



President's Message

In keeping with the saying 'fall back, spring ahead,' we have just reset our clocks. Remarkably, at this time in November, many areas of Norfolk forested lands continue to showcase the splendour of full fall colour! And I love the sunny days!

The October 19th tour of the Townsend Lumber operation, arranged by Betty Chanyi, was very well attended and enjoyed by all. It's great to see a Norfolk County company thriving and successfully adapting to a changing business environment. Townsend Lumber is an FSC certified company, a designation fast becoming a prerequisite for marketing wood products to the United States and Europe. Forest Stewardship Council certification will likely also become a factor for woodlot owners who wish to derive an annual or periodic income from sales of their merchantable timber. If their woodlot is certified, they may possibly command a premium price and/or find it easier to sell their wood. Our Board members are presently trying to determine the feasibility and the process of how individual woodlot owners may become FSC certified. For more info, visit <https://ca.fsc.org>. Thanks to Betty and Townsend Lumber for an informative tour.

Whether or not woodlot owners want to sell merchantable timber, proper woodlot management is needed. Here is an interesting study that lends credence to the benefits of good woodlot management. <http://www.ontariowoodlot.com/publications/owa-publications/landowner-guides/building-a-case-for-good-forest-management>. One of the things to manage is disease control. Dave Reid arranged a very informative workshop on Beech Bark Disease by Dr. Richard Wilson on Oct 28th at the OMAFRA on Blueline Road. Dr Wilson, a gifted and entertaining speaker, gave much practical advice on Beech Bark Disease and many other disease problems. The tour of a nearby woodlot infected by Beech Bark Disease was cancelled due to high winds. Thanks to Dave and Dr. Wilson for this instructive and enjoyable workshop.

One of our best allies in terms of insect control is barn swallows as well as other forest birds. Next year, a May 26th, 2016 workshop, conducted by Bird Studies Canada, will be held on how to encourage our feathered friends to eat more bugs on your property. This workshop will be followed up with an interpretative walk on May 28th, 2016. More details about these events will follow in future newsletters!

The NWOA Board is already planning for our NWOA Annual General Meeting on March 2nd 2016. Why not invite a friend, neighbour or recently 'new to Norfolk County' person in your area to attend? Many knowledgeable people will be available there to discuss and answer questions about your woodlot at a wide variety of information booths. Every year hundreds of people enjoy the dynamic speakers at this event, as well as the opportunity to win many door prizes! Be sure to mark this event on your calendar!

We welcome your comments, thoughts and ideas for our newsletter, workshops and Annual Meeting. You can post them on our website www.norfolkwoodlots.com or call me at 519-428-2615 or email me at john.dewitt@holliswealth.com

All the best to you during the upcoming festive season ... Merry Christmas!

John de Witt

Real vs. Artificial Christmas Trees - An Environmental Perspective

Making Your Holiday Habits Environmentally-Friendly

(Mpls, MN) - Each year during the holiday season people begin decorating and buying gifts. For those that celebrate Christmas, an important decision is choosing a tree. This includes deciding if it will be a real or artificial Christmas tree. How does your decision impact the environment? Cost, convenience, and personal preference are all important considerations, but so too is the environmental impact.

Research has shown that locally-sourced natural trees have less environmental impact than artificial ones. An independent Life Cycle Analysis (LCA) study released by the Montreal firm Elliposos [1] determined that real trees have less overall impact in terms of distribution, disposal, and average carbon emissions than their artificial counterparts. The LCA method allows for evaluation of potential environmental impacts of a product (or service) over its entire life cycle and takes raw material processing, manufacturing, transportation, distribution, use, reuse, recycling and disposal impacts into consideration. [2]

When it comes to artificial trees, the key to achieving environmental gains lies in the amount of time they are kept and reused. Average households replace an artificial tree about every six years. Evidence shows that, in general, artificial trees need to be reused for at least 20 years if they are to compare favorably with natural trees.

