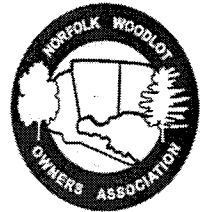


**2009**

NORFOLK WOODLOT OWNERS ASSOCIATION NEWSLETTER

www.norfolkwoodlots.com

Volume 1 Edition 13

January 2009

President's MESSAGE

Happy New Year from all the directors to all our members. Now that the new year has come it is time to start to think about the Annual Meeting.



This year will be very interesting as your executive has been working hard to bring you timely information and interesting displays. The MNR will set up a display regarding the brand new Endangered Species Act, that will affect all of us. We also have two speakers this year, which will speak to the butternut canker and Red Pine decline. Steve Scheers will update everyone on the 2008 spray campaign for gypsy moth and also the results of our efforts to cut down the ash trees that are in the infested area of the emerald ash borer.

I would encourage all members to consider volunteering to sit on a committee or the executive – as with the Forest Capital of Canada being extended into 2009 and movement on the St. Williams Conservation reserve – the executive could use the help and some new blood.... and of course it is not all work thanks to our Social Committee!

We will have interesting displays set up and also great door prizes, so we hope to see a great turnout again this year and mark your calendar for the February 4th Annual Meeting and I will see you there.

Mark Sommerville ~ President

WHAT's INSIDE?

- Annual General Meeting
- Funny Forestry Photos
- Butternut ~ What others are Doing!
- Woodn't You Like To Know Butternut vs Walnut
- Red Pine Decline

UPCOMING EVENTS!

ANNUAL GENERAL MEETING

WEDNESDAY FEBRUARY 4th, 2009

DELHI GERMAN HALL, Delhi ~ Hwy #3

DISPLAY / INFORMATION FORUM

Doors Open 5 pm / Meeting starts 7 pm

Guest Speakers

- Barb Boysen
FOREST GENE CONSERVATION
ASSOCIATION
BUTTERNUT a THREATENED TREE
- John MacLaughlin
Red Pine Decline
- Steve Scheers
Gypsy Moth & Emerald-Ash Borer Update

Over 34 Information Displays!

Membership has its privileges

Win a chance at winning 2 chainsaws!

Or \$ 1800 in Door Prizes!

Membership \$20

Special Enrolment Give - away

Forest Capital of Canada 2008 / 2009

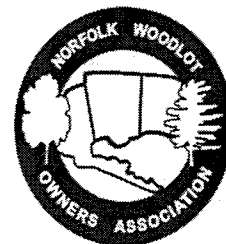
Anniversary NWOA & Forest Capital
of Canada Pocket Knife

Events Sponsored by the NWOA – for further
information visit

www.norfolkwoodlots.com

ANNUAL GENERAL MEETING

Norfolk Woodlot Owners Association



Wednesday February 4th, 2009 7:00 PM
Delhi German Home - Delhi

Forestry Information Forum & Information Displays – open 5 pm

Over 36 Information Displays!

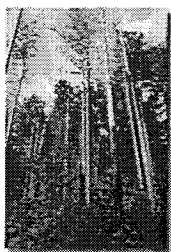
With membership access chance at \$ 1800 in Door Prizes! A chance at two chainsaws!

SEND YOUR MEMBERSHIP IN TODAY!

For more information call Mark Sommerville 519-426-3762

MEETING STARTS AT 7 PM

BRING THE FAMILY.....



Presentations

John MacLaughlin, forest pathologist
Red Pine Decline

Gypsy Moth
Emerald Ash Borer
Updates

Steve Scheers

Norfolk County



GUEST SPEAKER ~ Barb Boysen

Barb coordinates the program of the Forest Gene Conservation Association (FGCA), a not-for-profit corporation dedicated to conserving genetic diversity of tree and shrub species in southern Ontario, with members

from government, forest industry and conservation groups. The FGCA is a leader in the conservation and study of forest genetics, including species at risk including butternut. Barb is a forester (Lakehead University, 1982) and has worked mainly in south-central Ontario on tree improvement, reforestation and conservation initiatives within the context of private land forest management.

WHAT DOES IT TAKE TO BE A DIRECTOR?

An interest in natural resources management We meet once a month except July & August....
We need new members to keep the momentum of our associations growth moving forward.....

If interested please contact an existing director to learn more.....

