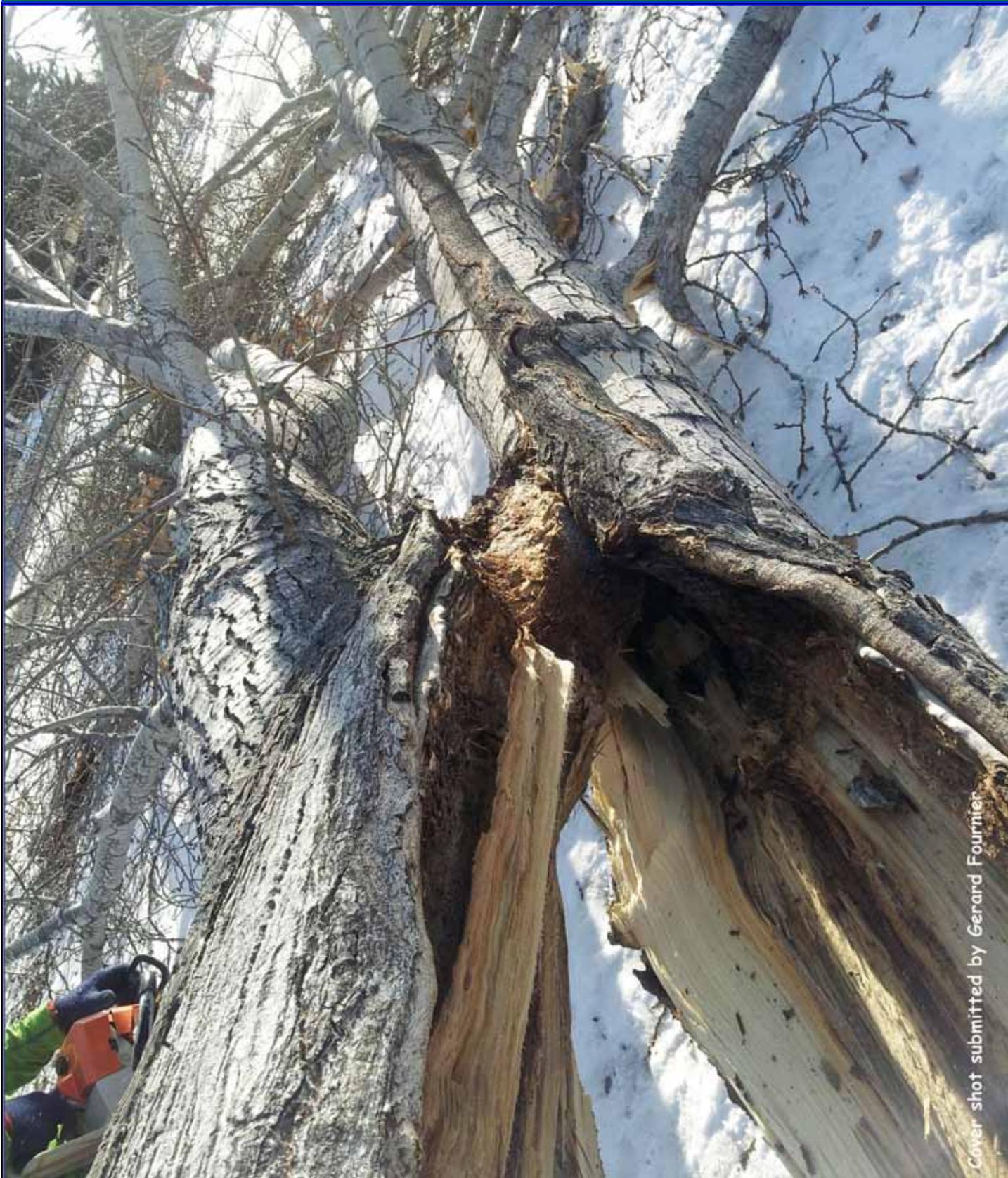


The Prairie Arborist

The Official Publication of the ISA Prairie Chapter Issue 1, 2013



Cover shot submitted by Gerard Fournier



Check out the Prairie Chapter WEB SITE

We have even more significant additions to the website:

Find an Arborist, If you have your 2013 membership paid up AND you are a certified arborist, you can have your name put on our website for the general public to look up and

hire.

The Arborists are listed under each city.

Check out the **conference information** as it goes up on the website.

Watch for the **book catalogue** with the proper pricing so there is no guess work in ordering what we stock at the office.

Soon you will be able to view some of the **old Prairie Arborist publications** on the website as well, so watch for that too.

Tree Climbing Competition 2013 will be held in Edmonton October 5&6

PCTCC In Edmonton October 5th and 6th. Looking for climbers, volunteers and judges to make this the most successful PCTCC to date. Location has yet to be determined. For more information contact **Geoff McLeod** 306-975-2537
Geoff.mcleod@saskatoon.net

Tree Risk Assessment Qualification (TRAQ)

The first weekend of March saw the first delivery of the new ISA Tree Risk Assessment Qualification, known in short as TRAQ. It also was the final training for the first TRAQ trainers.

This is a new ISA program that is designed to help arborists assess tree risks. It is a qualification rather than a certification in that there is an exam that is a part of the course.

The exam consists of a written portion and an in the field tree risk assessment evaluation.

