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## MESSAGE FROM THE PRESIDENT

What a year 2014 was and coming into 2015 the future is yet to be written...

The year has flown by and we are right back to conference time and the end of my term as President. It has been a fast but great year and I'm feeling blessed. As well it has been a complete honour to be part of this organization and the work it does to support, encourage, and provide educational opportunities to Arborists, tree people and people that love trees. Looking back at the past year the ISA Ontario Board Directors & Committees have been extremely busy.

1. The year started off with putting together the final touches to a very successful conference at the Deerhurst Resort in Huntsville.
2. The appointment of our new Executive Director, Rebecca Lord.
3. The welcoming of three new board members John Stewart, Mike Watson, Jonathan Marriott.
4. Two sold out workshops - one with Ian Bruce and the other with Jennifer Llewellyn.
5. The unleashing of the NEW ISA TRAQ programs in Toronto, Ottawa and Cambridge.
6. Working on 2015 Conference in Windsor securing venues, speakers & conference layouts.
7. The launch of a new Member Benefit program (check it out at the conference this year).
8. Yet another successful climbing competition.
9. Governance committee revising by-law and making us compliant with changes to the Ontario regulations for nonprofit organizations.

10. Publication committee has worked extremely hard during the transition period and had to jump over some major hurdles. New design/layout person, new printing service and distribution, editing team & pictures/advertisement.



When you think back and look at the number of volunteers and the number of hours that all the individuals on the Board and the Committees contribute over the year.....talk about paying it forward. I cannot say THANK YOU loud enough.

As well THANK YOU to all the members that support ISA Ontario and everything we do to continue providing Education & Safety to the Arborist industry. This is a member driven organization and without the members ISAO would cease to exist..so this is a call to all the members we need everyone help in spreading the word about ISA Ontario and becoming a member.

Work hard, play hard, & touch tress often.

Thanks,  
John

John Ransom  
ISA Ontario President

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# BITS & CHIPS

by Patricia Kerr

## YEW IN EUROPE NAMED OLDEST TREE

An English yew, *Taxus baccata* at S. Cynogs in Defynnog, Wales was recognized in 2014 as Europe's oldest tree with its age thought to be over 5,000 years by DNA testing and ring dating. This tops a yew in Perthshire, Scotland that is believed to be close to 5,000 years old. (There is a *Norwegian Spruce* in a National Park in Sweden estimated at 9,500.) They are all older than the Egyptian pyramids and predate Christianity and Christmas.

Although English yew usually only live to be 400 to 600 years old; the two ancient specimens both split under their own weight without falling victim to disease. Lower light levels and high moisture in the areas are also thought to have contributed to the trees' long life. They are both on land that was protected for thousands of years first as pagan sites which later became church yards.

There is a search ongoing in Europe for more trees of similar age. It is hoped that the hunt will encourage people to value trees and protected places.

<http://www.dailymail.co.uk/sciencetech/article-2683383/Europes-oldest-yew-tree-discovered-Welsh-churchyard-FIVE-THOUSAND-years-old.html>

## Another Reason To Hire Only Trained, Certified Tree Workers

The British on-line news site EADT24 reported on November 14 following a release by the HSC (*Health and Safety Executive*) that an Essex tree surgeon was fined 10,000 pounds plus 889 pounds in costs. "The HSE investigation revealed Bradfield and his

employees had no certificates of competence in even the basics of chainsaw skills or tree surgery." The irony of the story is: According to the report the tree was taken down due to homeowner concerns about safety. The tree surgeon and landscape gardener had 30 years' experience. "Together with his team they removed the lower branches before putting up a three-stage extending ladder to reach the higher branches. To increase its height they placed the foot of the ladder in the rear of their pick-up truck parked at the foot of the tree, and used no harnesses or ropes. No one was wearing personal protective equipment." Bradfield climbed the ladder but was knocked off by the top of the tree when it swung round as he was cutting it. "The tree surgeon who fell four metres while holding a running chainsaw landed on a colleague. The tree surgeon received only minor injuries.

However, after four days in hospital the worker later collapsed at home, dislocating both shoulders, and he then spent nearly eight weeks in intensive care with a severe chest infection. Due to nerve damage in his shoulders the worker now has very little use of both arms and requires constant care."

## Canadian Yew Harvest Criticised after European Discovery

One of the side effects of the search for ancient European yew and the knowledge that protected land can produce magnificent trees is criticism of Canada's wild yew harvest. Unlike Pacific yew and European yew, wild Ontario yew (or *Taxus canadensis*) is a shrub with a maximum height of 2.5 m and its wild harvest started after it was discovered it is a source for cancer-fighting chemicals or taxanes, including one that is used to develop *Paclitaxel*.

With this discovery, Canadian research projects attempted to develop a strain of yew that would produce higher concentrations of the taxanes and have faster growth rates that could be farmed and harvested mechanically as an alternative to the wild harvest. At the same time, other projects attempted to improve the extraction process to recover increased levels of several pharmaceutical products from the same amount of yew.

Both *Natural Resources Canada* and the *Ministry of Natural Resources* were involved in the research. One of the "farms" flooded and the plants died. The plants were tilled under at the second farm in 2013 due to lack of market. (The improved extraction process worked and the demand for the raw plant material dropped.) Even proposed construction of a "dryer" to be built in Northern Ontario to reduce transportation costs did not go forward.

In 2014, the market opened up in Ontario, and harvesters headed out in to wild places to collect yew branches. To ensure the harvest was done in a sustainable manner, harvesters were paid at a lower rate per pound if woody material was delivered to the transfer stations. Only bags of correctly harvested material received the premium rate.

Harvesters participating were from a mixed group. Some were those with marginal incomes or looking for a summer job but others joined the search in support of cancer treatment and some considered it a seasonal outdoor recreational activity.

Government and industry statistics indicate, at this time, the wild harvest in Ontario is sustainable and the plant is not being put at risk. So, I planted wild Ontario yew in my own protected place, my own garden, just in case.

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## 13-Foot Surviving Elm Identified

In Ontario we have another tree worth celebrating. *MoreTrees29* announced they successfully submitted an elm to Guelph's elm recovery program. The tree is 13-feet in diameter and is located at 34 Torrens Avenue in Toronto's Ward 29.

The tree has not undergone testing yet to determine how it has survived Dutch elm. The tree is approximately 400 years old.

<http://moretrees29.com>

## Forests Ontario Recognizes 400- year old Oak

In 2014, *Forests Ontario* recognized a white oak as the oldest tree in their program. Located in Niagara-on-the-Lake, its height is 21.3 m and circumference is 518 cm. The website says, "The white oak is the official boundary marker in the first land deed in Upper Canada (now Ontario) signed in 1781 between the Chippawa and Mississauga Native Chiefs and the English Crown. The deed was for a four mile wide strip of land, paralleling the Niagara River, on the west side, running from Lake Ontario to Lake Erie. The land was transferred to King George III for 300 suites of clothing."

Andrew Pitek, *MFC*, Forest Operations Coordinator said, "These programs are important to raise awareness of trees in urban settings and provide good seed sources." 🌱



by Kyle McLoughlin

# A Peculiar Problem: Understanding Pathogenic Fungi

Fungi and plants are an inseparable duo. There are even plants that maintain fungi relationships, that *don't* photosynthesize

(*Monotropa uniflora* – more on that one later). Inter-kingdom interaction is part of the natural way of things when living in a dynamic environment. In this segment we're going to be talking about the fungi that don't benefit the tree, and don't at first appear to play a visible role in the decay cycle. Pathogenic fungi are fungi that don't necessarily decay wood, but affect the health of the tree by impacting growth, nutrient flow, and structure. Of course, pathogens do play a role in decay, just not an immediately obvious one. The challenge is that many pathogenic fungi also decay wood, and many wood decay fungi, if given the right conditions, can act as pathogens. Fungi are tricky that way, they adapt to their situation, making them difficult to categorize.