"It makes sense to choose the tradition that suits your needs while also considering the best environmental practices," says Kathryn Fernholz, Executive Director of Dovetail Partners, a Minneapolis-based environmental think tank. "If you choose a real tree, you can get to know your local grower and recycle your tree at the end of the holiday season. If you choose an artificial tree, make sure to reuse it for as many years as possible. Whichever route you go, your goal can be to pass the tradition of selecting a tree - or even the tree itself - down to the next generation!"

Additional environmentally-friendly measures you can take during the holidays include use of recycled and recyclable wrapping paper and greeting cards, use of LED holiday bulbs; and reuse and recycling of real trees and other decorations at the end of the season such as through collection programs, composting, wood chipping or planting.

[1] The study can be found here: Couillard, Sylvain; Bage et. al. "Comparative Life Cycle Assessment (LCA) of Artificial VS Natural Christmas Tree." Elliposos. February 2009. www.elliposos.ca/lca-christmas-tree-natural-vs-artificial/

[2] To learn more about LCA, read Dovetail's report

"Life Cycle Analysis: A Key to Better Environmental Decisions."

Article by Dovetail Partners Inc., excerpted from The Outlook, November, 2015.

Website Information

For more information, and access to Newsletters, visit our Website norfolkwoodlots.com.

To access this section you need to login with your Username and Password

Select the "**Member Area Login**" and login. (*hint. Your user name is your full email address and password as was sent to you*) You should be able to reset your password if needed, or if problems send an email to membership@norfolkwoodlots.com. Once logged-in, select "**Members Area**" go to "**Current Newsletter**" page, once there you can select the latest or any newsletter you would like to read.

Building a Case for Good Woodlot Management

Terry Schwan R.P.F., Al Mussell, and, Steve Bowers R.P.F. published a study, in May 2013, comparing the potential revenue of a properly managed woodlot to the revenue generated by traditional farm crops.

- Terry Schwan, Forester, Guelph District, Ontario Ministry of Natural Resources
- Al Mussell, Senior Research Associate, George Morris Centre, Guelph
- Steve Bowers, Retired, Ontario Ministry of Natural Resources, former Huron County Stewardship Coordinator

Below is an overview of their study, which can be seen in its' entirety, on the Ontario Woodlot Owners Association website. <http://www.ontariowoodlot.com/>

Summary

A series of case studies were developed to profile examples of responsible long term forest management in southern Ontario. Eight landowners were interviewed to gather their financial and forest information and to summarize the history of activities on their properties. Annual revenue and costs for various products (timber, fuelwood, and maple syrup) were obtained from the landowner. A representative crop model was developed for a typical crop rotation in Ontario using corn, soybeans & wheat. The model was based on crop enterprise budgets developed by OMAF, which reflect agriculture industry average costs and returns. A Present Value calculation was used to estimate the equivalent 2010 value for revenue and costs from the woodlots and agriculture crops. This paper summarizes the results of the eight cases. The results show that, during the time periods covered in this study, sound management of woodlots has provided returns that are complimentary and favourable in comparison with agricultural returns. The overall purpose for this study was to promote and document responsible management of privately owned forests.

Introduction

Small forests and woodlots are a central feature of the rural Ontario landscape. They form the foundation for our natural environment, and provide environmental and social values which people depend upon to ensure health and quality of life. These forests also support a broad range of economic activity. How these forests are managed has a direct impact on their health and the corresponding economic and ecological benefits they provide. One may ask, "What factors motivate private woodland owners to manage their woodlots sustainably?" For some it may be personal interest or stewardship ethic, while others may be more influenced by potential for economic returns.

The case study concept was suggested in a brainstorming exercise with participants the Maitland Watershed Partnership Initiative in 2003 looking for ideas on how to encourage responsible management of farm woodlots. It was recognized that many of the woodlots in rural Ontario are owned by farmers and sometimes receive limited attention as farmers often need to concentrate their management focus on busy farm operations.