Stemming red pine decline in southern Ontario

By Abigail M. Oberchain

Red pine plantations are abundant in southern Ontario, particularly in the infamous former blowsand areas. Farming practices of the mid- to late 1800s degraded these areas into virtual deserts, so many red pines were planted during the 1920s and '30s in hopes of jumpstarting ecological recovery. This strategy works: The deserts are gone, replaced by thriving forests that provide many benefits to the people of southern Ontario. However, now some of the forests are facing a new peril.

"Unfortunately, in some of these plantations, most of which have been well managed over the years, maturing red pine trees that were expected to live at least 100 years are now dying at unprecedented rates," reports OFRI research scientist John McLaughlin. "It's a very serious problem.

"For example, Simcoe County, with an annual income of \$1 million from its plantations, is losing valuable sawlog and pole-sized timber. In the Region of York, tall trees, many of them still with green needles but with rotten roots, are blowing down, creating hazardous conditions for the many recreational users of these forests.

"The rapid collapse of red pine plantations can have ecological consequences as well. Forest managers want these plantations to be converted gradually to native oak-

dominated mixedwoods, but if red pine losses cause large holes in the canopy to develop quickly, then less desirable, opportunistic species like Manitoba maple and raspberry will likely move in and dominate these sites."

He continues, "We knew that many biotic and abiotic factors could be contributing to this decline: extreme weather events such as drought, increases in average temperatures, root diseases, insect outbreaks, soil characteristics, and other factors. So we set out to determine what key factors are driving this decline, if and how they are working together, and how we could change management practices to prevent or minimize such decline."

This research is taking place on 12 sites across central and southern Ontario, from the Gurd Experimental Forest near North Bay to a site near Delhi (southwest of Brantford). McLaughlin says, "We have collected all of the data we need to compare healthy and declining stands, such as information about soil characteristics, basic mensurational data [diameter at breast height, tree height, age, etc.], foliar nutrient levels, root depth and distribution, mycorrhizal colonization, precipitation and temperature, and pathogens present.

"We are doing a final data collection and experiment this spring to look at how

soil organisms may stimulate development of *Armillaria*, a common cause of root rot disease. Our sites vary greatly with regards to rhizomorph production and virulence, and we hope to find out whether this variation is due to the individual fungi or to something at the site."

While data are still being analyzed, some interesting preliminary results

have come to light. "One thing clearly separates healthy sites from the diseased sites we have observed," McLaughlin says. "The pH of the C horizon is slightly acidic on the healthy sites, while soils on the diseased sites are very alkaline. This finding ties into drought resistance – red pine don't like to grow their roots into highly alkaline soil, and shallower root systems result in decreased ability to access water during droughts."

And drought has become increasingly common in the areas where these plantations are growing, McLaughlin points out. "We suspect that this is a climate change issue. Over the next 100 years, the optimal climate for red pine could move 300 kilometres north, meaning we should think very carefully about where we plant red pine today. Though red pine are very drought resistant – that's why they were planted in the blowsand areas in the first place – they can still succumb if their roots are too shallow or have been killed by root disease such as *Armillaria*."

He adds that *Armillaria* is one of the most serious pathogens in Ontario. "It's very opportunistic – it is present on most sites at a sub-lethal level, and then when the host is stressed due to drought or some other factor, it takes off, and you end up with an irreversible decline."

McLaughlin's investigations have also expanded awareness of the extent of another serious red pine disease, *Annosus* (Fomes) root rot. "We've known since the mid-1950s that this virulent pathogen was present in Ontario, but I came across it on many sites where it had not been recorded before. Although it does not seem to be as widely distributed as *Armillaria*, it is a more virulent pathogen, even when the trees are not stressed."

Once all the data are analyzed, McLaughlin hopes to have the intricate web of factors involved in the red pine decline sorted out so he can then collaborate with plantation managers in generating strategies to minimize current and future losses in economic, scenic, and ecological values.

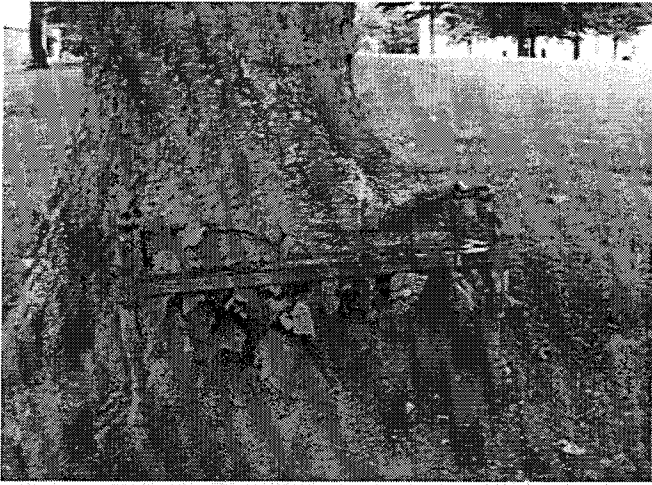
For more information about this project, contact John McLaughlin, (519)824-4120, ext. 54849, john.mclaughlin@mnr.gov.on.ca.