Although mushrooms and conks are the most popular forms of fungal fruiting bodies, as far as fungi are concerned, these are the lookers of the bunch. They aren't the only fruiting bodies in the fungi kingdom though; *pycnidia*, *conidia*, *perithecia*, *apothecia* and *stroma* (just to name a few), are all parts of fungal fruiting structures that can tell us a lot about the species and ecology of a fungus. Pathogenic fungi may have any of the above fruiting bodies, and in some cases certain species of pathogen can have two. Think of it like *Aphids*,

some of which can go through six distinct stages of reproduction before going through an entire generation. Isn't nature weird?



This specimen was showing signs of an advanced infection by Butternut canker fungus. The black weeping is a great way to locate the fungal mycelium. As this was a specimen tree the client asked that the bark remain on. Currently efforts are being undertaken to improve conditions of this specimen, despite the fact that decay fungi have been identified in the canopy, in addition to the disease present throughout the tree

These unique fruiting bodies are nearly invisible to the naked eye in many cases, yet can be identified with practice. As arborists we cross pathogens most often in the form of their effect on the tree, such as canker, leaf discolouration or tissue death, rarely is the fruiting body encountered. Yet in the end, knowing the fruiting body is helpful in aiding disease ID because it helps us to accurately learn the symptoms and cycle of the disease. By learning the cycle of how the disease reproduces, it can ideally lead to a method of control. A pathogen that reproduces rapidly (like most fungal diseases) is one that should be addressed sooner rather than later, less it get out of hand and spread to nearby specimens, or allow for multiple entry points for decay.

When a spore of a pathogenic fungus like butternut canker (*Ophiognimonia clavignenti-juglandacearum*) lands in a wound that is suitable for growth, the spore begins to germinate. After germination, the pathogen begins invading its host (in this case the tree) by consuming parts of the cambium, and moving through its desired food source. Anywhere the fungal mycelium wants to go, it must "eat" its way through. Now, this process is very similar to the way decay fungi grow, the difference is that the pathogenic fungi attack

the cambium as well as sapwood and phloem (depending on the species), usually the active parts of the tree. By attacking the cambium, the pathogen is attacking a critically important part of its host. This is part of why cankers form the way they do. The pathogenic fungi are attacking the cambium, and the ram's horn on the outside is the tree trying to replace what's been lost. The tree is reacting to the pathogen, and the exposed wood on its trunk.

You will never see a mushroom or conk grow from a canker, but you will see one growing from the wood exposed by a canker. This is a secondary species, sometimes called an opportunistic invader, which is very common in pathology, both in trees and in animals. Kind of like the guy that slept on your couch for six months in college, ate all your food and never gave you a cent for rent. "I'm only going to stay for a couple days till I get things straightened out, I promise!" Yeah right, thanks Dan. Give an inch and they'll take a mile. That means, if you see a conk growing out of a wound near a canker there are at least two fungi living within that tree, and that both are subsisting off a different food source. Wait, did you just say, a different food source? Yes, yes



This fruiting body of the species Dead Man's Fingers (*Xylaria polymorpha*) is actually covered with thousands of tiny fruiting bodies called *perithecia*. The *perithecia* are the tiny dimples covering the black mass



The widespread *Nectria* fungus is a common pathogen on many hardwoods, including the Beach Bark Disease. The fruiting bodies here are also known as *perithecia*

I did. Once there is one factor impacting the tree, chances are there will be others, including decay fungi and insects, because they can recognize where they can get an easy meal.

Knowing the depth of the fungi kingdom at least lets us know what we're dealing with, the organisms that cause disease are as vast and complex as the plants that they grow on. Knowledge of pathogens gives us proper insight into dealing with the trees themselves, which are at the end of the day, our patients. A diseased tree, much like a sick person, is going to recover or resist disease much better, if it is in good condition. This may seem like a no-brainer, but this is the perennial problem we face as arborists: trees planted in poor soil, or incorrect soil, in highly polluted areas, too closely together, in environments of low biodiversity. In many cases these disease fungi are taking hold of their hosts, and

causing biological harm because the trees are already stressed, and they will continue to be stressed until things change in the urban environment.

When humans get sick, it's usually because we've been working overtime, sleeping less, eating poorly, and the weather has been crummy. Each one of these things isn't enough to weaken us, but





One of the most easily recognizable and most virulent forest pathogens *Armillaria* is a contender for the title of largest organism in the world. *Armillaria* can spread through the roots of its host through the soil to infect the root system of a new host. It is also a popular edible in Eastern Europe



In many cases, this is what we see above; multiple, tiny fruiting bodies, in this case *cleistothecia*

exposure to any of them for too long can play a significant role in contracting an illness. Once we get an illness, it means time off work, a lot of sleep, eating well, and staying where we can control the environment. Sick trees are very similar.

If we can slow down disease fungi by improving conditions for the tree, we can limit the possible entry points for decay fungi. Reduce the likelihood of decay fungi, and play an effective role in managing risk, and prolonging the life of the tree. Properly recognizing and treating pathogens is part of managing risk for the long term.

Sure we can't move our trees inside, but fertilizing the soil, mulching to reduce compaction, and limiting drought or flood stress by introducing an efficient watering cycle can go a long way to preventing those diseases from advancing once they've been identified. This goes very much the same way with decay, once a tree has decay, it can never be removed. Now, if the tree has developed the right relationships beforehand, with humans or fungi (hint hint *mycorrhizae*), as caretakers, then disease or decay may not become a serious problem. In the words of many great men before me: "An ounce of prevention is worth a pound of cure."



What is below the bark is a veritable fungal feeding frenzy! The entire collection of these white fibers is called a mycelium, and the individual fibers are called hyphae. The hyphae break down (consume) the wood to support the growth of the fungus. It's similar to root hairs and the root plate of a tree. Note Lego Lumberjack for scale





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# EAB DAMAGE CONTROL in guild park & gardens

by Cara Webster, *Natural Resource Specialist, City of Toronto, Parks, Forestry & Recreation, Urban Forestry*

## Background

City of Toronto Urban Forestry received a lot of criticism from some individuals over the winter and spring of 2014, following logging of dying ash trees from a much-loved forested park in Toronto. A large part of Guild Park & Gardens is a predominantly ash forest along the Scarborough Bluffs and Lake Ontario. The management of the forest to remove trees suffering decline from Emerald Ash Borer (EAB) was made a priority, due to the presence of significant plant and wildlife habitat and high public use. Logging has not been recently practiced in the City of Toronto, but it was done at the Guild to help introduce lower impact equipment to remove tree hazards, reduce wood volumes, and to re-purpose some of the wood. Approximately 2600 ash trees were removed from Guild Park & Gardens alone over a five-week period. Four other forest sites in Toronto were also managed under the same contract. Luckily, due to the long cold winter, 90% of the required work was completed in February to March, 2014.

## Community Outreach

Public outcry started in early March once the logging operation switched to clean-up phase and there was a significant stockpile of logs in the park. Following correspondence with local residents, publication of a *National Post* article, *Global TV* news reports and an article in the ISAO's *Ontario Arborist* magazine, Toronto Urban Forestry Services staff stopped the tree cutting and dedicated additional effort to public education; including a public meeting in early April to update the community on the process being followed to mitigate impacts from ash decline.

To prepare for the anticipated impacts of EAB in the Guild

community, Urban Forestry held public meetings starting in 2008. The local councillor also provided regular updates on his web site. In early January 2014, a public meeting was held to provide forest management examples from other southern Ontario sites including Oakville and Sarnia to try to prepare the public for work that would take place over the winter. Despite these proactive measures, as work began and site changes became visible, numerous complaints were received from members of the public. Many of the complaints that were received focused on the aesthetics of the site before the clean-up and restoration work phases had begun.

Lots of downed woody debris following tree removals, March 2014. PHOTO CREDIT: City of Toronto



## Why Logging?

A lot of effort was spent on this project, starting in fall of 2012, to create a holistic forest management plan that would protect the environmentally significant features at Guild Park & Gardens including wildlife habitat, regeneration and rare plants. A lot more detail was incorporated into the forest management prescription in our effort to retain wildlife trees, reduce wood stockpiles near rare plant locations and reduce compaction

and disturbance to soils and ground vegetation.

Despite public claims, the primary reason to conduct a logging operation was not to profit from the wood harvesting. It was to protect the soils while removing downed wood. To accomplish this required trees to be cut and removed quickly while soils were frozen. The sale of wood helped to offset some of the cost of tree removal but it turned out that operating this type of work in the City of Toronto was much less profitable than expected due to increased trucking costs; owing to increased traffic congestion and longer distances to sawmills.