There is also a mandatory train the trainer program to become qualified to teach the TRAQ course and Prairie Chapter member, Dwayne Neustaeter, who was part of the panel of experts who developed this new qualification recently completed the requirements needed to be a trainer for the new TRAQ program.

Green Industry Show & Conference

For over 35 years the Green Industry Show & Conference has been bringing buyers and suppliers face-to-face. It is recognized as one of Canada's premier events for landscape, nursery, garden centre, greenhouse, turf and tree industry professionals.

With a comprehensive speaker line-up and an extensive trade show, over 250 booths, this event continues to bring thousands of industry members together in one convenient location!

Dates: **November 14 & 15, 2013**

Location: Edmonton EXPO Centre at Northlands, Wayne Gretzky Drive & 116 Avenue, Edmonton, AB

To learn more about the Green Industry Show & Conference visit: www.greenindustryshow.com

If you have any questions or would like additional information, contact: Valerie Stobbe, Trade Show Coordinator
Phone: 780-489-1991 or 1-800-378-3198; Fax: 780-444-2152,
Email: valerie.stobbe@landscape-alberta.com; Web site: www.greenindustryshow.com

Prairie Arborist goes Digital in 2013

The first issue of the Prairie Arborist in 2013 will be digital and available at www.isaprairie.com

It's now time to give this a try. We have been working within the economic parameters amount of paper, cost of colour publishing and cost of mailing.

The new Prairie Arborist will be:
 PDF format
 fully downloadable and printable
 Full colour
 Not limited by size, weight or mailing costs

Saves trees however it doesn't mean you should stop planting trees

If you are not on line please contact the Prairie Chapter office @ 1-866-550-7464 to receive a paper copy of your newsletter.

EXAM

ISA Certified Arborist, Utility Specialist, and Municipal Specialist Exam

Olds College, Olds, Alberta

May 4th, 2013

Room 1027 Land Sciences Building

Registration: Deadline: April 18, 2013

Seats Available: 25

Start Time: 8:30 am End Time: 1:30 pm

To register, please contact our Certification Liaison, Gordon White, at gwhite@okotoks.ca or phone 403-938-8958 or

contact the ISA Certification Dept. at:

cert@isa-arbor.com or

<http://www.isa-arbor.com/certification/becomeCertified/index.aspx> or

call 1-888-472-8733.

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ISA International Society of Arboriculture



Register on or before May 31 to receive the early registration rate.

The deadline for preconference registration is July 10.

After July 10, you must register on-site, which begins Friday, August 2.

conferencereg@isa-arbor.com

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Mail to: ISA Registration P.O. Box 3129 Champaign, IL 61826-3129

Mimi Cole, Director for Alberta

A beautiful sunny Alberta day- a little frosty to start, but nothing like what other parts of the country are getting.

Makes working outside a pleasure..... willows are red and gold, white birch and bronze cherry bark- winter colour wow.

The branches of the tamaracks are lacey master pieces in the frost.

Had a good board meeting in January.

The 2013 fall conference planning is well underway. Edmonton is the host City, Bonnie Fermanuik will lead the charge. It'll be great.

Keep your eyes open and ear to the ground, there will be some work shops coming your way as well. Check the web site read your email.

I recently wrote the proctor exam with a few others. Hopefully this will make exam writing more convenient for the budding arborists who want to certify.

I started a new job at year end, in the forestry industry. Jobs for arborists in this part of the world at this time of year are sparse to say the least. My employer supports the fact I was running my own bizz so if that's what you're doing, it can't hurt when it comes finding employment.

I shared a copy of the Prairie Arborist with our Head Forester to foster some arborist/ forestry understanding. We should all be proud of this publication.

Here's bringing a little Alberta sunshine to you all.

Mimi



Submitted by Mike Allen

2013 Manitoba Forest Research Symposium

Presented by the
Canadian Institute of Forestry

Thursday, April 4, 2013
Registration 9:00 am
9:30am – 4:30pm
Convocation Hall
University of Winnipeg

Presentation Topics:

Forest ecosystem restoration
Urban forestry
Forestry operations
Assisted migration
Forest health assessment...and more!

Register online: <http://cif-ifc.org/site/manitoba2>
beginning 4 March 2013. Discounts for CIF members!

Keynote Speaker:
Dr. Christian Messier
Université du Québec

"Urban trees, gardens and parks are complex ecological systems."

- ♦ Presentations from local forestry professionals
- ♦ Student poster competition
- ♦ Educational display booths
- ♦ Great networking opportunities!

