



NORFOLK WOODLOT OWNERS ASSOCIATION NEWSLETTER

www.norfolkwoodlots.com



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President's MESSAGE

St. Williams Forest Tree Nursery Heading in New Directions

The horrific contraction in forest harvesting in Ontario's North has seriously impacted activities at the oldest forest tree nursery in Ontario. Since last July, new partners at ForestCare have been laying the foundations for new business avenues. Rather than producing seedlings only for reforestation, the newly named "St Williams Nursery and Ecology Centre" will produce a wide range of native plant materials (trees, shrubs, grasses and wildflowers) for ecological restoration, landscaping and biodiversity conservation.

Traditional reforestation stock will certainly not be forgotten but with rapidly increasing public interest in "re-naturalizing" some of their land, to help the native fauna and flora, partners in the new enterprise believe that the former forestry station can play an important role not only in our county, but right across Ontario. Restoration projects are being undertaken on abandoned or unproductive agricultural sites, along roadsides and infrastructure corridors, construction sites, worked out gravel pits, irrigation pond diggings, landfills, brownfields, parks, green roofs, etc. Restoration and landscaping with wild-type native species is important to restoring natural biodiversity in both our rural and urban landscapes, and can also have significant benefits such as increasing the abundance of pollinating insects for horticultural and agricultural crops.

The new partners at St Williams include area residents and are well known amongst some members of the Norfolk Woodlot Owners Association: Mary Gartshore and Peter Carson from the Walsingham area will be partnering with their nursery and seed business; Allan Arthur, is an experienced ecologist and Lynedoch area farmer; Jim and Wilma Wiersma are long experienced in the greenhouse and nursery trades, and have moved from their farm in Fisherville to the former superintendents house at the nursery. Jim will also act as the new facilities manager and Wilma as the lead greenhouse grower for the new company. Ms. Gartshore and Mr. Arthur are provincially recognized experts in land restoration with many years of experience. They will serve in consulting capacities to government, businesses and landowners wishing to undertake restoration work. They are hoping to provide a full range of ecological services from verbal advice to managing contracts for an entire project from conception to completion. Our members are invited to contact the office and enquire about the availability of nursery stock that they might like to plant.

The new partnership is particularly keen to be part of the local community and they would like to restore some of the attractions, which made the old "Reforestry Farm" such a popular place in our community. They are planning to develop an interpretive centre and retail native plant shop on the grounds to help citizens understand the process of land restoration and conservation of natural biodiversity. Combined with the existing Forest Interpretive Centre this idea could put St. Williams back on the map as a "must visit place" for a broad range of Ontarians interested in heritage and the out of doors.

Good Luck to the new entrepreneurs, Ontario needs you!

Dolf Wynia, President, Norfolk Woodlot Owners Association

UPCOMING EVENTS!

TREE PLANTING

ROWS or NOT – Weighing the Pros and Cons

Sunday November 15th, 2009

Time: 1:30 PM

Where: Meet at corner of Con. 1 ~ South Walsingham and Hwy #59
Driving Tour ~ 2 sites to be visited.

Discussions will occur on sites ~ comments will be included on the map provided that day.

Approximate length of tour 2 ½ hours. Dress appropriately.

Tree Spacing ~ ROWS

The distance between planted trees is determined by the species and the purpose of the planting. The goal is to plant a sufficient number of trees to fully utilize the site, but provide sufficient growing space to avoid a noncommercial thinning to maintain plantation vigor. No single spacing is ideal for satisfying all planting objectives. A distance of 6 to 12 feet between trees within planting rows will result in maximum growth and maintenance of tree quality for most species. Spacings of less than 6 feet require thinning before the trees are of commercial size and value and are not recommended. Tree spacings greater than 12 feet are also not recommended as the site is not fully utilized while the trees are young and weed control problems are prolonged.

Wide spacings also contribute to the development of trees with large branches and poor form. In general, hardwood seedlings are planted at wider spacing than conifer seedlings or transplants and are pruned to produce high quality stems. Access roads should be evenly spaced throughout a newly established plantation to facilitate future management.