Significant regrowth and new plantings blending into woody debris, September 2014. PHOTO CREDIT: Matt Forsythe

The decision to use a logging contractor for this work plan was made to try to reduce issues that the City has faced working with urban tree service companies. In urban manicured park and boulevard areas, arborists work to achieve an aesthetic standard which is much different than what foresters try to achieve in a natural disturbed forest. This has led to mis-use of heavy machinery causing damage to soils, wood chips being blown into natural areas and smothering ground vegetation, over-extraction of woody debris that should be retained to replenish the soil, over-zealous pruning and removal of dead trees, and cutting of log lengths into small pieces instead of more natural tree fall sizes that provide habitat for wildlife such as salamanders.

A high level of skill and expertise was required to fell trees within the time and weather constraints. Ash decline at Guild Park & Gardens presented a lot of challenges due to the high number of tree fall targets ranging from architectural monuments, commemorative trees and benches, park buildings, adjacent public school properties, utility wires, roadway, bluff edge, trails and treated ash trees. The logging contractor had access to smaller machinery that could more easily navigate small foot trails and pull logs out of the forest. Logging equipment was moved between the five park sites that were being managed simultaneously so that the largest trees were targeted for removal first, followed by removal of smaller trees using small skid-steers. Some residual tree damage occurred in order to remove this high number of trees from the park and to create a few skid trails to pull material out of the wooded areas. However, a tree damage survey that was completed following operations showed that 97% of the stand was free of damage.

## Site Recovery

Urban Forestry has switched to a restorative phase of the project at Guild Park & Gardens and has planted over 3600 native trees and shrubs during the spring and fall seasons. Invasive plant management will continue over subsequent years to remove

competition from new plantings and allow regeneration. The *TreeAzin* injection program is continuing to inject approximately 500 ash trees throughout the property and may switch to an annual treatment period to try to maintain canopy. A park management plan has also been completed for the site to identify all of the site management issues including forest and trail management.

Smaller scale tree removal will be required over the coming years to remove remaining marked hazard trees in areas that were not completed in 2014 and to address trees that do not respond to *TreeAzin* treatment. These areas will be restored as required over time to replace tree canopy.

Despite the initial shock to the community during the logging operation, the forest is starting to recover and will be well cared for to sustain a healthy forest. Woody debris that the community insisted we try to remove from the park has blended into the vegetation over the field season. Over time, new plantings and regeneration will fill in the forest gaps to replace the ash canopy.

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# MAPLE LEAF FOREVER

by Patricia Kerr

## Rebates for Locally Sourced Native Maples

Ken Jewett, age 85, discovered his condominium was doing landscaping and he offered to pay for the new trees. However, in the process he learned, to his horror, the maple trees were to come from Oregon. They were NOT Canadian grown.

"Someone has to stand up for Canada," said Jewett in a telephone interview. We need to remember the maple is our arboreal emblem. I am just a little guy."

Today Jewett is asking the arboricultural community for help educating Canadians on the value of native locally-sourced maples.

Jewett's concern drove him to action and the development of a charity, *Maple Leaves Forever (MLF)*, dedicated to planting all types of native maples. Jewett's personal drive is for maples but he believes strongly in diversification and maintains a managed woodlot. A spokesperson for the *Ontario Woodlot Association* said, "There are other programs happening to support other natives. The maple is his thing."

Jewett's research taught him how our native maples survive our climate's off days and ice storms better than most imports. He also learned about the hazards of invasives, but his drive is about patriotism. "The maple is Canada's tree. Canadians should support our emblem."

Jewett's charity *MLF* started in Mulmur Township north of Toronto in 1990. The idea was to give people a financial incentive to plant native, locally-grown trees. He started giving away lots of 25 native Sugar Maple seedlings at the annual tree day. This offering expanded to the adjacent Township of Mono but ended in 2007 when one-third of the 12 thousand seedlings were not picked up. Jewett felt this was both costly, wasteful and disappointing.

In 2008, the charity moved away from seedlings to Sugar, Red, Silver and Black saplings of at least 3-feet in height. The purchase costs were shared 50/50 between the charity and the planter. Currently, the subsidy is one third of the acquisition cost.

The *Ontario Woodlot Association* confirmed they are one of the growers producing Canadian-grown native maple trees from locally-sourced seed for *MLF*. The number of trees ordered varies from year to year.

Jewett states he bought a full page advertisement in the *Ottawa Citizen* (costing \$10,000) as an open letter to David Johnson, (Governor General of Canada), John Baird (Foreign Affairs Minister), Mark Christmanson, (C.E.O. National Capital Commission), Jim Watson (Mayor of Ottawa), M. Pedneaud-Jobin (Mayor of Gatineau), and Andrew Potter (Editor of the *Ottawa Citizen*). He says he did receive letters of acknowledgement and appreciation from the Governor General and commitment from the *National Capital Commission* to only plant Canadian-grown, native maples on their property.

Jewett's advertisement has dropped into the great vacuum that is cyberspace but he has held the attention of the *Ottawa Citizen* and their reports are following the development of his charity to have only Canadian-grown from Canadian seed maples.

Success has encouraged him to take his program provincially. Jewett wants to restore the native maple to its place of honour in our hedge rows, rural plantings and laneways in the rest of Ontario. In return, the charity continues to offer rebates.

Telephone conversations with both *Humber Nurseries* and *Sheridan Nurseries* stated they grow most of their own native maples in Ontario. Sheridan did confirm they will buy from Oregon if they have a rush order they cannot fill. Japanese maples are usually U.S.-sourced.

*MLF* has lot of marketing to do to educate the public. Both retailers confirmed consumers rarely ask or have concerns about the origin of their stock. One worker stated, "Only the most avid gardeners care where the plants come from."

Jewett continues in his letter, "The City of Ottawa and the *NCC* tree people have been very supportive and helpful in operationally specifying that if a maple is to be planted it will be a native Canadian maple. Now will this be costly? No it will not, remember *MLF* pays for a third of any purchase."

Anyone wishing to take advantage of the rebate can go to [mapleleavesforever.com](http://mapleleavesforever.com). Complete the application and review the list of 16 nurseries that carry native maples. When the application is approved, the landowner or client pays the nursery for two thirds of his invoice and *MLF* mails a cheque for the remaining third to the nursery. 🍁

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# Supporting Organizations: ASWP

**The Arborist Safe Work Practices (ASWP) Committee began in the year 2000 after a meeting of a group of arborists concerned about the number of accidents and incidents in the workplace. They identified the lack of common work practices for instructing new arborists as a major concern and causal factor for accidents and incidents. The result of this meeting was the development of the Safe Work Practices.**

Our long-running *Chair* Ruurd Van de Ven decided in the fall of 2014 that he was stepping down. The Committee thanks him for his many years of service and dedication. The new *ASWP Chair* for 2015 is Mike Greer.

Our *Terms of Reference* outlines the purpose of the Committee. The *ASWP Committee* is a volunteer effort for the arborist trade in Ontario, whose purpose is to assist government agencies, *WSIB*, and Safe Workplace Associations to improve the health and safety of the arboricultural industry. This purpose is satisfied by:

- The management and control of the content of the *Arborist Industry Safe Work Practices* document;
- Providing a location for government agencies, *WSIB*, and Safe Workplace Associations to access knowledge, skills and experience on health and safety-related arboricultural matters;
- Providing a location for government agencies, *WSIB*, and Safe Workplace Associations to communicate with the arboricultural industry on health and safety-related issues.

The *ASWP Committee* has developed working relationships with safety associations and government agencies. Although the primary contact is with the *Workplace Safety and Prevention Services (WSPS)*, connections with the *Infrastructure Health and Safety Association (IHSA)* and other safety associations occur. *WSPS* is the amalgamated safety association that includes *Farm Safety*, the primary safety association for most arborists in Ontario. *IHSA* is the amalgamated safety association that includes the previous *Electrical Utility Safety Association*. *WSPS* hosts our meetings and provides some administrative support. The Ministry of Labour also supports us as a

Technical Committee, which they can and do approach for specific information on areas of the arborist trade.