The case studies were undertaken, in part, to investigate whether economic returns from woodlots can compare favourably with those from agriculture. Returns from these managed forests (mostly from timber sales but including other activities such as production of maple syrup or fuelwood) were compared to the budgeted income from agricultural crops over the same period. These case studies demonstrate the potential for enhanced long-term financial returns and examples of responsible stewardship provided by the woodland owners profiled. It is hoped they will provide an increased awareness and incentive for woodlot owners to manage their woodlots responsibly.

While demonstration sites have been utilized through a variety of projects over the years, to our knowledge very few case studies illustrating long-term economics and forest management have been developed, and those few have involved conifer plantations. None that we are aware of have attempted to compare agricultural with forest returns.

This summary paper provides background details, methodology, and some limited discussion of individual cases, differences and anomalies. The overall purpose for this study is to promote and document responsible management of privately owned forests in southern Ontario. Specific components included:

Developing a series of case studies through interviews and data collection:

- Estimating the net present value (NPV) of historic revenue from the woodlots selected for these cases;

- Estimating the NPV that could have been derived for the same tract of land under an agricultural crop rotation using OMAF crop enterprise budgets; and,
- Comparing the historical monetary returns under the woodlot and crop rotation scenarios.

Discussion

The empirical results of the study and interviews with participants provided the following insights regarding woodlot management economics.

Market Timing

High prices for maple logs in the latter years of the study did have some influence on the results. This is illustrated in the Staley case study, where without a recent harvest the returns don't look as favourable in comparison to agriculture. However, this does also relate to timing of the cutting cycle as mentioned below. One advantage of a forest crop is that there is more opportunity to time the markets and sell when prices are higher, e.g. trees can be retained during times of depressed prices and will, in most cases, continue to add volume and value until markets improve.

Timing Within the Cutting Cycle

Obviously results are more valid when viewed over a longer time period. For example, if a large timber sale is made just before or after the data collection period begins, it could skew the results in one way or the other unless the time period is long enough to reduce its effect on the overall results.

Landowner challenges

A number of factors influence a landowner's ability to manage their woodlots for long term sustainability and productivity, including:

- Economic conditions on the farm;
- Pressures in active markets to make a sale earlier in the cutting cycle than appropriate;
- Problems with less competent or honest loggers or consultants (e.g. logging damage or inappropriate selection of trees for harvest);
- Availability of training opportunities to enhance landowner knowledge;
- Generational change of ownership;
- Development pressure (change of land use from agriculture).

Common Elements to Success

Common traits of the landowners in these case studies that contributed to their success, included:

- Long term ownership of their properties;
 - Long term objectives;
 - Interest in and knowledge of their property (including some form of formal or informal inventory);
 - Willingness to seek out professional forestry advice (public agencies or private consultants);
 - Interest in their forests and in learning about and following good forestry practices.
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Townsend Lumber Tour – Monday, October 19th, 2015.

Site Visit Report

By - Betty Chanyi – NWOA Director

On a lovely, crisp autumn morning in October, 30 people gathered at Mike Penner's woodlot on the Bell Mill Side Road to gather information about harvesting practices that exemplify good stewardship of the woodlot. Mike Penner, the woodlot owner, Dave Townsend, owner of

Townsend Lumber and childhood friend of this writer along with Brian Fox, forestry consultant explained the management plan for this woodlot which will be an investment in the future good health and productivity of this forest. Mike, Brian and Dave explained that during the harvesting process, crop trees are left while the small red pines are harvested for chips. This is not lucrative today but the investment today, guarantees the development of a productive woodlot.

Two feet are left on all sides of the crop trees in order for them to be able to grow straight and tall which will yield a couple of good 16 foot logs at harvest time in a few more years. Mike's plan is to have a healthy productive forest which will provide income in the years to come.

