NORFOLK WOODLOT OWNERS ASSOCIATION

NEWSLETTER

www.norfolkwoodlots.com

April 2024

President's Message

Our Annual General Meeting (AGM) was well attended on March 6, 2024 at the Delhi German Home. Doors opened at 6pm and lots of conversation and exchange of ideas occurred at the booths with people tending the displays. The formal part of the meeting started at 7pm and concluded at 9pm with the chainsaw draw.

Our guest speaker, Madison Struba, Program Development Coordinator at the Windsor Invasive Species Centre, gave a very interesting talk about what we can do to help prevent and control invasive species from attacking Norfolk trees. Madison focused on Oak Wilt, Hemlock Wooly Adelgid, Beech Leaf Disease and Spotted Lanternfly and showed what we can do or not do to help prevent the spread of these invasive species.

Followed by our second speaker, Adam Biddle, Norfolk Supervisor Forestry Parks with an update on Norfolk forests. Adam gave a very helpful guide on the To Dos and Not To Dos when harvesting your woodlot.

Of course, the super fun part of the evening is the draws for the Early Bird Prize and the Main Door Prize amongst many other door prizes given to us from our very generous donors. Gary Chips won a chainsaw with the Early Bird Prize and Barbara Hourigan also won a chainsaw with the Main Door Prize.

Two Norfolk members volunteered to offer their services on the NWOA Board. Please welcome Angelle van Kleef and Ian Fife as our new Board members. We look forward to working with these two hard working and talented people.

The 2024-2025 NWOA Chapter Board
John de Witt – President
Dr. Bob Dukelow - Vice President
Dr. John Morrissey – Secretary
Eric Ferguson - Acting Treasurer /Website Membership
Tracey Boerkamp - Annual General Meeting Chairman
Mark Bacro – Director / Norfolk Chapter Representative for OWA

Mike Penner - Director
Dolf Wynia - Director
Audrey Heagy – Director
Kristen Bernard – Director
Ian Fife – Director
Angelle van Kleef - Director

To control cost, NWOA newsletters are emailed to NWOA members and posted on NWOA website. The few who do not have internet are still being mailed out, courtesy of our Newsletter Editor, Dr John Morrissey.

We welcome your comments, thoughts and ideas for our newsletter, workshops and AGM. To make them fun and informative, we require your feedback to show what is of interest. Thanks. You can post them on our website www.norfolkwoodlots.com (Go to the 'About us' Tab then select 'Contact us " to complete the message box), direct email at membership@norfolkwoodlots.com .

If you have any questions, please contact us at

Mail: **Norfolk Woodlot Owners Association**
c/o Norfolk County – Forestry Department
185 Robinson Street, Suite 100
Simcoe, ON N3Y 5L6
NWOA website: www.norfolkwoodlots.com
NWOA email: membership@norfolkwoodlots.com

Thanks,

John de Witt, President

Have you renewed your membership for 2024?

Members can renew their membership online, using the OWA website.
Go to: https://www.ontariowoodlot.com/Sys/Login

If you have never logged into your profile, enter the e-mail address that is on your account and select **"Forgot Password"**

The system will send a temporary password where you will be asked to create your own password.
Once you are into your profile, there will be an option to renew your membership.

AGM Photos

AGM Crowd

John de Witt, NWOA President

Adam Biddle, NWOA Norfolk Supervisor Forest & Parks & Dolf Wynia, NWOA Director

Madison Struba, AGM Speaker & John Pineau, OWA Executive Director

Ecological Benefits of Old Growth Forests in Norfolk County
By Ian Fife

Norfolk County old growth forest history

As land was being cleared for lumber, agriculture, and potash from the late 18th to the mid 19th century, old growth forests (trees greater than 50 years of age) in Norfolk began to disappear. Much of the timber cut from southwestern Ontario never made it for local use and was often transported overseas to the European market. By the late 20th century, Norfolk County's old growth forest was less than 1% and remains a diminished forest type.

What old growth forest looks like

Horizontal and vertical structure. Horizontal structure means there is a diversity of tree species and sizes. Vertical structure is a diversity of tree height. To visually assess forest structure are the diameters and heights of the trees. Apart from plantations, are all the tree diameters and heights the same size?
Standing dead wood. Aside as important wildlife habitat, dead trees are an important function of all forests. Standing dead trees lead to forest regeneration and contribute to soil health and increased carbon storage as they become downed woody debris.
Downed woody debris. Amount of downed woody debris is one of the identifiers of old growth forest. This not only includes logs on the ground but also stumps and root and soil mounds. Woody debris also provides a seemingly infinite amount of food and resources for wildlife.

In defense of old growth forests

Fighting climate change. Old growth forests store 40% more carbon than managed forests and the carbon remains captured in the soil for centuries. Once cut, old growth begins to emit carbon.
Conserved genetic health. The largest, straightest, and healthiest tree will produce the greatest number of seed, passing genetic health on to the next generation. Old growth trees are less susceptible to disease and invasive species.
Resilient against weather events. Old growth forest reduces the loss of standing timber from storm events. The forest's complexity disperses and minimizes the effects of wind, snow and ice, reducing windthrow and blowdown.