The Committee operates through volunteers representing Municipal, Commercial and Utility sectors and meets on a quarterly basis. The representatives from each sector have an equal number of management and workers. However, as with any volunteer organizations it is sometimes difficult to recruit people so our ratio may not be exact. Fortunately this year we managed to fill our vacancies and retain the ratio.

Since 2000 the Committee has accomplished many goals such as: three printings of the *ASWP Guide*, moving documents from paper format to electronic and making them free to download, developing two testing protocols for fall protection knots and spar tree fall protection systems, submitting comments on various *MoL* initiatives and advising the *MoL* on specific arborist safety issues.

Our goals for 2015 are: to revise the *ASWP* documents, develop a new website with the assistance of *WSPS*, move the documents from their current location to the new site, improve the communications links to ensure easier participation from stakeholders like yourself and encourage participation in reviewing newly developed work practices. Also, the work of the sub-committee reviewing the task of hoisting a worker with a crane should have some results to share. In addition, the Committee will review the recommendations from the *Arborist Round Table Safety Discussions* held in January, 2014 with the analysis of the *Arborist Trade Lost Time Injuries Review* to address safety concerns in the industry.

As we work through these goals we will endeavour to keep industry associations advised of the progress.

## Arborist Round Table Safety Discussion

The *Arborist Safe Work Practices (ASWP) Committee* held a round table discussion in January, 2014. Thirty arborists who represented individuals and companies gathered to discuss safety in the arborist industry. Since 2011 there have been six fatalities in the arborist industry, two in 2014 alone. In addition, 199 lost time

injuries from 2009-2013 were recorded. The accident and incident record for the arborist trade in Ontario is not good. This meeting provided an opportunity to talk about the potential causes and present possible solutions.

The meeting began with the Ministry of Labour (*MoL*) providing information on new legislation for 2014 including mandatory training for workers and supervisors and the Working at Heights legislation for the Construction sector. The *College of Trades* were also represented and presented information about the College and the process for changing a voluntary trade to a regulated trade.

The attendees then heard from the Chair of the *Arborist Safe Work Practices Committee* regarding the statistical data for accidents and injuries. The group then broke into smaller groups to brainstorm ideas to present to the group as a whole. The following were the group's discussions:

1. Discussion of mandatory *WSIB* requirement for all workers working in the arborist utility arborist trade;
2. Better data from *WSIB* with respect to incidents reported – causes, where, how, etc.;
3. More training resources (*MTCU*) needed for companies outside of the GTA – specifically eastern and northern Ontario;
4. Better distribution of incident information to workers;
5. More public awareness for the trade of arborist and utility arborist – not just anyone with a truck and chainsaw can be one of them;
6. Seek insurance companies support that only skilled workers should be performing work on properties – define required skills for the worker and company requirements for skills;
7. Moving the volunteer trade of Arborist to a Mandatory Trade through the College of Trades did not have full support from all members;
8. Begin awareness of skills and trade through the primary school grades;
9. *ASWP* production and public stakeholdering – need to get more information out to stakeholders of the committee and the work it is doing;

10. Review scope of work for trade to see which parts should have more focus for safety i.e. fall protection, and ensure that those areas are sufficiently addressed in the *ASWP* material;

11. Mandatory licensing through *MoL* for all businesses that operate an arborist / utility arborist business.

The *ASWP Committee* is reviewing these comments and will develop an action plan that addresses items they can influence.

## Arborist Industry Lost Time Injuries Review

The *Arborist Safe Work Practices (ASWP) Committee* conducted a review of *Lost Time Injuries (LTI)* for the arborist trade from data supplied through *Workplace Safety and Preventative Services (WSPS)*. The data was compiled from information from the *Workplace Safety and Insurance Board (WSIB)* Rate Group 190 and further defined to the Classification Unit for Landscapers and Tree Surgeons. The data did not include workers outside of this group such as utility arborists or municipal arborists because they are grouped with a number of different classifications within their Rate Group and would be difficult to flush out those numbers. An *LTI* occurs when an employee is injured and a claim is made and granted through *WSIB*.

The analysis grouped the information into specific headings based on the information provided. The represented years are from 2009 to 2013 with a total number of *Lost Time Injuries* during this period at 199. The percentages for each heading are based on the total injuries. The data provided also indicated that the average years of experience for an injured worker was three years and the average age of the injured worker was 30 years old. The data also indicated that the average length of time off was 82 days.

The analysis of the data indicates that the highest Injury Type were sprains and strains with 50% of the *LTI* injuries. The typical injury location is the upper body (shoulders to waist), at 45%. The highest causal factor for *LTIs* is due to strike by at 44%.

This analysis, along with the results of the *Arborist Round Table Safety Discussion*, will guide and focus the activities of the *ASWP Committee* in 2015.



by Bryce Gunson

# Climate Change S.O.S.

## (SAVE OUR SYRUP!)

Climate Change S.O.S. (Save Our Syrup!) is a recently completed 2-year-pilot program at Mountsberg Conservation Area geared towards grade 9-10 high school students from the Halton Region School Board. Highlighting the effect of climate change on one of eastern Canada's great natural assets and contributions to the cultural landscape – the sugar maple (*Acer Saccharum*) and maple syrup, the program has brought more than 600 students out of their classrooms to experience and explore the working maple sugar bush at Mountsberg. The on-site experience, led by Brenna Bartley from Mountsberg, teaches students the social and economic benefits maple trees provide to Canadian rural communities, the challenges a changing climate may have on the sugar maple, and the potential impacts for regional biodiversity and rural economies. Sugar maples are more susceptible to the effects of climate change than many other tree species due to their shallow roots and sensitivity to changes in temperature and moisture, making them an ideal species for students to study.

While on site to study the sugar maple population, the students engage in activities that helped them to understand the biodiversity supported by maple syrup production as well as the economic "ecosystem" that the sugar bush supports in the community. A short walk brings students out to the sugar bush, where students work as teams of citizen scientists to collect data in order to establish a baseline of data on the health of the trees. No data of this kind has previously been gathered at Mountsberg. Dr. Jennifer Baltzer & Dr. David Morris from Wilfrid Laurier

University worked to establish an effective study plot approach, allowing students to take measurements of the trees and assess their overall health. The study area is 25mx25m and consists of 25 one-metre square plots. All trees measuring over 5cm diameter at breast height have been tagged and included in the monitoring project. A total of 33 trees were big enough to be included in the study; this group consists of 13 Sugar Maples (generally mature, canopy trees), 15 White Ash trees (all young, understory trees) and 5 American Beech (all young, understory trees). This information will be used to help reveal possible effects of climate change on the Mountsberg sugar bush.

In addition to this, researchers at Wilfrid Laurier University, led by Dr. Brenda Murphy and Mr. Bryce Gunson, conducted an assessment of the impact of the Mountsberg program. The goal was to understand how sharing knowledge about the impacts of climate change on a valued ecosystem and commodity (namely sugar maple ecosystems and maple syrup) influences students' knowledge, attitudes, and behaviours toward climate change. An assessment survey was administered by teachers both before and after the visit (pre-test and post-test) to Mountsberg.

Results from the 517 surveys indicated positive changes in knowledge of climate change and maple syrup, and positive changes in students' attitudes regarding their ability to lessen their impact on climate change. Although we didn't see a statistically significant change in behaviour towards climate change, the literature indicates this is the hardest attribute to change. Overall, feedback on the program from both students and teachers has been extremely positive, with many expecting to participate again this spring. This successful pilot program has resulted in the program now being offered as regular programming at Mountsberg. For more information, please contact Bryce Gunson at (519) 756-8228, Ext. 5405 or [bgunson@wlu.ca](mailto:bgunson@wlu.ca).

