2017.
Dec. 1, 2017	Annual membership fees for 2017-2018 are due (if applicable)
Dec. 1, 2017	Credential Assessment Process portfolio materials to Registrar, for Jan. 1, 2018 national CAP assessment.

ONTARIO BRIDGE TRAINING PROGRAM FOR FORESTERS

Funded by: Ontario

Standards and Demonstrable Competency numbering is consistent with the 2008 Certification Standards for the Profession of Forestry in Canada (LINK)

Supplier	Competency	Modules Required to meet 2008 Certification Standards	More Information or Enrolment
Canadian Institute of Forestry / Institut forestier du Canada	**Standard 1: Tree and Stand Dynamics**		
	Competency 1.1	Module 1.1 and 1.4	Online modules except as noted courses.cif-ifc.org
	Competency 1.2	Module 1.2 and 1.4	
	Competency 1.3	Module 1.3	
	Competency 1.4	Module 1.4 (field course)	
Canadian Institute of Forestry / Institut forestier du Canada	**Standard 2: Forest to Landscape, Structure and Function**		
	Competency 2.1	Module 2.1	Online modules except as noted courses.cif-ifc.org
	Competency 2.2	Modules 2.2 and 2.5	
	Competency 2.3	Module 2.3	
	Competency 2.4	Module 2.4	
	Competency 2.5	Module 2.5 (field course)	
Lakehead University	**Standard 3: Forest Management**		
	Competency 3.1	Standard 3 - Module 1	Online modules ec.lakeheadu.ca/nrm/home
	Competency 3.2	Standard 3 - Module 2	
	Competency 3.3	Standard 3 - Module 3	
	Competency 3.4	Standard 3 - Module 4	
	Competency 3.5	Standard 3 - Module 5	
	Competency 3.6	Standard 3 - Module 6	
	Competency 3.7	Standard 3 - Module 7	
Lakehead University	**Standard 4: Economics and Administration in Forestry**		
	Competency 4.1	Standard 4 - Module 1	Online modules ec.lakeheadu.ca/nrm/home
	Competency 4.2	Standard 4 - Module 2	
	Competency 4.3	Standard 4 - Module 3	
	Competency 4.4	Standard 4 - Module 4	
	Competency 4.5	Standard 4 - Module 5	
	Competency 4.6	Standard 4 - Module 6	
Canadian Institute of Forestry / Institut forestier du Canada	**Standard 5: Leadership Skills**		
	Competency 5.1	Module 5.1	Online modules courses.cif-ifc.org
	Competency 5.2	Module 5.2	
	Competency 5.3	Module 5.3	
Lakehead University	**Standard 6: Forest to Landscape, Structure and Function**		
	Competency 6.1	Standard 6 - Module 1	Online modules except as noted ec.lakeheadu.ca/nrm/home
	Competency 6.2	Standard 6 - Module 2	
	Competency 6.3	Standard 6 - Module 3	
	Competencies 6.4 and 6.5	Standard 6 - Module 4	
	Competency 6.6	Standard 6 - Module 5 (field course)	
Canadian Institute of Forestry / Institut forestier du Canada	**Standard 7: Professionalism and Ethics**		
	Competencies 7.1 to 7.4	Module 7.1	Online module courses.cif-ifc.org

The following Bridge Training modules are provided for candidates for registration in Ontario (OPFA):

Lakehead University	**Ontario Forest Policy & Legislative Framework (Ontario requirement)**		
	Ontario Bridging Module 1	Principles of forest admin. and policy	Online modules ec.lakeheadu.ca/nrm/home
	Ontario Bridging Module 2	Tools and analysis of forest policy	
	Ontario Bridging Module 3	Forest policy in Canada and provinces	
	Ontario Bridging Module 4	Forest policy in Ontario	

UNIVERSITY OF VICTORIA
PROFESSIONAL SPECIALIZATION CERTIFICATE
IN ECOLOGICAL RESTORATION

This non-credit certificate provides advanced training for professionals working in landscape architecture, landscape design and management, forestry, agrology, biology, mining, ecological restoration, and environmental practice.

The courses will provide you with the skills and knowledge to conduct advanced detailed site assessment and restoration projects that pay special attention to the unique conditions and challenges presented by built or otherwise highly altered environments.

The ER program is offered **online** so you can meet your annual professional development requirements on your own schedule. Sign up for one course or the entire certificate!

Upcoming courses:

ER 501: Design Principles for Natural Processes
Dates: September 5 to December 10, 2017; tuition $750
This is an advanced course on ecosystem design that considers the ecology and reproductive biology of plants when restoring ecosystems. In this course, we'll examine the principles and ethics of native plant selection, harvesting and propagation to meet site-specific design objectives such as which species need to be closely matched genetically (geographically) for the propagated stock.
Other course topics include: pollinators, peripheral populations, dispersal agents, and hybridization. We'll also explore the implications for green or living roofs and the impact of climate change.
The course includes an overview of the goals and foundations of ecological restoration and how restoration nurseries grow appropriate restoration species.

ER 502: Ecosystem Design Through Propagation of Native Plants
Dates: January 2 to April 1, 2018; tuition $750
Ecological restoration is a rapidly changing subject. Practitioners and professionals faced with restoration of degraded ecosystems are seeking ways to restore these systems in the face of climate change and continued urban expansion.
The traditional values and assumptions that have gone along with developments are no longer holding true. Answering the questions faced by restoration professionals requires exploring a new approach to the field of restoration. New questions need to be asked and answered as restoration takes on a much broader role in the world.
This course aims to address these new challenges to traditional reclamation and restoration by identifying natural processes involved in maintaining ecosystems and how they are recreated in restoration projects. It also addresses the element of design where a particular restoration project accommodates special requirements.