Submitted by Don Hay

I was at a workshop this week at Olds College about Nursery Pruning and I was struck by a couple of things that were said:
Variation is beautiful & The basics are important

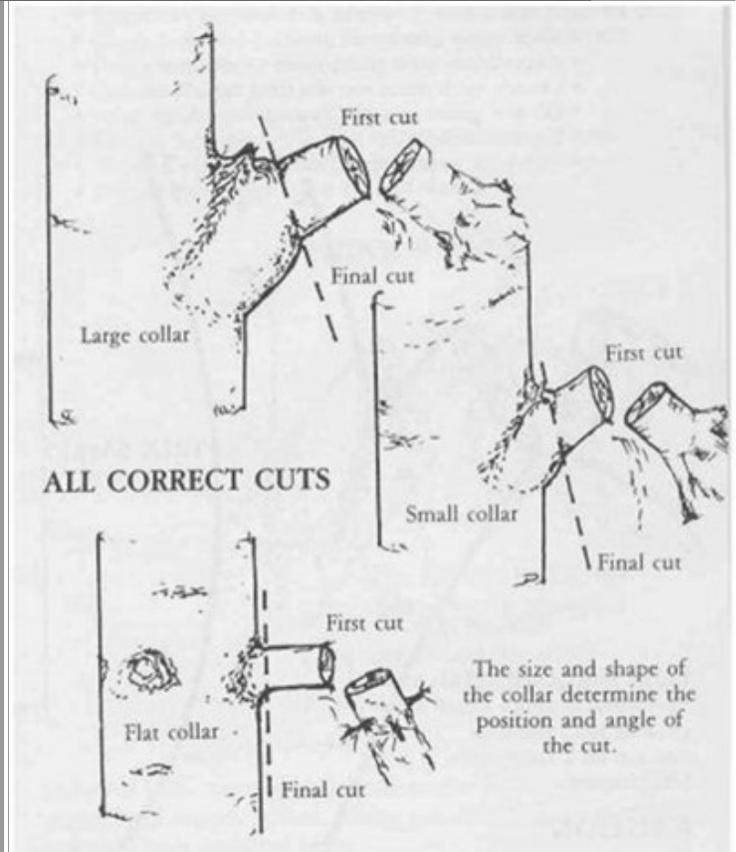
I know that way more was said that impressed me, but for some reason these two things stuck and made me think.

Years ago shortly after having formal instruction in pruning: Don Senior had already given me the informal instruction with the yelling and such, I worked with a "Friend" who wasn't too careful with the way he made his cuts or how he held his saw and secateurs. "It doesn't matter... it isn't my tree... they don't know what a proper cut is" etc. Were his usual comments.

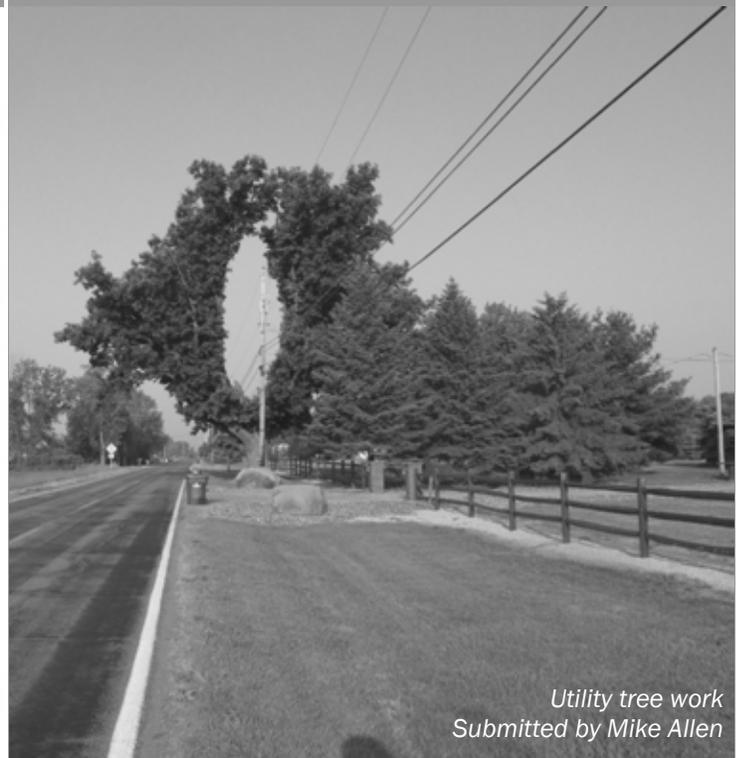
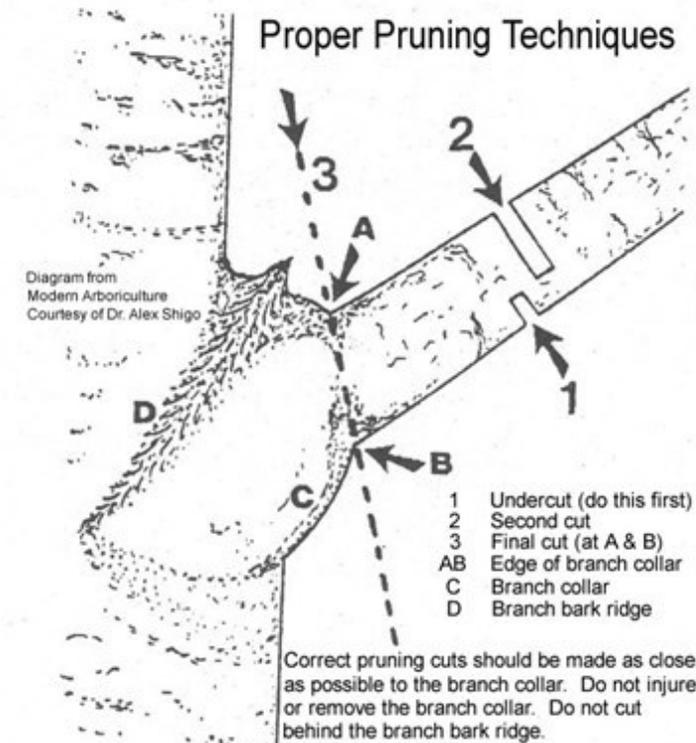
Years later I was by one of those trees and you could tell the difference between the good and bad cuts. It really does matter if there is a stub or if the collar has been cut into.