The group then moved on to the Townsend Lumber yard and the log yard. On this yard it is estimated there are 2 million board feet of uncut boards. Each 150 000 to 160 000 board feet will run through the debarked, but much care must be taken in this area as there are heightened fire hazards when ash trees, especially, are being debarked because the dust and sawdust is especially susceptible as a fire hazard. As well, walnut and red oak chips have to be kept separate from all other wood chips because these two are too acidic for animal bedding.

Debarking



The sawmill itself is amazing. The mostly automated mill sets up the logs, cuts off the outside edges, squares the log and then proceeds to saw the logs with precision and accuracy, then flips the log 90 degrees and continues to cut away at the new side. Some boards end up as railway ties, some as 2x4's and 2x 6's and even more.

Now the bundles of boards are stacked with special slats to separate and allow air circulation to take place. These stacks are loaded into one of 3 kilns which look much like tobacco kilns but bigger for drying. The different species of lumber require various amounts drying. For instance, maple may take 7 to 8 days while red oak can take up to 90 days to day in the kiln.

Air Drying



Once the lumber is dried to 5% to 8%, it is graded, bundled and is ready for shipping to any of 6 countries which are Townsend's customers. Not only do Townsend's sell lumber, they also sell retail and ship flooring, trim, and mouldings they manufacture. Also available for retail sale is tongue and groove boards and plywood which is not manufactured on site but obtained to accommodate customers.

Kiln Drying



The storage facility housing the trim and mouldings was huge and stacks of these materials reached skyward in various lengths and designs. This is an excellent source when one is searching for those finishing touches to construction.

Discussion then focused on FSC certification of wood products. Customers all over the world are demanding to know where their wood products come from and FSC reassures them that the wood products they are purchasing come from a country with good ethics and good forestry practices. The chain of custody can be traced with FSC products and then the ethics of that chain can be checked for credibility. It was pointed out that the tree cutting by-laws in Norfolk County and in Ontario are good and need to continue because that will help the reputation of all those wishing to harvest their woodlots.

Townsend Lumber not only supports their owners but the local economy as well. They have 121 employees, contribute between \$8 and \$10 million to local businesses such as trucking companies, tire outlets, fuel companies, companies that supply fire equipment, forest related equipment and manufacturing equipment. They are positive corporate partners in Norfolk and give back to the community.

The last phase of the operation we visited was the flooring plant where the raw flooring receives a good sanding and then passes through several coats of finish, ultra violet drying and a final sanding and finishing. Seven coats of finish go on every board that is now flooring of

the highest quality. It truly was a remarkable process to watch happening. Glistening flooring comes out the end, complete dry and ready for installation in any home or office.

Applying Finish
&
Drying



In the Townsend Lumber Breezewood showroom, we saw all the different types of flooring that is available and customers can even choose to have custom flooring made to their specifications. As we wandered about the showroom, we were treated to a lovely lunch by our hosts and presented with \$125 coupon that could be used when ordering flooring from them. It was very generous of the Townsend Lumber family to treat us so very well, share their expertise and give us a tour we will never forget. Thank you Dave, Mike and Brian for being wonderful tour guides. You were great!

Tour Group



Beech Bark Disease Workshop – Wednesday, October 28, 2015

Workshop Report

By Dave Reid, NWOA Director

About 20 people attended the workshop held between 2 and 4 pm at the auditorium of the OMAFRA/University of Guelph horticultural research station east of Simcoe. Those attending were treated to a lively and entertaining presentation by Dr. Richard Wilson, Forest Program Pathologist, Ontario Ministry of Natural Resources and Forests, Forest Health & Silviculture Section based in Sault Ste. Marie.