Photo: Dan Day

Southern Ontario's red pine plantations are a source of high-value timber and provide recreational opportunities to many; their rapid decline could hinder efforts to convert these plantations to natural forest.

FOREST FUNNY PHOTOS



Sometimes people move as slow as nature.....

Imagine how many years it took this tree to swallow up this bench and how many people walked by and decided not to move it....



If you stood with your feet in the earth

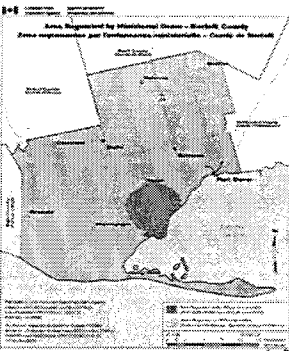
Up to your ankles in grass
And your arms had leaves running over them
And every once in awhile one of your leafy fingers
Was nudged by a bird flying past,
If the skin that covers you from top to tip



Wasn't skin at all, but bark
And you never moved your feet from their place
In the earth

But stood rooted in one spot come
Rain, Wind, Snow, Sleet, Thaw, Spring, Summer, Winter, Fall, Blight, Bug, Day, Dark
Then you would be me:

A tree.



Don't Move Firewood

Throwing a few pieces of firewood into the truck of the car before a camping trip might seem like a good way to plan ahead, but those logs could destroy a forest.

Firewood can carry small but harmful hitchhikers that are often hidden in the bark or wood. The damage caused by invasive species such as the emerald ash borer can expand exponentially when they get rides from families on vacation—even if it is only a few kilometres away. In fact, the emerald ash borer had killed millions of ash trees across Canada.

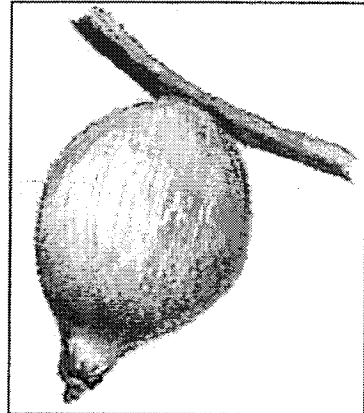
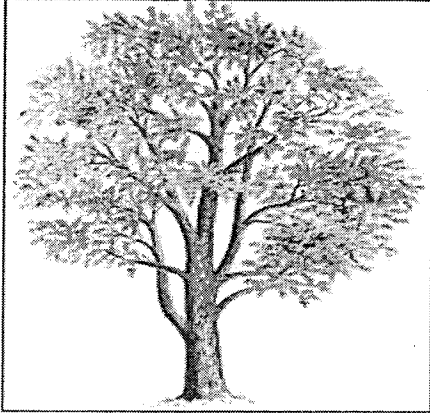
When forests are destroyed, everyone bears the consequences. Workers who depend on the lumber industry can lose their livelihoods. Animals and birds can lose their habitat. And our environment can lose the cleaning power forests provide for the air we all breathe.

The solution is easy: leave your firewood at home and pick some up locally instead. If everyone takes care of our forests we will be able to enjoy them for years to come.

Buy Local!

FEATURE TREE ~ Butternut (*Juglans cinerea*)

Features: The Butternut (*Juglans cinerea*) is a medium-sized tree that belongs to the Walnut family, and like the other native walnut in Ontario, the Black Walnut, it produces edible nuts in the fall. The roots of Butternut secrete juglone, an allelopathic chemical that can kill other plants growing nearby.



Form:

Open-grown butternut trees have a short trunk with a broad, open, spreading crown. In the forest, butternut have taller, less branchy trunks with a smaller, more compact crown. The smaller branches in the crown tend to bend downwards and then turn up at the ends.