*We would like to acknowledge the generous support of the Canadian TREE Fund through the Jack Kimmel grant, Wilfrid Laurier University, Conservation Halton (Mountsberg), the Social Sciences and Humanities Research Council (SSHRC), the Ontario Ministry of Agriculture, Food, and Rural Affairs (OMAFRA), the Halton Regional District School Board, the Halton Catholic District School Board, along with support from an anonymous donor.*





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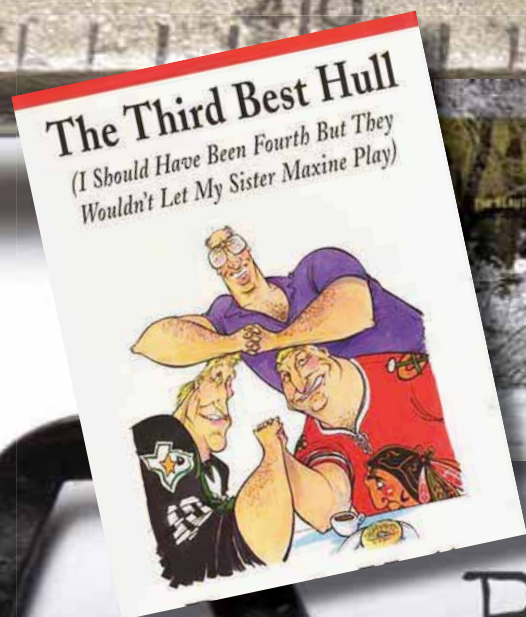
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## BOOK REVIEW

### THE THIRD BEST HULL

By Dennis Hull

Hockey legend Gordie Howe once said there were two superstars in the Hull family: Bobby, the Golden Jet and one of the greatest players ever to tie up a pair of skates, and his brother Dennis, who had a solid career with the Chicago Blackhawks, and is now one of the most sought-after public speakers in North America.

In *The Third Best Hull*, Dennis Hull outlines his life in hockey with humorous anecdotes, insights, and stories. Not just another sports autobiography, this book provides insight into the life of a hockey star without taking itself too seriously. You'll find out about Guy Lafleur speaking English; how he once won a substantial coin toss; and about his ongoing rivalry with Henri Richard, the younger brother of the legendary Canadiens great Maurice Richard. Along the way, Dennis gives the reader an account of the famed 1972 Russia-Canada series and speaks with stunning candour about his brother, Bobby, his nephew and St. Louis Blues' star Brett Hull, and hockey legends like Howe, Ken Dryden, and Bobby Orr. (©1998, 2013; paperback, 208 pages)

Available at the 2015 ISAO Conference & Trade Show.

### ICE STORM 2013

From The Toronto Star

*Ice Storm 2013* documents our worst storm in over two decades. With photos from the Toronto Star's award-winning photographers and additional pictures from members of the public who captured what was happening around them, the book provides a visually stunning collection and is a fascinating historic record of this powerful ice storm; its beauty, its devastation, and the aftermath. From downed trees to ice-draped berries, and from neighbours' open doors to heroic and tireless hydro workers/arborists, the stories of the ice storm come alive in this beautiful keepsake book. (©2013, hardcover, 144 pages)

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by Kevin T. Smith, Ph.D, Northern Research Station, USDA Forest Service, Durham

# TREE RECOVERY FROM Ice Storm Injury

Ice storms are part of nature, particularly in northeastern North America. The combination of air and surface temperatures, precipitation, and wind that result in damaging layers of ice is very specific, occurring infrequently at any given location. Across the region however, damaging ice is formed in fragmented areas every year. Occasionally as in December 2013 and January 1998, a closely-spaced series of ice storms severely damaged large rural and urban areas in Ontario and adjacent provinces and states.

Ice storms immediately affect people's lives through damage to buildings and to the infrastructure for transportation and energy. By necessity, governments and news media focus on public safety and human effects of infrastructure damage. With major storm events, aerial and ground surveys assess the impact of tree injury on infrastructure over large areas of the landscape or along stretch of roadway or utility corridors. After the immediate safety and cleanup needs are met, public attention moves on to other topics. But what contributes to the severity of tree injury and eventual recovery? Some of the lessons learned from the tracking of individual trees in rural forests since the northeastern ice storm of 1998 (Shortle and others 2014) are summarized in this article.

## References:

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- Smith, K.T. 2014. Origin of buds, branches, and sprouts. Tree Care Industry 25(5): 22-27. (Available at <http://www.treesearch.fs.fed.us/pubs/45865>)

Crown injury that occurs over a time span of minutes to hours induces a cascade of changes that affects trees for years to decades to come. The force of accumulated ice aggravated by wind (Fig. 1) can exceed the strength of the stem and branch system in tree crowns (Kraemer and Nyland 2010). Breakage and tree crown loss result from stem snaps, branch breaks and pullouts, and ripped forks. The strength limits may be due to inherent wood properties such as compression or bending properties as measured in a wood testing lab. Under sufficiently extreme conditions, any size of branch or stem of any tree species is vulnerable to breakage. Under less extreme loading, branches or stems may bend and become supported by neighbor trees or by the ground without breaking. Crown architecture contributes greatly to the degree of stress loading with the upright decurrent shape of pine and hemlock

being less vulnerable than the spreading excurrent shape of elm and ash. At the level of tree biology, crown breakage affects tree budgets through: (1) reduced income from photosynthesis and (2) increased expenses for defense and recovery.

Less obvious than broken branches but still a consequence of breaks is the sudden blockage of potential water flow from air bubbles or emboli introduced into the water-conducting sapwood cells or pores. Living xylem parenchyma cells quickly die from desiccation following introduction of air into sapwood. Into the growing season, metabolic shifts form compartmentalization boundaries at the margin of healthy and killed sapwood (Shortle and Dudzik 2012). These boundaries consist of plugging, waterproofing, and anti-microbial materials that resist the spread of lost function and infection. The sapwood killed by desiccation and subsequent infection discolors, usually becoming darker than healthy sapwood. This wound-initiated discoloration generally occurs within compartmentalization boundaries. Eventually, wood-destroying fungi can spread within the discolored wood.

Crown breakage and wounding contribute to tree infection through (1) providing an entry pathway for new infections of killed sapwood and (2) the release of previously

Fig. 4. Patterns of growth suppression and recovery in trees injured in the 1998 regional storm. Increment cores (bark to the right) were collected after the 2000 growing season and the onset of the 1998 growing season is marked (arrows). PHOTO CREDIT: Kenneth R. Dudzik, USDA Forest Service, Durham, New Hampshire, USA



Fig. 1. Ice deposition and tree injury are a natural part of northeastern forests

compartmentalized infections in the stem and root system. Intact bark provides good protection from invasive wood decay fungi. The high moisture content and low oxygen levels in healthy sapwood limits the growth of most aerobic organisms responsible for decay. Mechanical injury, sapwood cell death, and wood aeration favors initial infection and spread. However, the production of compartmentalization boundaries both in wood present at the time of injury and in wood formed after injury resists the loss of healthy sapwood function (Shortle and Dudzik 2012). Compartmentalization boundaries are expensive as organic compounds are diverted from normal energy-yielding to defensive processes. Tree species vary to the extent to which they commit resources to compartmentalization boundaries and individual trees vary in the availability of metabolic resources for defense at the time of injury and during recovery.

Systematic dissection of storm-injured trees show that discoloration and decay moves slowly from broken branches and may take years to reach the main stem. Dissection also revealed that trees that initially survived canopy loss were at risk from the release of previously compartmentalized infections, particularly infections introduced by earlier wounds of the lower stem or woody root system. Infections can be released by mechanical breaching of compartmentalization boundaries, low availability of energy to

maintain those boundaries, or increased aeration of infected and adjacent wood.

Following crown breakage, the key to long-term survival and restoration of growth rates is the building of a new crown to replace the lost photosynthetic capacity. New branches can form from sprouts that arise from pre-formed latent buds and from new meristematic points, frequently at the wound margin (Smith 2014). Sprouting is sometimes viewed negatively as a source of timber defects in rural forests or as a source of unsightly and weak branch attachments in urban trees. However, the ability to reiteratively sprout and build a new crown is fundamental for tree survival. Frequently, the character of high-value veteran trees is the result of sprouting and crown recovery after storm injury of long ago.

Initial surveys of severity and extent of ice storms document the footprint of human disruption. Such "snapshots" usually do not provide a measure of net economic or ecosystem loss. The tracking of individual trees showed that damage was strongly related to: 1) Tree health before the storm, particularly with respect to root disease, 2) Ability to sprout and rebuild crowns, and 3) Closure of open wounds. Accurate prediction of recovery requires looking for signs of infection in the roots and butt of trees and assessing the capacity for crown restoration. (More images cont'd on next page.)