Managing old growth forest

Aim to retain old growth trees. A Canadian economic study found that harvest revenue from woodlots made up of 20% and 60% old growth forest was negligible and resulted in only 2% more revenue. Maintaining 30% - 60% old growth trees has more ecological benefits.
Know your tree tolerances. Shade tolerant and shade intolerant will help you guide your decisions about removing old growth trees. Areas of shade tolerant trees such as maples, oaks, and hickories will do better with a light removal. Cherry, walnut, poplar, and pines (except white pine) are shade intolerant and can withstand a heavier removal.
Identify plant and wildlife. Incorporate a plant and wildlife list into your management plan. Free phone apps like iNaturalist and Merlin can identify plants and birds for you. If you are looking for an expert survey, Birds Canada offers free bird surveys and Natural Resource Solutions Inc. offers vegetation surveys at various price levels.

From The University of Toronto Magazine – Spring 2023

A CLOSER LOOK

Solving a climatic puzzle, one tree ring at a time

Anyone who has seen a tree stump will have noticed the rings in the wood and, at some point, learned that counting these rings can tell you the age of the tree. This unique growth not only tells us how long a tree stood, but it also holds clues to past weather patterns.

Trevor Porter, a professor in the department of geography, geomatics and environment at U of T Mississauga, is tapping into this natural archive to create a detailed picture of how Canada's climate has changed over the past 1,000 years. With a network of research sites that span the Yukon and Northwest Territories, his goal is to build a chronology that stretches back long before weather records such as thermometer readings were kept, and to better understand what a future, warmer Arctic may look like.

Trees are sensitive to precipitation and temperature, which affect their annual growth. Porter, who is a paleoclimatologist, analyzes the individual rings, examining their width and the density of the wood and then subtracting the natural pattern of growth to see how the environment has changed. "What we learn from tree rings is valuable," he says.

While there are records that go back 10,000 years or more from other sources – ice cores, sediment and ground ice, for example – tree rings provide detailed, annual information that is exactly dated. One of Porter's long-term aims is to create a comprehensive record from the region that goes back a millennium. So far, his team has managed 913 years. "I really want to push this farther back in time," he says, which means looking for dead trees buried in lakes or mud deposits where the wood is preserved.

Porter describes the process of reconstructing the past climate using tree rings – a field known as dendrochronology – as a painstaking exercise. Going back further in time requires matching the pattern in a sequence of rings from a dead tree with a section of rings of a living tree from the same geographic area. With a match, the dead tree can be accurately dated. "It's a bit like solving a jigsaw puzzle," he says.

—Patricia Lonergan

HOW CORE SAMPLES ARE COLLECTED

Porter and his students travel to northern Canada during the summer to collect core samples from trees at multiple sites.

1. They use a hand-crank increment bore – basically a hollow drill bit – to pull core samples from living trees without harming them.

2. Disk-shaped samples are sliced from dead trees by chainsaw.

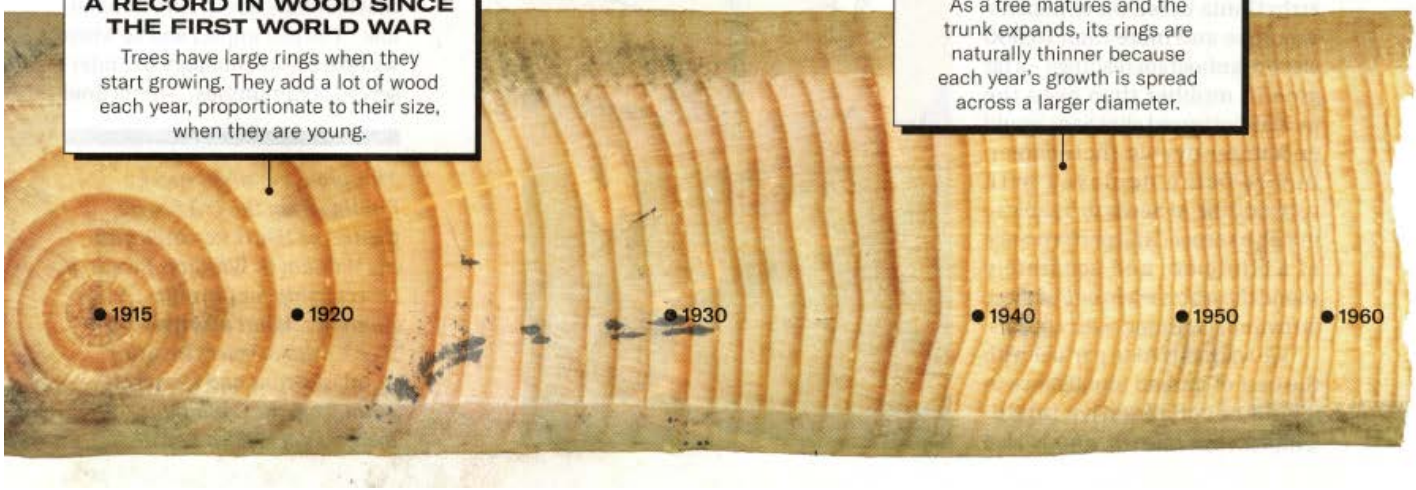
3. The samples are examined under a microscope. Rings are counted and calendar years are assigned to each ring. Dots are added to help find specific decades easily when cross-dating.