Some of those poor cuts had developed into a short crack and we all know what that leads to; bigger cracks and worse.

So here are some of the basics that we all know and even though I am sure that none of you are like "MY Friend" was, I thought that this was a good time to look at them again and pat ourselves on the back and say;



that the public needs to hire only ISA Certified Arborists, because the basics do matter and variation is beautiful!



Utility tree work
Submitted by Mike Allen

Dendrochronology and Archaeology

Sheffield Dendrochronology Lab - What is Dendrochronology?

Dendrochronology or tree ring dating is a method of dating which makes use of the annual nature of tree growth. Each year trees such as oak, put on a layer of new wood under the bark. The thickness of that layer - the tree-ring - depends on various factors, particularly climate. Conditions favourable to growth will result in a wide ring; unfavourable ones will produce a narrow one. Trees growing at the same time will show similar patterns of tree-rings. This can be seen best by measuring the widths of the tree-rings and plotting them as graphs. There will be some similarity between graphs from contemporary timbers.

In order to make use of the information contained in the tree-rings, long ring patterns, known as tree-ring chronologies, have to be constructed for use as reference data. These are produced by overlapping ring patterns from successively older timbers, starting with living trees, then buildings, and finally samples from archaeological sites and peat bogs. The Sheffield Laboratory now has a continuous master sequence for England going back to about 5000 BC. This is made up of numerous regional tree-ring chronologies, particularly in the medieval and post-medieval periods, for which the laboratory now has more than 200 reference chronologies from many areas.

To date a timber sample of unknown date, its rings are measured and its ring-pattern matched against the reference chronology rather like fingerprinting. Each ring on the test sample can then be given a calendar date. The precision of the tree-ring date with relation to the felling of the tree will depend upon the completeness of the sampled timber. If bark edge is present the date of the outer ring will be the year the tree was felled. If the timber has been trimmed, the felling date will be less precise but it will be more accurate than any other dating method.

Sheffield Dendrochronology Lab - Dendrochronological Methods

Dendrochronology and Standing Buildings

In practice, it is usually necessary to sample eight to twelve timbers in order to date a building reliably or, where there is more than one major construction phase, eight to twelve timbers per phase.

If a building is undergoing restoration and timbers are

being replaced, it may be possible to remove slices of about 5 cm thickness and send them to the laboratory. Otherwise samples are taken by drilling into the timber with a hollow corer in a discrete position. This causes a little sawdust and leaves a hole 15mm in diameter. We believe that it is more in keeping with a historic building to leave the holes unplugged but they can be filled with plugs if preferred.

Once the building has been sampled, we try to produce a report of the results within eight weeks. We cannot guarantee that our work will result in the production of a date.

Dendrochronology and Archaeological Timber

In practice it is preferable to sample as many timbers as are available in a structure in order to date it. This increases the chances of obtaining a date although, as with any scientific method, we cannot guarantee that our analysis will result in the production of a date.

Samples should be about 5 cm thick and taken from the widest part of the timber or, if present, through the part which contains sapwood. They should be labelled, sealed in clear polythene and sent to the laboratory for assessment. If assessment is to be carried out on site please consult the laboratory for advice.



Sheffield Dendrochronology Lab - Current Research

The Softwood Project

Dendrochronology in Britain and Ireland is founded on the analysis of oak, (*Quercus* sp), but there have been recent notable successes with other species, such as beech, (*Fagus silvatica* L.), and native sub-fossil pines, (*Pinus sylvestris* L.). The conifers frequently found in medieval and post-medieval context remain virtually ignored. This is essentially due to the fact that conifers have been widely imported throughout the last millennia, thus increasing the difficulties associated with their analysis. However, the progressively widespread use of dendrochronology and the increasing co-operation between recognised laboratories throughout Europe and the USA has proved invaluable in identifying imported

(Continued on page 15)

Submitted by Don Hay

Internet Article is from Laboratory Equipment
<http://laboratoryequipment.tumblr.com/post/43739225159/pine-sap-makes-ever-green-plastics-plastic-bags>

Plastic bags are a bane of nature. And not just bags – just about all plastics, really. Most are made out of petroleum, and a piece of plastic, if it misses the recycling bin and ends up in a landfill, will probably outlast human civilization.

But Chuanbing Tang at the [Univ. of South Carolina](#) is developing new plastics that are “green” from the cradle to the grave. Given that the new polymers he’s working on often come from pine trees, firs and other conifers, he’s giving the word “evergreen” added resonance.

Rather than tapping a barrel of oil to obtain starting materials, Tang’s research group instead begins with the natural resins found in trees, especially evergreens. The rosin and turpentine derived from their wood is rich in hydrocarbons, similar but not identical to some components of petroleum.