Fig. 3. Tree recovery depends on rebuilding tree crowns. Three years after storm injury for examples of paper birch, sugar maple, and white ash (left to right).

Fig. 2. Wound-initiated discoloration in paper birch about three years after storm injury



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The Education Committee is excited to share with you the preliminary conference program for the 66<sup>th</sup> ISAO Annual Conference and Tradeshow. This year, the Conference and Tradeshow is being held at Caesars Windsor Hotel and Casino, in Windsor, Ontario. Caesars Windsor is an exciting venue for us; it brings us to a place where we can relax and enjoy all of the amenities that a resort like Caesars can offer us, as well as spectacular conference facilities. The resort itself is well situated, downtown across from Detroit, Michigan, only 3 min from Via Rail, and 15 minutes from Windsor International Airport and 25 minutes from Metro Detroit Airport.



With us having a strong line-up of educational speakers for the conference including Dr. Linda Chalker-Scott from Washington State University, award-winning journalist, Andrew Nikiforuk, and Dr. Kevin T. Smith from the USDA Forest Service; we welcome you to learn the latest research, expertise and knowledge of Arboriculture in North America. In addition to our educational speakers, we are pleased to announce that hockey legend Dennis Hull will be our guest speaker for our Gala Dinner. It was 1972 when one of the most historic hockey events ever took place. A team of Canadian born NHLers took on a squad of Russia's hockey stars in an eight-game series that would change how the world looked at hockey and how the game would be played in the future. Dennis Hull was one of those NHLers! Come and listen to one of the top after-dinner entertainers in North America tell us about his stories. It's going to be a great conference and networking opportunity!

## BRIEF UPDATES FROM THE EDUCATION COMMITTEE:

- Conference planning and preparations are well underway;
- ISAO Bookstore will be open at the conference & tradeshow;
- Education Committee members to date include:
  - Mike Watson
  - John Ransom
  - Rory Quigley
  - Linda Hawkins
  - Murray Potts
  - Rebecca Lord
  - Heidi Breen
  - Mandy Vandenburg
  - Mark Burleton
  - Emma Gilmour

- 2015 Workshop series is under review:
  - Continued partnership with the Ontario Tree Climbing Committee for a September workshop
  - Scoping two workshops with Jen Llewellyn, one in the GTA and one in the Ottawa area.
- We always value new ideas for the educational conference and workshop series!

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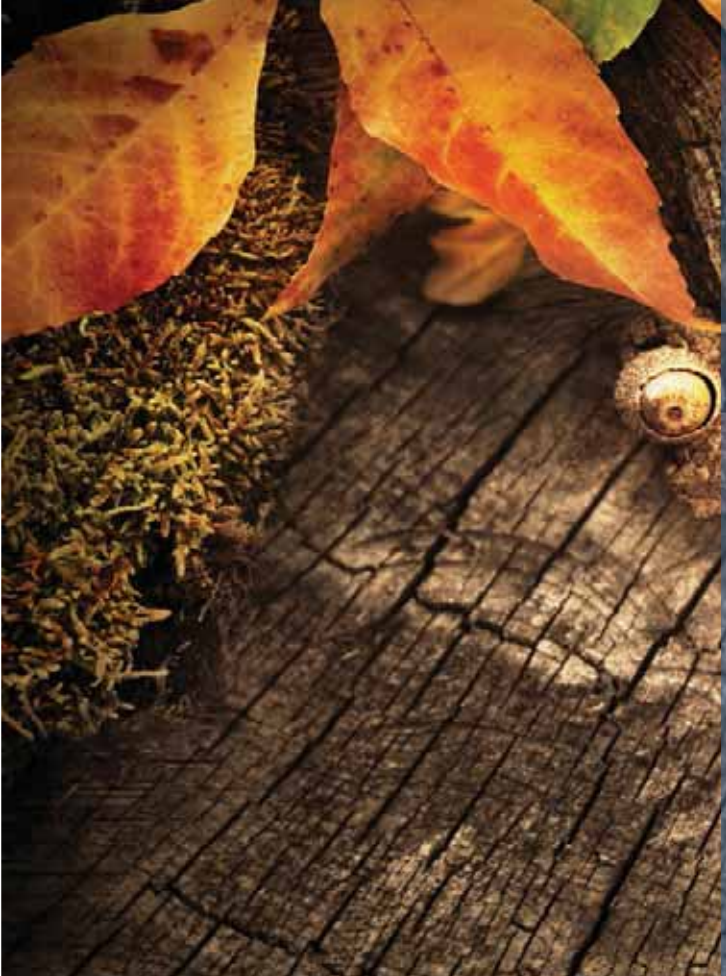
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**Location:** Caesars Windsor Hotel & Casino, JOVIS Room, 377 Riverside Dr. E, Windsor, ON N9A 7H7

**Preparatory Workshop:**  
Tuesday, February 17, 9 am-5:00 pm

**Certification Exam:**  
Wednesday, February 18, 8 am-12:30 pm

For more information, please contact the ISAO office at 416-493-7022. The registration form can be found at [www.isaontario.com](http://www.isaontario.com).

**Cost:**  
\$130.00 (includes taxes) – MEMBER  
\$195.00 (includes taxes) – NON MEMBER

WOMEN IN ARBORICULTURE ONTARIO BREAKFAST

Friday morning | February 20<sup>th</sup>  
*at the ISAO Conference & Tradeshow in Windsor*



The Women in Arboriculture Ontario Breakfast will be held on Friday morning at the ISA Ontario conference. Attendance is free with the conference. The event is for women to help connect all women in arboriculture. Some women may be the only females in their workplace, where others may want to share ideas regarding gear or techniques that they have developed.

The long term goal is to focus more broadly on promoting and encouraging the participation and visibility of women in arboriculture. We aim to achieve this by providing opportunities for women in our industry to network, socialize and support one another, while discussing the risks, benefits and challenges that we all face.

The group will concentrate on establishing their own aims which may include but not be limited to:

- Achieving greater attendance and event structure for women attending events;
- Ensuring greater involvement and participation of women through attendance and speaking engagements at conferences, seminars and workshops;
- Connecting women regionally, nationally and internationally via an online forum or other systems to act as a sounding board for each other.





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66<sup>th</sup> Annual ISAO Conference & Trade Show

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# 2015 Conference Agenda\*

CHART YOUR COURSE. HERE'S A LIST OF ALL THE VALUE-ADDED COMPONENTS.

## Wednesday, February 18<sup>th</sup>, 2015

8:00 am - 8:30 am	30min	REGISTRATION
8:00 am - 12:00 pm	4hrs	ISA CERTIFIED ARBORIST EXAM
8:30 am - 8:45 am	15min	OPENING CEREMONIES Conference Welcome: John Ransom, ISA Ontario Chapter President
8:45 am - 10:15 am	1hr, 30min	KEYNOTE SPEECH Killing Trees with Kindness: How We Enable Trees to Their Eventual Demise Dr. Linda Chalker-Scott, Washington State University
10:15 am - 10:45 am	30min	TRADESHOW AND REFRESHMENT BREAK
10:45 am - 12:00 pm	1hr, 15 min	Evaluating Information - How To Find Out What Works, What Doesn't, & Why Dr. Linda Chalker-Scott, Washington State University
12:00 pm - 1:00 pm	1hr	TRADESHOW AND LUNCH BREAK
1:00 pm - 2:00 pm	1hr	Tree Injury & Recovery From The January 1998 Regional Ice Storm Dr. Kevin T. Smith, USDA Forest Service
2:00 pm - 3:00 pm	1hr	Elm Recovery Project Dr. Shelley Hunt
2:30 pm - 3:00 pm	30min	TRADESHOW AND REFRESHMENT BREAK
3:00 pm - 3:30 pm	30min	Understanding Pollination for Trees and Arboriculture Dr. Peter Kevan & Anne-Marie Roussy
3:30 pm - 4:30 pm	1hr	The Transformative Power of Urban Trees Vincent Pietrepaliol
4:45 pm - 5:45 pm	1hr	AFFILIATION GROUP MEETINGS MAUF Municipal Arborists and Urban Foresters OCAA Ontario Commercial Arborists' Association Dinner UAA Utility Arborists Association CTF Canadian Tree Fund AGM
8:00 pm - 12:00 am	4hrs	HOSPITALITY SUITE