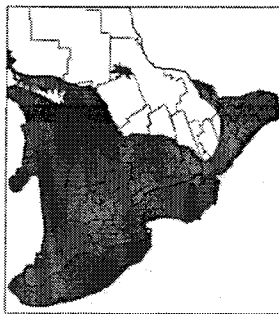
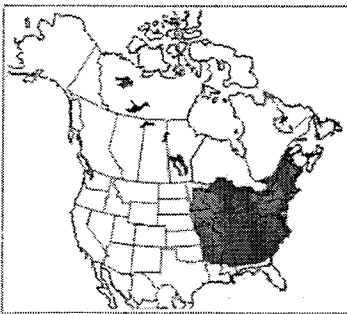
Bark:

The bark is grey and smooth on immature trees. On older individuals, the bark becomes separated by narrow, dark fissures into wide, irregular, flat topped, intersecting ridges.

Leaves:

Butternut leaves are compound. They are about 25 to 40 cm in length and are composed of 11 to 17 leaflets arranged along a central stalk. The individual leaflets are stalkless. Their undersurface is densely hairy.

Status: Endangered Provincially and Nationally



Range: The Butternut occurs in eastern North America, ranging from Georgia, Alabama, Mississippi and Arkansas west to Iowa and Missouri, north to southern Ontario and Quebec, and east to New England. In Ontario it is found throughout southwestern Ontario north to the Bruce Peninsula and the edge of the precambrian shield.

Butternut (*Juglans cinerea*)

Threats: Butternut trees are normally found scattered at low density in forests, and were thus never common in Ontario. Historically, they have declined as forests have been cleared. Today, the main threat to Butternut is a serious fungal disease called Butternut Canker, which was first found in Ontario trees in 1991, but has been in North America for about 50 years. It is thought to have arrived accidentally in infected plants imported from overseas. The fungus can kill a tree within a few years of infection. It enters through cracks or wounds in the bark and multiplies rapidly, making sunken cankers that expand and girdle the branch or trunk, killing everything above the canker. Fungus spores can be transported in wet weather for miles, and the disease can spread quickly. In southeastern states such as Tennessee, the disease has already killed about 80% of the Butternuts. In Ontario, surveys in eastern Ontario show that most trees are infected, and perhaps one-third have been killed.

Protection: Protection provided to the Butternut under Ontario's *Endangered Species Act*, 2007, prohibits any type of harm to this species. Butternut does grow in some national and provincial parks in Ontario where trees receive protection from cutting. Most trees, however, are on private land. There is no known cure for the canker disease, nor any effective techniques to slow or prevent the spread of the disease. The Ontario Forest Gene Conservation Association has established a Butternut Conservation Group, and one of its main objectives is to locate disease-resistant individuals and use these to propagate tree seedlings for planting.

SPECIES @ RISK ACT - Ontario

The Butternut species is listed on the Species at Risk in Ontario List, in O. Reg 230/08 under the Endangered Species Act, 2007 (ESA 2007), as an endangered species. Clause 9 (1)(a) of the ESA 2007, provides that no person shall kill, harm, harass, capture or take a living member of a species that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species.

There are exemptions.....

Attend the NWOA Annual General Meeting to find out more.....

DESCRIPTION	Butternut heartwood is medium brown and resembles American Walnut, it's just not as dark. It is straight grained and coarse, but with a soft texture.
OTHER NAMES	White Walnut
WORKING PROPERTIES	Easily worked with hand and power tools. Little dulling effect, but cutters must be kept sharp due to soft nature of the wood. Nails, screws, glues and stains well. Can be brought to an excellent finish.
DURABILITY	Non-durable and susceptible to attack by common furniture beetle. Heartwood is moderately resistant to preservative treatment. Sapwood is permeable.
SEASONING	Butternut wood dries slowly with little degradation. Medium movement.
USES	High-class and utility joinery, interior trim, cabinet fitments, furniture, boxes, crates, veneer, panelling.
COMMENTS	Excellent carving wood. Used as a substitute for Black Walnut

Rideau Valley Conservation Authority

Butternut Recovery Program

Butternut canker disease has infected most of the butternut trees across the entire North American range. This fungal disease has been found on more than 95 percent of the butternut trees examined in eastern Ontario. There is no known cure for butternut canker disease, but some trees may be resistant to the disease just as some people are more resistant to colds than others.