Hydrocarbon-rich starting materials, whether from petroleum or tree resin, can be converted into various forms of what are commonly termed “plastics” through polymerization. With petroleum derivatives, scientists have invested more than a hundred years of research into refining the polymer chemistry involved, and their success in that endeavor is evident in the range of plastics now part of common parlance, such as Plexiglas, polycarbonate and PVC.

But processes for developing plastics from renewable sources, such as rosin and turpentine, are not nearly as developed. “Renewable polymers currently suffer from inferior performance in comparison to those derived from petroleum,” Tang says.

His laboratory is a national leader in helping change that situation. Tang just received a National Science Founda-

tion CAREER award to further develop the polymer chemistry he has been refining since he arrived as a chemistry professor in USC’s College of Arts and Sciences in 2009. The award from NSF’s Division of Materials Research will support Tang’s laboratory through 2018.

“The aim is to understand how the macromolecular compositions and architectures dictate the properties of the materials we make,” Tang says. “If we can establish clear structure-property relationships, we will be able to achieve the kinds of results we now get from polymers made from petroleum.”

According to Tang, molecules derived from wood products are particularly worthwhile targets. “They’re a rich source of the cycloaliphatic and aromatic structures that make good materials after polymerization,” he says. “They have the rigid molecular structures and hydrophobicity that materials scientists know work well.”

They also have an advantage at the end of their life cycle. By virtue of being a direct product of biology, the renewable starting materials are a familiar sight for the microbes responsible for biodegradation. “Most plastics from non-renewable resources are generally not biodegradable,”

Tang says. “With a polymer framework derived from renewable sources, we’re able to make materials that should break down more readily in the environment.”

Together with graduate student Perry Wilbon, Tang worked with Fuxiang Chu of the Chinese Academy of Forestry to prepare the first comprehensive review of terpenes, terpenoids, and rosin, three components of tree resin (and other natural products as well) that are plentiful sources of cycloaliphatic and aromatic structures.

Published as the cover article in Wiley’s [Macromolecular Rapid Communications](#), the review is a blueprint for just one approach that Tang is taking to develop sustainable polymers from the greenest of sources.



Picture from Google images www.eloph.com

Thank You Arboriculture Canada Training & Education Ltd.

Announcing the 2012 Arboriculture Canada Training & Education Ltd. **"Spirit of the Competition"** Prize Package for the ISA Prairie Chapter 2012 Tree Climbing Championship (TCC) event. This "Spirit of the Competition" prize kit is presented to the person who wins the vote of the TCC chairperson, judges and technicians for having the best sportsmanlike attitude and behavior throughout the duration of the competition!

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Submitted by Jean-Mathieu Daoust

Hello fellow arborists my name is Jean-Mathieu Daoust, current ISA Prairie chapter Alberta director at large.

Thank you for your votes and thanks to my other colleagues who accepted nominations for the position and your willingness to lend a hand if needed.

As you know, a large number of evergreen trees, mainly spruce in our region, develop co-dominant leaders which indicates a structural weakness and potential for failure and damage. This is mainly due to a weak branch attachment with included bark.

The list of causes for this condition includes biological, such as the terminal shoot weevil, fat birds, or mechanical by either pruning or wind damage. A tree can develop a co-dominant leader at any time in its life which means that we arborists should always keep a keen eye on the top of our evergreens to ensure they have a single leader.

One of the more important factors regarding branch attachment is that many co-dominant stems on evergreens have included bark, although some may have lateral branches diverting into leaders.

During wind storms, trees with large co-dominant stems can get ripped apart, leaving a tree with a large wound and often, property damage can result. Oftentimes mature trees damaged in such a way must be removed completely. Even if you have been asked to look at other trees or shrubs taking a few seconds to glance at the tops of evergreens can add value to jobs sold and make our evergreen trees more structurally sound. The general public often under looks the tops evergreen trees, when failure potential and branch attachment is properly explained most people are quite responsive to having the problem remedied.



Repairing a multiple leader on younger shoots is quite simple as the co-dominant stem or stems can be removed right at the source without having to make large cuts. For example a maturing spruce that is between 30 and 40 feet tall which has developed multiple leaders within the past 3 to 5 years can easily be returned to a single leader.

You can correct these by climbing or from a bucket and cutting with a pole pruner if it is not safe enough to make a proper cut with hand tools. For those climbing and not in a bucket, it can be difficult to see the top when making a pole cut, a ground spotter can assist the climber with cut placement and sometimes leader selection.

Occasionally, nursery or garden center trees have double leaders originating from the base, and a complete removal of competing stems is rarely noticed immediately after the cut, and definitely not years after treatment.

Some people may choose to splint a lateral branch to an upright position to re-establish

the main leader to ensure it takes dominance, from my experience most leaders develop best, naturally in most circumstances.

Mature trees with co-dominant trunk leaders are a little more challenging to return to a single leader and in some situations can not be repaired. I would consider a mature co-dominant trunk or mature co-dominant leader as a tree where the competing stems are older than 5 years or where leaders count for more than 20% of tree height on mature trees.