## Thursday, February 19<sup>th</sup>, 2015

7:30 am - 8:00 am	30min	REGISTRATION				
7:00 am - 8:00 am	1hr	DELEGATES AND PAST-PRESIDENTS' BREAKFAST				
8:00 am - 8:30 am	30min	MORNING GREETINGS: John Ransom, <i>ISA Ontario Chapter President</i> Canadian TREE Fund Update and Recognition Ceremony: John Wilson, <i>CTF Chair</i> ISAO MEMBER UPDATE - INTRODUCING OUR NEW BENEFITS PACKAGE Christine Finn, <i>CNLA</i>				
8:30 am - 9:30 am	1hr	Empire Of The Beetle Andrew Nikiforuk				
930 am - 10:00 am	30min	TRADESHOW AND REFRESHMENT BREAK				
10:00 am - 10:30 am	30min	TREE WORKER STREAM	PLANT HEALTH CARE STREAM	LEADERSHIP STREAM	ISAO Policy & Procedure Question and Answer  Arthur Beauregard	
		Worker Safety in Ontario Ron Lucas <i>MOL</i>	<i>Plant Healthcare Products: Miracle or Marketing</i>  Linda Chalker- Scott	Responsibility & Awareness of Fall Protection Gear and Techniques Sean Hooper <i>IHSA</i>		
10:40 am - 11:10 am	30min	Fall Protection Sean Hooper <i>IHSA</i>		Electrical Awareness Responsibility Andy Kerr		
11:20 am - 11:50 am	30min	Electrical Awareness Andy Kerr <i>IHSA</i>	<i>LEAF &amp; The Urban Forest</i> Local Enhancement and Appreciation of Forests (LEAF)	Employer Safety Training & Recording Requirements Ron Lucas <i>MOL</i>		
12:00 pm - 1:00 pm	1hr	TRADESHOW AND LUNCH BREAK				
1:00 pm - 1:30 pm	30min	ISA ONTARIO AGM <i>Student Session to Meet the Employer AND/OR Climbers Corner - Understanding Your Gear</i>				
1:30 pm - 2:30 pm		Reduce the Crown, Weather the Storm Ryan Redvers	Improving Street Tree Performance - York Region Experience Adam Barkovitz <i>Forester, The Regional Municipality of York</i>	Severe Weather In Ontario Geoff Coulson <i>Environment Canada Meteorologist</i>		
2:30 pm - 3:00 pm	30min	SPONSOR: TRADESHOW AND REFRESHMENT BREAK				
3:00 pm - 4:30 pm		SRT - Single Rope Technique Gareth Tudor-Jones <i>Bartlett Safety &amp; Training</i>	Managing Forests In A Changing Climate Gary Neilson <i>Ministry of Natural Resources</i>	Lessons Learned, The Town of Richmond Hill's Successful Approach To 2013 Ice Storm Jeff Stewart <i>Town of Richmond Hill</i>		
5:30 pm - 7:00 pm	1hr, 30min	CANADIAN TREE FUND SILENT AUCTION & SOCIAL (CASH BAR)				
7:00 pm - 9:30 pm	2hr, 30min	CONFERENCE DINNER & BANQUET feat. entertainer Dennis Hull				



Friday, February 20<sup>th</sup>, 2015

7:00 am - 8:30 am	1hr, 30min	<b>DELEGATE BREAKFAST</b>	<i>Women's Only: Women in Arboriculture Ontario Breakfast</i>
8:30 am - 9:00 am	30min	<b>ONTARIO TREE CLIMBING COMPETITION 2014 AWARDS &amp; UPDATE</b> <i>Julie Tucker (Committee Chair)</i>	
9:00 am - 10:30 am	1hr, 30min	<b>HEAR FROM THE EXPERTS ON RISK MANAGEMENT FROM TREE CLIMBING, TREE MANAGEMENT TO STORM RESPONSE</b>  Panel Discussion with Sean Hooper ( <i>IHSA</i> ), Andy Kerr ( <i>IHSA - Hydro Specialist</i> ), Ron Lucas ( <i>Ontario Ministry of Labour</i> ), Sharon Lilly, Jeff Stewart, Gareth Tudor-Jones, Dr. Linda Chalker-Scott, <i>Washington State University</i> . Moderated by Ian Bruce	
10:30 am - 11:00 am	30min	<b>REFRESHMENT BREAK</b>	
11:00 am - 11:45 am	45min	<b>Key Performance Areas</b>  <i>Gareth Tudor-Jones, Bartlett Safety &amp; Training Coordinator</i>	
11:45 am - 12:30 pm	45min	<b>Life After Production Tree Work &amp; Tree Risk Management</b>  <i>Sharon Lilly, Director of Educational Goods and Services at the International Society of Arboriculture</i>	
12:30 pm - 1:30 pm	1hr	<b>CONFERENCE CLOSE</b>  <i>Ken Gillies, ISA Ontario Chapter President</i> <b>Packed Lunch</b>	



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**Please make cheques payable to ISA Ontario.**

Important! Payment with cheque, Visa, Mastercard or PO# must accompany registrations. Notification will only be sent if registration is not accepted. To reserve at our host hotel, the Caesars Windsor Hotel & Casino, call the Reservations Department at 1(800) 991-7777 and request the special convention rate for ISAO. Rooms start at \$129.00 and a block will be held on a first-come, first-serve basis. For more information about the Caesars Windsor Hotel & Casino, visit them online at <http://www.caesarswindsor.com>.

**PLEASE REGISTER ME FOR:**

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<input type="checkbox"/> Full Conference (3 day package)		\$467-10%=\$420***	\$599-10%=\$539***	\$284-10%=\$256***
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<input type="checkbox"/> Banquet Ticket (Thursday pm)		\$90	\$90	\$90
	<b>13 % HST</b>	\$ _____	\$ _____	\$ _____
	<b>Total including HST</b>	\$ _____	\$ _____	\$ _____

\* Students must show proof of enrolment in a recognized full-time arboriculture, horticultural or other approved program.

\*\*\* To receive 10% off the full conference price, you must also book your room at the Caesars Windsor Hotel and show proof of purchase to ISAO. All early bird registrants are entered in a draw for the chance to win 1/5 ISAO bookstore gift certificates.

**How did you hear about the conference?** ☐ Ontario Arborist ☐ ISAO Website ☐ ISAO Email Notice ☐ Colleague

**What is your sector industry?** ☐ Commercial ☐ Utility ☐ Municipal ☐ Climber ☐ Foreman ☐ Owner ☐ PHC ☐ Sales

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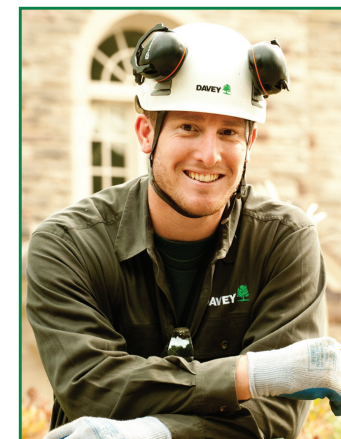
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# NEW YEAR GREETINGS from the CANADIAN TREE FUND

Greetings to all from the Canadian TREE Fund. Although not as harsh as last year, winter is upon us and it is nearly time to gather for the ISAO Annual Conference in Windsor.

This is my first year with the *Canadian TREE fund (CTF)* and it has certainly been an insightful one. I volunteered because trees have always been a big part of my life and it has taken me this long to find some time to give back.

Working in the *MNR Fire Program* in the early 2000s supported my schooling at both U of T and U of G. I graduated with degrees in both architecture and landscape architecture, but it has been the trees to which I keep going back. I completed my ISA certification in 2012 and have kept busy since then working on tree issues for the development industry and working as hard as possible to see that our forest resources are maintained. When development chooses to bulldoze, we work to replant with trees that will not only satisfy municipal requirements, but thrive in the conditions in which we plant.