ILLUSTRATIONS BY CHRIS PHILPOT. DATA: PORTER ET AL. (2013, QUATERNARY RESEARCH)

A RECORD IN WOOD SINCE THE FIRST WORLD WAR

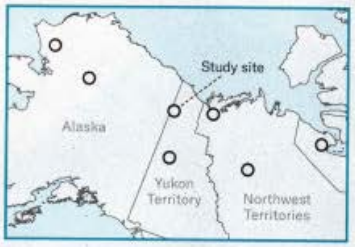
Trees have large rings when they start growing. They add a lot of wood each year, proportionate to their size, when they are young.

As a tree matures and the trunk expands, its rings are naturally thinner because each year's growth is spread across a larger diameter.

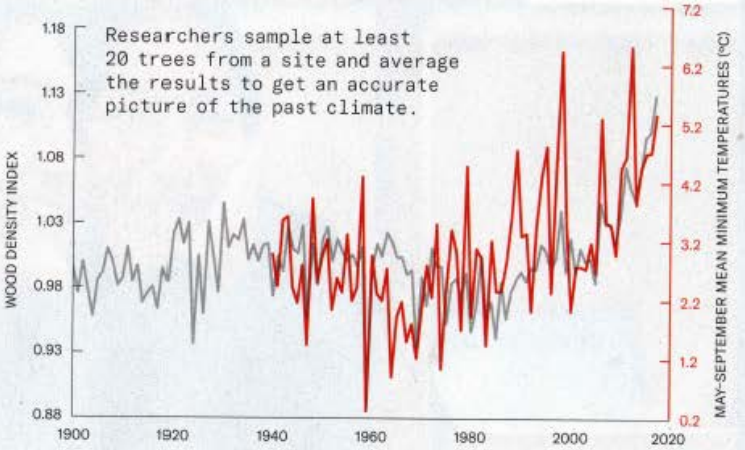


'YOU CAN'T TALK TO ONE TREE TO GET THE FULL STORY'

To gather data further back in time, researchers aim to include information collected from roughly 50 dead trees. Each tree "remembers" the past differently based on various factors.

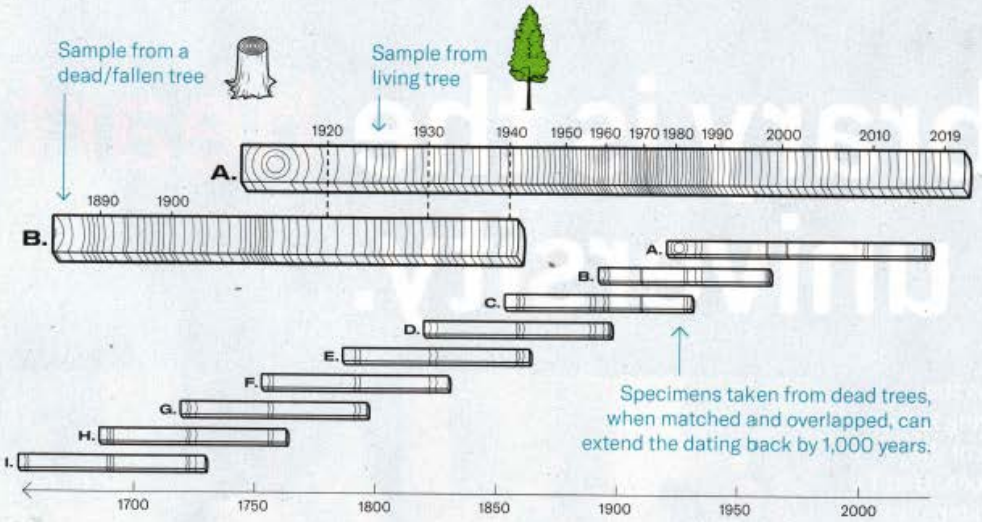


The tree-ring record Porter is building represents thousands of trees across a large region.



DEAD TREES HELP EXTEND THE CHRONOLOGY

Researchers can determine the date of tree rings on dead tree samples with help from living trees, where the dates are known. By lining up rings on a dead tree with samples from living trees, researchers can compare the pattern of growth on the outer most layers of the dead tree. Once they find a match in the sequence, they can extend the tree ring chronology.



Specimens taken from dead trees, when matched and overlapped, can extend the dating back by 1,000 years.

Researchers can take precise measurements – at the micrometre scale – from a scanned image of a tree sample, using image-analysis software. The measurements from each sample are then compared against all other samples to verify the year assigned to each ring.