Rather than removing co-dominant stems entirely one may choose to repair competing leaders using a reduction cut on a selected stem below the height of the desired leader to avoid making a large pruning wound and

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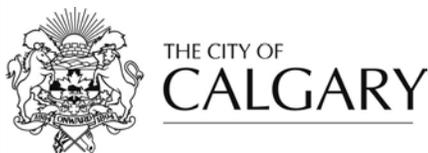
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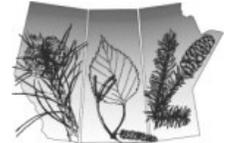


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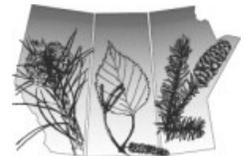
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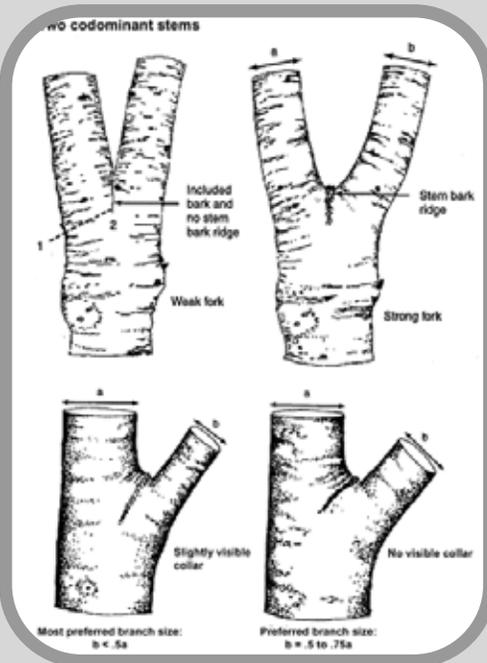
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gap in the canopy. Over time, this technique will encourage collar formation and a stronger branch attachment will result. The selected leader will grow more wood annually than the reduced stems. Ideally the original weak growth point will begin to develop into a branch union. Keep in mind that reduction cuts, while encouraging collar formation, can encourage adventitious sprouting. This could encourage the original multi leader problem to remain. Ongoing care is sometimes required.

Eventually, a tree with a repaired leader will have a strong attachment; where a weak union was once present, failure potential is decreased and tree longevity and structure is improved.

Certain trees have trunks that are large and growing apart from each other and reduction may not be possible or effective enough to reduce the risk of failure. Bracing and cabling may be required in conjunction with or instead of reduction especially on trees where there is no option for dominant leader selection.



You may also choose to reduce both stems if the situation requires such treatment. Some of you may have noticed that sometimes a co-dominant trunk is naturally suppressed as the tree grows and branches shade each other to affect the others growth. Essentially this is what we are trying to reproduce with the use of reduction cuts.

Special consideration should be taken when removing evergreens with co-dominant trunks. These have increased risk of failure at the trunk union. Weaving branches may be acting as a brace between multiple trunks. Removing these branches could cause weight at the top of the tree to pull the trunks apart. Forces created by rigging are also likely to act on the weak union and increase the risk of personal injury or property damage.

A technique we use while working on co-dominant, trunked spruces is, taking the top of the tree out first, followed by working from the bottom up. This significantly reduces bending forces and sway in the stem and this method is also helpful with single trunked trees which are top heavy.

A temporary brace can also be used to keep stems from bending beyond a certain point and on larger trees multiple braces can be tied as the climber/s ascend the tree.

My inspiration for writing this article came from looking at the trees on the ski hill while riding the chairlift. I noticed how



many trees had multiple leaders and it got me thinking. Reading the new 3rd edition of Dr. Ed Gilman's pruning book was also inspiring. I would like to encourage you to keep your eyes trained to spot structural defects in our ever-green trees

whether the problem occurred naturally or intentionally. Keeping your eyes and mind at attention to structural detail will have benefits for the trees and their caretakers as the trees age, especially when corrected in the early stages.

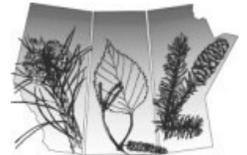
A small effort today can help prevent property damage and potential tree loss in the future at least. Like the trees at the ski hill, man vs. tree stats at the ski resorts report more deaths due to collisions than tree failures!

In the picture the tree to the left had a mature double leader originating from the bottom of the picture. One of the stems was reduced. The tree to the right had 5 leaders some mature and some young, the older ones were reduced and the younger ones were removed. I will be monitoring these trees closely as they belong to a neighbor with my garage as the target!

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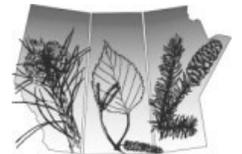
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Tree Disease Management	Calgary Mar. 27 & 28
Chainsaw Safety & Cutting Techniques	Edmonton - Apr. 30 Calgary - May 2
Tree Pruning	Edmonton - May 1 Calgary - May 3
Tree Climbing, Fall Protection, Work Posit.	Calgary - May 21 & 22
Technical Tree Falling & Cutting	Sask. - Apr. 15 & 16 Calgary - May 23 & 24 Winnipeg - May 30 & 31
Production Tree Removal & Rigging	Calgary - June 12 - 14



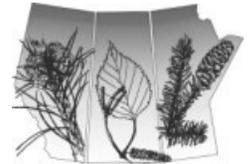
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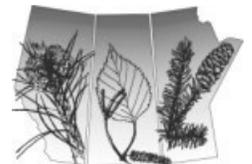
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(Continued from page 6)

oak timbers in a variety of historical contexts and has clearly demonstrated the suitability of conifers for dendrochronological analysis.