I've found that the folks who volunteer with the *CTF* are key to its relevance. It is rare to find people so committed to bringing together members of the arboricultural community, whether it is through golf tournaments or a *Tour des Trees* bicycle tour. These events not only raise money for better understanding of arboricultural issues, but also foster that sense of community that I find so special within the arboricultural field.

One of the interesting aspects of my involvement with the *CTF* was going through the selection process for the *Canadian Jack Kimmel Grants*. This year we received nine worthy applications from across the country - the research presented came with a broad focus, from high school outreach on the west coast, medicinal research in the centre, to *Spruce Budworm* research in the east. Each application was evaluated on a standard set of criteria, including its potential impact on the arboriculture industry. Three deserving applicants were given research funding for their projects totally, close to \$35,000 total:

**1. Take a Stand: Youth for Conservation** - Prof. Alison Kermode, Simon Fraser University, Victoria BC - \$13,000 awarded!

This project seeks to foster environmental stewardship in youth in the Greater Vancouver Area through an outreach program hosted by graduate students at Simon Fraser University. Outreach activities will be performed at high schools and within the community to provide knowledge and skills "in tree biology, physiology and maintenance, urban forest design, and leadership mentorship for youth caring for trees in their school or community."

**2. Structural Evaluation of EAB affected Trees** - Phillip van Wassenae, Urban Forest Innovations, Mississauga ON - \$15,000 awarded!

This project will investigate the expected structural decline of

ash trees during their infestation with the *Emerald Ash Borer* and use tree-pulling tests on the stems and basal root areas of the trees. This research will inform Risk Management Plans being created by Urban Foresters and Arborists. This research will also support tree worker safety by clarifying the risks of working around such infested trees.

**3. Impacts of an Invasive Beetle on Spruce Budworm Outbreaks** - Steve Heard, University of New Brunswick, Fredericton NB - \$6980 awarded!

This project will investigate the interaction between a currently escalating *Spruce Budworm* infestation and the slow moving *Brown Spruce Longhorn Beetle* on native red spruces in the Halifax area. This research has the potential to affect decision making for urban forest managers when dealing with infected trees.

In addition to the Canadian grants, the *CTF* provides funding for *Jack Kimmel International Grants* with money that is donated to riders who participate in the *Tour des Trees* annual cycling event. These grants are awarded by the *International TREE Fund*, with recommendations made by a selection committee, which includes two *CTF* trustees. At the present time those two trustees are Cathy Bentley and Gerard Fournier. Similar to the *CTF* process, fund selection is based on certain criteria with the intention of supporting projects that will have significant impact on our industry. This year three projects were chosen, collectively accounting for \$30,000 of funding:

**1. Oleksandr Gromyko, Ivan Franko National, University of Lviv, Ukraine:** "Screening of actinobacteria for activities that protect trees against bacterial and fungal diseases." \$10,000

**2. Manuela Baietto, University of Milan, Italy:** "Effect of root-

stimulating treatments on physiologic and growth performance of *Platanus x acerifolia* and *Ulmus pumila* seedlings". \$10,000

**3. Johanna Deak Sjoman, Swedish University of Agricultural Science, Sweden:** "The role of tree species in cooling the urban climate - application in tree planning and landscape architecture." \$10,000

We would like to thank all who submitted proposals for their interest in the *Canadian TREE Fund*. Our trustees debated each of the proposals, their merits and applicability to the field of arboriculture. We take the responsibility very seriously, but due to the number of proposals and funds raised, we are unable to fund all proposals received. A list of previously funded proposals can be found on our website.

All of this important research could not take place without the generosity of our donors! You can donate any time on our website - [www.canadiantreefund.org](http://www.canadiantreefund.org). With the upcoming Annual Conference, please don't forget that we will be hosting a silent auction on Thursday, February 19<sup>th</sup>.

**Furthermore, the Canadian TREE Fund's AGM will be held on Wednesday, February 18<sup>th</sup> at 4:45pm for those who would like to attend.**

**We are always looking for volunteers to help us with our work, if you are interested, please don't hesitate to stop by and let us know.**

**Ryan Paliga**  
Canadian TREE Fund Trustee  
[thepaliga@hotmail.com](mailto:thepaliga@hotmail.com)

*The Canadian TREE Fund: "Making a difference in the future of urban forestry through research and education."*





# Canadian TREE Fund



A TRIBUTE TO THOSE WHO SUPPORTED  
THE CANADIAN TREE FUND  
THROUGHOUT 2014

## 2014 Donor Recognition



# The Canadian TREE Fund continues to influence the evolution of our industry

On behalf of all those who will benefit from the education and research projects made possible over the past year a sincere THANK YOU and CONGRATULATIONS go out to our Canadian TREE Fund community including the people and organizations below who generously donated their time and money in 2014.

You should be proud of what you have made possible and the impact it has and will continue to have on our industry.

While this year's campaign unfortunately fell short of our \$50,000 goal, we remain committed to our overall mission. Since our humble beginning back in 1996 we have accumulated nearly \$900,000 in donations which supported 70 Canadian projects, 6 International projects, 9 Harold Van Dyke Bursaries and 7 Randy Lidkea Scholarships. That is a lot of tree knowledge and arboriculture know how, that has positively contributed to healthier trees and safer work environments.

As we look ahead to the coming year, we are optimistic that \$50,000 will be realistic and achievable goal for 2015. In addition to our financial goals we hope to raise awareness to the benefits trees provide our urban environments and extend our Tree Fund community by appealing to a wider and more diverse audience who will understand and appreciate the importance giving something back to our industry. And finally we are hoping to attract positive and energetic individuals to join our team of Trustees. If you or someone you know would like to be directly involved in identifying research and education programs to meet the challenges of our urban forests and help to advance the evolution of our dynamic industry, please let us know. Detail information on who we are and what we do can be found on our website [www.canadiantreefund.org](http://www.canadiantreefund.org)

**John Wilson,**  
CTF Trustee

### Why I donate to the TREE Fund...

"I ride in the Tour des Trees and support the Canadian TREE Fund because it is a wonderful experience that is life enriching"

- John McNeil,  
RPF Manager, Forestry Services Parks and Open Space, Town of Oakville





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Claudia Moniz-de-Sa  
Graham Mudge  
Susanne Munro  
Joanna Nakeff  
Thomas Napoleone  
Mary Neilans  
Mary Neilans  
Morley Nelson  
Paula Nelson  
Adele Neuman  
Norm North  
Mary Partridge  
Berta Pavlov  
Doreen Peace  
Jan Pinney

Rick Plovie  
Donna Plumb  
Steven Poutney  
Rory Quigley  
Jack Radecki,  
Urban Forest Council  
Sharon Reid  
Rene Roddick  
Nancy Romain  
Paul Ronan  
Heidi Scheibmayr  
Ken Sharpe  
Les Sigal  
Jacob Smid  
Steve & Rose Steiger,  
Ontario Tree Experts Inc.  
Deb Stewart  
Pat Tanaka  
W.J. Taylor  
Aarin Teich  
Madeleine Thibault-Smith  
Lia Thiesmann  
Allan Thomas  
Sue Throop  
Emily Throop  
David & Shanon Throop  
Brett Throop  
Rob & Jennifer Tinney,  
Tindall Tree Service  
Brian Watson  
Mke Watson, Kelly Tree Service  
Betty Wickman  
John Wilson  
Lynne Wonnacott  
Linda Woodcock





## Ontario 2015 Spring Schedule

### Cambridge, ON

**Tree Dynamics & Integrated Risk Assessment**  
April 9 & 10

**Tree Pruning - Apr. 22**

**Tree Climbing, Fall Protection & Work Positioning**  
April 23 & 24

**Emergency Readiness & High Angle Rescue**  
May 14 & 15

### Nobleton, ON

**Chainsaw Safety & Cutting Techniques**  
February 23, April 15, July 6

**Technical Tree Falling & Cutting**  
April 16 & 17

**Chainsaw Train the Trainer**  
June 7 - 12

24 CEU's for 3 day courses, 16 CEU'S for 2 day courses, 8 CEU's for 1 day courses

## Expert Safety Training & Qualification

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