High winds were predicted that day and so we decided to forgo the field trip portion to visit a nearby infected woodlot owned by Schuyler Farms. If you are computer savvy and have access to the World Wide Web here are two excellent references provided by Richard that cover the subject well:

<http://www.baycounty-mi.gov/docs/health/gypsymoth/beeckbark.pdf>

<https://dr6j45jk9xcmk.cloudfront.net/.../2851/stdprod-096009.pdf>

For those who are not computer savvy or have no access to the world wide web, I will include a few basic excerpts from the latter reference “Beech Bark Disease in Ontario: A Primer and Management Recommendations by John McLaughlin and Sylvia Greifenhagen, Ontario Forest Research Institute, Ontario Ministry of Natural Resources” in the Ontario Forest Research Institute Forest Research Note No. 71, 2012.

“Beech bark disease (BBD) is a non-native insect-fungus complex caused by the beech scale (*Cryptococcus fagisuga*) and the canker fungus *Neonectria faginata*. The beech scale was introduced into North America in the 1890s on European beech (*Fagus sylvatica*) seedlings shipped from Europe to Halifax. *N. faginata* probably arrived in North America in a similar way. The beech scale and the ensuing disease have gradually spread through eastern North America. In 1999, BBD was officially confirmed in Ontario, and has since spread throughout most of the American Beech’s local range. The disease is initiated when the beech scale feeds on the outer bark of beech trees. Usually the larger trees in a stand are attacked first. Although they do not kill trees, scale infestations reduce tree vigour and growth, and lower tree resistance to fungal infection. Within 2 to 10 years of the arrival of the scale insect, the feeding wounds become infected with *N. faginata*. The fungus grows into and can kill the tree’s inner bark and cambium, creating many circular or lemon-shaped cankers. Infection usually occurs on the lower bole of the tree but cankers can extend into the crown. The cankers may develop into large vertical patches of dead bark or encircle the entire bole. Branches above large patches of dead bark often show signs of decline, producing little to no foliage. Large trees are the first to become diseased and to exhibit crown dieback. Trees with BBD are more susceptible to invasion by decay fungi and insects and their combined effects can result in stem breakage during wind events.”

Beech Bark Disease



“Three distinct phases in disease development may be observed as BBD spreads across the landscape.

- On **the advancing front**, previously unaffected beech trees are colonized by the beech scale; larger trees are usually the first to become infested. Damage caused by scale feeding ranges from superficial, localized necrotic bumps to deep bark cracks. Scale infestations contribute to the decline of beech affected by other stresses such as root disease or drought.

· A few years after initial scale colonization, the disease progresses into **the killing front** phase during which scale populations rapidly build, *N. faginata* infects colonized trees, and cankers develop. Many beech die within 3 to 6 years of infection.

· After this first wave of beech mortality the disease remains endemic in **the aftermath forest**. In this phase, the remnant large beech trees continue to gradually decline and stem breakage is common. Younger trees also become infected and gradually decline.

Under certain climate conditions, additional waves of BBD may occur in aftermath forests, followed by extensive tree mortality. For example, winter temperatures that remain above -25 °C favour the build-up of beech scale populations. Several years of drought are also reported to increase beech susceptibility to BBD, resulting in increased disease and tree mortality levels.”

Norfolk County is on the advancing front with BBD confirmed in the eastern half of the County while only the scale insect has been found to date in western Norfolk. However, BBD has been confirmed west of us in Elgin County, perhaps resulting from an introduction through the movement of firewood. Please feel free to contact Dave further for more information (dave.reid@eastlink.ca; 519-426-8856). The forest health technician for our area is Rebecca Lidster: Rebecca.Lidster@ontario.ca (519) 873-4624 and I am sure she would appreciate sightings of suspected BBD.

Ongoing Site Visits and Workshops

Barn Swallow / Forest Birds Workshop

Workshop #2 - May 26, 2016

Thursday, May 26, 2016, 7:00PM to 9:00PM, location and agenda TBD

Interpretative Walk - May 28, 2016

Saturday, May 28, 2016 8:00 AM, with BSC staff, Location TBD