It is therefore, necessary to build up a database of conifer chronologies and extend the scope of British dendrochronology to enable precise dating evidence to be obtained from a wider range of timber species and hence provide a more comprehensive dating system for timber structures and artefacts.

Baltic Oak Timbers

Imported oak timbers have been identified by dendrochronology in standing buildings, archaeological sites and art historical material. The general source of much of this timber is known to be the Eastern Baltic region but tree-ring research has shown that at least two distinct sources of woodland were used. Evidence has also begun to accumulate for other areas of the continent also providing timbers found in England. Much of the research so far has relied on using samples encountered during routine case-work and the re-working of an archive of panel-painting data deposited by the late Dr John Fletcher.

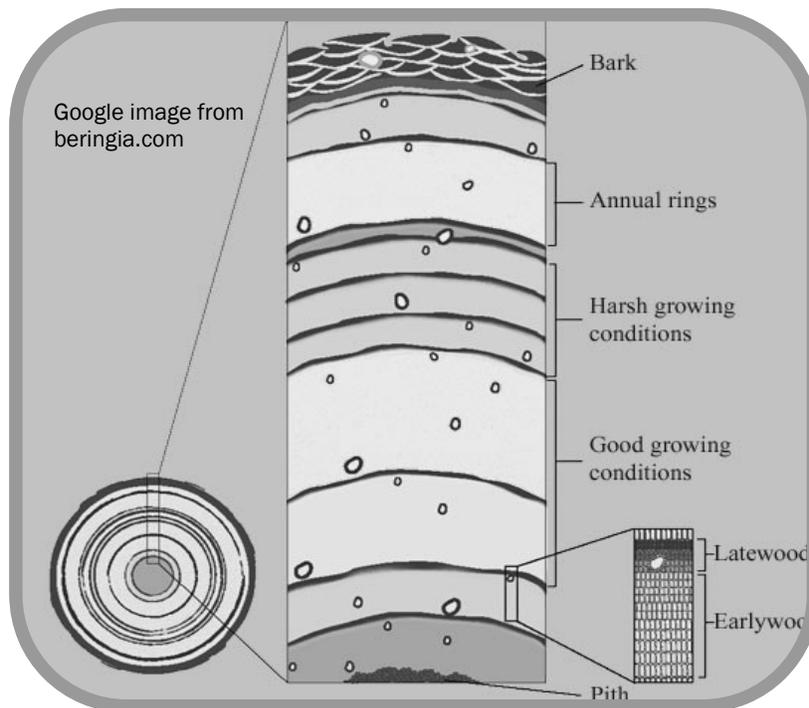
By comparing data from England with other dendrochronologically identified imported timber groups it is hoped that techniques can be developed that may allow much smaller scale movements of timber to be identified by 'dendro-provenancing'.

Devon Buildings and Woodland

Dendrochronological studies so far carried out in the south-west of England suggest that there is a problem, particularly for vernacular buildings for which few tree-ring dates have been produced. There are two aspects involved in resolving this problem:

- First, there is a need to analyse samples from modern woodlands to investigate how the varied topography of the south-west region affects tree growth.
- Second, vernacular buildings which have the most suitable timbers for dendrochronology must be selected and sampled.

Once a network of local tree-ring chronologies has been produced, it may then be possible to apply dendrochronology on a more routine basis. In addition to providing much needed dates for architectural styles of building, the study of woodlands past and present should also enhance our knowledge of the ecology and landscape history of the area.



London Woodland Changes

The excavations carried out in the central London area over the last 25 years have produced more timbers than any other area in England. This has provided a unique resource.

Research is currently being conducted using this evidence as well as evidence derived from standing buildings and surviving ancient woodland in the London region to research all aspects of the patterns and

trends of past timber exploitation, the development of local woodland management traditions, the development of local and international trade in timber and woodland products, and illuminate attempts at landscape reconstruction.

The project is intended to yield a period by period survey of the London area evidence and describe patterns of change within it.

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Populus tremuloides Michx.

By Charles Burchill

Originally Written for Paddle Manitoba – Winter 2010

The Ripple

My friend is commonly known as trembling aspen, quaking aspen, poplar, popple, white poplar, or just Aspen. Some people also call it the ghost tree due to the chalky-white bark. This much maligned and often ignored and overlooked tree, often thought of a weed, is found across all of Manitoba. It is in fact is one of the most widely distributed trees in North America stretching from Mexico to Alaska and coast to coast. In well drained fertile soils it can be as tall as 40m with a trunk diameter of 60cm. In much of southern Manitoba, with heavy clay soils, the trees are much smaller and often thought of as the neighbourhood 'bush'. The individual stems only live 60-90 years. There are several other less common poplars in Manitoba – Balsam Poplar (*Populus balsamifera* L.), Largetooth Aspen (*Populus grandidentata* Michx.), Eastern Cottonwood (*Populus deltoids* Marsh.).

Aspen have white or cream coloured smooth trunks and small roundish leaves that end in a pointed tip and have fine teeth. The leaves have a flat petiole (stem) which is stronger in one direction than the other which allows the leaves to flutter in the slightest breeze. It is this fluttering that gives the tree the common name quaking or trembling Aspen. Flowers appear before the leaves in the spring as catkins with male and female flowers on separate trees (clones). Seed pods mature along the central stem of the hanging female catkin.