Rideau Valley Conservation Authority is working with the Forest Gene Conservation Association and the Butternut Recovery Team to build a strong butternut recovery program across southern Ontario. With the help of numerous partners including the Government of Canada Habitat Stewardship Program for Species at Risk, the Ontario Species at Risk Stewardship Fund, Ferguson Forest Center, Stewardship Councils and Conservation Authorities, local landowners are helping to find, monitor and plant healthy butternuts through a regional Butternut Recovery Program. Landowners are reporting butternut trees found in their backyards, fence lines and woodlots. Conservation Authority staff then assess each tree for overall health and potential canker resistance. If the tree is healthy and has minimal to no canker infection, it is added to a database and mapped for future seed collection. Thousands of seeds are collected each year from select healthy parent trees to produce 2,000 vigorous seedlings that are in turn planted throughout eastern Ontario to replace the dead and dying butternut. As many seeds as possible are collected from the canker free trees in the hope that they could provide genetic resistance to the fungus and be used to produce canker resistant stock for future planting. Trees

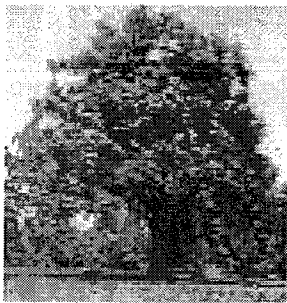
that are showing signs of canker resistance are monitored each year to ensure they haven't become infected.

So far, over 380 healthy trees have been found and recorded as potential seed sources for future seed collection. Twenty-five of these trees show signs of resistance to the canker disease. Leaf samples have been sent to the Ontario Forest Research Institute for DNA testing to determine whether these 25 are hybrids or pure butternut species trees. Preliminary results suggest that 12 of the 25 are pure butternut. Plans are underway to save the genetics of these resistant trees through a long-term grafting program.

Small batches of seedlings are planted by interested landowners all across eastern Ontario in the hope of re-establishing the population. Over 4,000 butternut seedlings have been planted since 2006.

The Butternut Recovery Program is working to:

- Inform and educate landowners about butternut canker.
- Locate, assess and map mature healthy butternut trees with landowner help.
- Collect seeds from healthy parent trees and grow vigorous seedlings to replace butternut loss.
- Plant and monitor butternut seedlings on public and private sites throughout eastern Ontario.
- Assess the status of canker free trees every year.
- Work closely with the national and provincial Butternut Recovery Teams and other recovery efforts across Ontario.



Most of the land in eastern Ontario is privately owned so the involvement of concerned landowners is critical to the success of the program.



...If all the landowners would co-operate, we may just be able to save a Canadian Heritage Tree.

Norma Appleton and Dean Taggart,
Thunderheart Farm, Westport, Ontario

For more information:

Rideau Valley Conservation Authority

3889 Rideau Valley Drive, P.O.Box 599, Manotick, Ontario K4M 1A5

613-692-3571, www.rvca.ca



WOODN'T YOU LIKE TO KNOW.....

Answers to questions from members....



Q1. How do I tell the difference between a Butternut and a Black Walnut?

Butternut and black walnut are often confused.

The following table illustrates some of the main differences between the two species.

	Butternut	Black Walnut
Twigs	<ul style="list-style-type: none">• thick, buff-coloured• quite downy• chambered pith is dark brown• distinct hairy fringe above each leaf scar• upper margin of leaf scar straight across	<ul style="list-style-type: none">• thick, orange-brown in colour• slightly downy• chambered pith is light brown• no hairy fringe above leaf scar• upper margin of leaf scar deeply notched
Buds	<ul style="list-style-type: none">• downy• usually two buds above each leaf scar• terminal bud elongated and blunt	<ul style="list-style-type: none">• slightly downy• usually two buds above leaf scar• terminal bud rounded and blunt
Leaves	<ul style="list-style-type: none">• about 40 cm long• compound• 11-17 leaflets• terminal leaflets same size as other leaflets• leaflets are stalkless• quite hairy underneath• yellowish green	<ul style="list-style-type: none">• about 30 cm long• compound• 15-23 leaflets• terminal leaflet either smaller than other leaflets or missing• leaflets are stalked• slightly hairy underneath• yellowish green
Bark	<ul style="list-style-type: none">• ash-grey in colour and smooth when young• separates into wide, intersecting, flat-topped ridges on mature tree	<ul style="list-style-type: none">• light brown and scaly when young• changes to dark brown with deep intersecting furrows on mature tree
Fruit	<ul style="list-style-type: none">• oval in shape• husk smooth with dense sticky hairs• inner nut has jagged irregular edges	

WEB SITE SOURCE AND FOR MORE INFORMATION



www.fgca.net