To register for a course or apply for the program, use the online application form which can be found at: http://continuingstudies.uvic.ca/science-and-ecological-restoration/programs/ecological-restoration-professional-specialization-certificate
For more information, contact the program office at ecorestoration@uvic.ca or 250-721-8458.

In Memoriam

WILLIAM DONALD (BILL) TOWILL

Obituary Condolences Flowers

William (Bill) Donald Towill died at St Joseph's Hospice on May 23 at 4:15pm at the age of 60, after a short and brave battle with brain cancer. Beloved husband of Deborah (Debby) Towill. Loving son and brother to parents William B. and Margaret Towill and brother Gordon Towill (Ellen Towill). Devoted uncle and great uncle of Michael Towill (Ashley Towill) and Timothy Towill, Anne Sophie and Olivier Page, and William, Chloe, Arthur and John Ferguson. Doting owner of faithful canine companion Spooner. Despite being born in Saskatchewan, Bill spent the majority of his life in Thunder Bay. He gained a BSc in Botany at the University of Manitoba, followed by an MSc in Forestry from Lakehead University. Well respected in his field, Bill worked as a forester for the Ontario Ministry of Natural Resources for over 35 years and had only recently retired. He had a passion for young people and was a mentor and dynamic leader with Scouts Canada and active on the Scouts District Council for many years. He was very involved with First-Wesley Church throughout his life, serving on many committees and as a member of the choir. Bill loved the outdoors. He canoed and hiked his way throughout the region and was looking forward to travelling even more widely with Debby during their retirement years. An optimist in every sense, Bill possessed an immensely positive outlook on life and once he was diagnosed, never considered that he could not beat his illness. He was a kind, gentle and beautiful man. A funeral service will be held at the First-Wesley Church, 130 Brodie St N, Thunder Bay, ON P7C 3S3, on Saturday, May 27th at 2pm. In lieu of flowers, please direct donations to the Thunder Bay District Grey Wolf property, the Thunder Bay Regional Cancer Care or the St. Joseph's Hospice.

Online condolences
may be made through www.nwfainc.com

Business Cards

Your Business Card Here!

Advertise your company or services here.

Members	$25 per single issue $80 per year (four issues)
Non Members	$40 per single issue $140 per year (four issues)

If you would like to be included in the Business Card section please email opfa@opfa.ca.

OPFA Council 2016-2017

President	Greg Pawson, R.P.F. #1465, Sault Ste. Marie, Ontario
Vice-President	Peter Street, R.P.F. #1117, Callander, Ontario
Past President	Astrid Nielsen, R.P.F. #1882, Ottawa, Ontario
Councillors	
Southeast	Richard Raper, R.P.F. #1073, Peterborough, Ontario
Southwest	Tim Payne, Associate Member, #2000, London, Ontario
Central East	Lacey Rose, R.P.F. #2213, Pembroke, Ontario
Central West	Denis Gagnon, R.P.F. #1867, Sault Ste. Marie, Ontario
North East	Aaron Palmer, R.P.F. #2259, Haileybury, Ontario
North West	Tom Ratz, R.P.F. #1511, Thunder Bay, Ontario

Public Members
Richard Gasparini
Susan Gesner
Mark Kuhlberg
Larry McDemott
Dianne Miller

Member News

New Members

Full
Adam Barkovitz
Dean Caron
Jevon Hagens
Brian Harbord
Scott Wiebe

Associate
David Wiley

Provisional
Berhane Bairu
David Flood
Gaspar Horvath
Travis Lockhart
Dan Marina
Andrew Puchalski
Kayla Richard
Gus Saurer
Margaret Scott
Shelagh Yanni

Student
Ellenore Teichgraf

Resignations
Don Farintosh

Deceased
Robert (Bob) Penwell, former Full Member

Suspensions
The following members have had their certificate recently suspended for administrative reasons and are therefore not entitled to practise any aspect of professional forestry until they have resolved the issue(s):

Paul Charrette
Glenn McGinn
Jennifer Morrison

Suspension Lifted
The following member resolved all outstanding administrative issues and the suspension of their certificate of registration was lifted effective May 2, 2017:

Peter Gill

Lost Members
We have lost contact with the members below. If you know the whereabouts of these members, please let us know, or have them contact us. They are:

John Fingland
Donald Myles
Benjamin Wang

∞∞∞

The Professional Forester is now only delivered electronically. A copy is also available on the website (www.opfa.ca). You are invited to print your own paper copy if you so desire. To make sure that you receive all important member information, please check that your email address and other personal information is accurate in the member directory.

Photos: Denis Gagnon, R.P.F.

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Undeliverable copies can be sent to:
5 Wesleyan St., #201, Box 91523
Georgetown, ON L7G 2E2

Coming Events

EVENT	DATE	LOCATION	DETAILS
Canadian Institute of Forestry Annual Meeting and Conference	September 27-29	Ottawa, ON	www.cif-if.org
Ontario Invasive Plant Council Annual Meeting and Conference	October 10-11	Ottawa, ON	www.ontarioinvasiveplants.ca
Ontario Land Trust Alliance Annual Meeting	October 19-20	Alliston, ON	www.olta.ca
Latornell Conservation Symposium	November 21-23	Alliston, ON	www.latornell.ca
OPFA Annual Meeting and Conference	**May 15-17, 2018**	**Timmins, ON**	**www.opfa.ca**

If you know about an event that should be listed here, please send the information to the Editor at newsletter@opfa.ca.

Submissions

Submissions are welcome, please send them to:
Caroline Mach, R.P.F., Editor
newsletter@opfa.ca

Deadline for the next issue:
September 1, 2017