A good seed crop is produced every 2-3 years, in some cases a single tree may produce millions of seeds. The seeds deteriorate in a matter of days and few are fortunate enough to find good conditions to germinate. The tree spreads and reproduces primarily through suckering. Bark is a light greyish green sometimes chalky white, with a smooth waxy lustre.

Aspen reproduce prolifically through suckers which are genetically identical to the parent tree. Adult trees produce a chemical that inhibits suckers but if the parent tree is removed through fire or logging (or beavers) the root suckers grow quickly. These suckers, with the support of the existing root systems, can grow up to 1 meter every year for the first 10 years. In the year after disturb-

ance it is not unknown for an aspen clone to send up 100,000 suckers per hectare. The stems are so dense you can not walk through the bush, don't even bother to try to portage. Over time the trees thin out due to competition for light and other resources. In the spring it is often easy to spot a single clone since they will all be the same sex and will flower and leaf out at the same time. When the leaves turn golden in the fall every tree in the same clone will usually change at the same time - sometimes making interesting aerial patterns.

If you consider something being genetically identical and interconnected as the same organism then Aspen clones could be considered both the largest and oldest living things on earth. Clones can be fairly small, only a few trees, but sometimes they can also appear as whole forest. There is a 106 acre 6,000 ton stand of genetically identical quaking aspen in the Wasatch Mountains of Utah. The age of this giant clone has been estimated at 10,000 years or more.



The wood has been used to make traditional canoe paddles, tepee poles, deadfalls, snow shovels, snowshoe frames, crates boxes,

washboards, and floor boards. Whistles were made out of hollowed out stems. It is now commonly used in plywood, Aspenite, and oriented strand board. Water was run through the ashes to obtain a caustic solution to make soap when combined with animal grease. It is commonly used as firewood.

The dry wood has been used for smoking meat and fish. A friend of mine uses poplar wood to fire clay pots the temperature and ash giving unique glaze patterns. Young branches are used to make baskets, wreathes, furniture. The wood is odourless and tasteless so it is used to make tongue depressors, ice cream sticks, and chopsticks. Because it grows so quickly, in many areas the poplar is the only common tree, it was used for almost everything.

The tree is a favourite food of beaver; an adult beaver can consume 1-2kg of the thin bark daily. Apparently the original range of the beaver corresponds to that of the Aspen suggesting a close connection between the two. Branches and logs are used to build lodges and dams. Ruffed grouse are also dependent on Aspen

(Continued on page 18)

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My Friend the Aspen

(Continued from page 16)

where they breed and nest in mid-sized stands, in the winter they eat the male flower buds. The buds are a good source of calcium, fibre and vitamin A. Hares and rabbits gnaw the bark off of young trees, often killing the stem. Deer and moose browse the twigs and leaves. Porcupines also show a distinct preference for aspen bark as well.

Rodents and birds are not the only animals that like Aspen Poplar. There are over 300 insects and 150 diseases that attack trembling aspen. The forest tent caterpillar probably causes the greatest and most noticeable damage. Some outbreaks, in the worst years, can cover more than 100,000 square kilometres; millions of the caterpillars defoliating whole stands in just a few days. Having consumed everything the army of caterpillars descend the tree and go searching for more eating everything in their path along the way. Within a short time the aspens recover growing a new set of leaves to continue to collect sunlight and grow. Periodically the caterpillar population crashes because of a parasitic fly which destroys the caterpillars by laying eggs in their cocoons.

Much of the tree is edible (although from my experience not very palatable). Apparently you can eat the inner bark and cambium in the spring with some sources claiming it tastes like honeydew melon – I have not found this to be the case. The sap has been made into syrup. At one time the ashes were even used as a source of salt.

The tree has a wide range of traditional medicinal uses. The leaves chewed and applied to bee or wasp stings relieve the pain. Masticated leaves also help with mosquito bites and cuts. Claims have been made for the poplar to treating heart disease, cancer, poisoning, even diabetes. The inner bark and powdery bark bloom has been used to stop bleeding. The leaves and bark contain salicylates and thus have pain, fever, and anti-inflammatory activities.

The ghost tree is ubiquitous in canoe country and usually overlooked because of its weedy short lived nature. Next time when portaging or paddling along a golden fall shore take another look at this amazing tree.

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Roots, Shoots and Suckers

You do not need a parachute to skydive . You only need a parachute to skydive twice

The last thing I want to do is hurt you . But it's still on my list .

Since light travels faster than sound, some people appear bright until you hear them speak .

If I agreed with you, we'd both be wrong .

Money can't buy happiness, but it sure makes misery easier to live with .

Knowledge is knowing a tomato is a fruit . Wisdom is not putting it in a fruit salad .

Women will never be equal to men until they can walk down the street with a bald head and a beer gut, and still think they are sexy .

Buses stop in bus stations . Trains stop in train stations . On my desk is a work station .

In filling out an application, where it says, 'In case of emergency, notify:' I put 'DOCTOR . '

I didn't say it was your fault, I said I was blaming you .

I used to be indecisive . Now I'm not so sure .

You're never too old to learn something stupid .

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