TREE PLANTING DENSITY RECOMMENDATIONS

Conifers for Timber Production	600 to 1000 per acre
Christmas trees	1200 per acre
Hardwoods	300 to 500 per acre
Windbreaks	3 staggered rows



COMMON TREE PLANTING SPACING

Distance Apart	Number of trees per acre
6 X 6	1210
6 X 10	726
7 X 7	889
7 X 10	622
8 X 8	681
9 X 9	538
10 X 10	436
12 X 12	302

Scattered Planting

Planting of trees in localized pods scattered across the restoration site with pioneer species on the exterior of pod with tolerant shade/slower growing species planted within the interior of the pod.

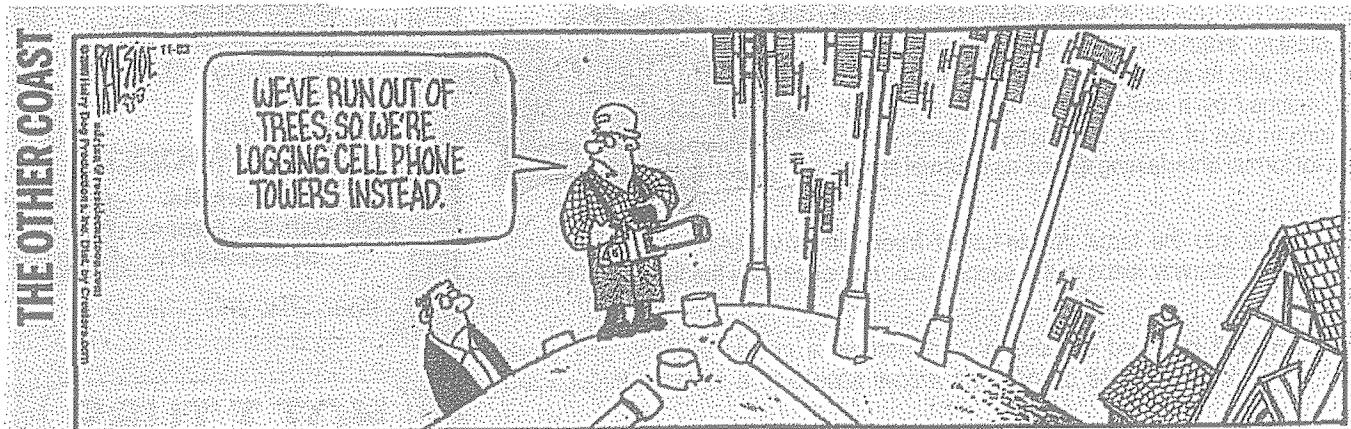
Planting in a scattered pattern throughout the site may also be undertaken. This may occur at the beginning of the restoration effort or later to establish a savanna type distribution of larger trees.

Restoration may also include complimenting efforts with infilling of native prairie grasses, wildflowers and forbes.

Biodiversity and a naturalized transition of the restoration site is the approach applied.

Savanna	A transitional grassy area with scattered trees and shrubs positioned between a grassland and a forest, an area usually with no more than 50% trees.
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FOREST FUNNIES



WEBSITE OF THE MONTH

The Environmental Commissioner of Ontario is the province's independent environmental watchdog. Appointed by the Legislative Assembly, the ECO is tasked with monitoring and reporting on the government's compliance with the Environmental Bill of Rights to ensure that Ontario's natural environment is protected and conserved for future generations.

Environmental Commissioner's Report Card for Ontario

www.eco.on.ca/eng/uploads/eng_pdfs/2009/ar2008.pdf

Don't Move Firewood

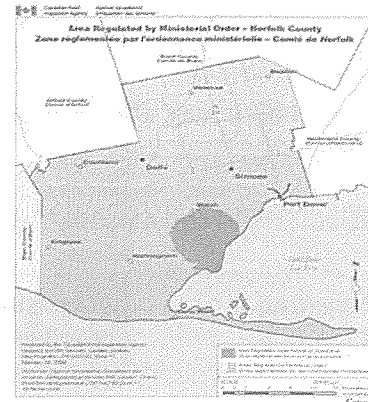
Throwing a few pieces of firewood into the trunk of the car before a camping trip might seem like a good way to plan ahead, but those logs could destroy a forest.

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 has killed millions of ash trees across Canada.

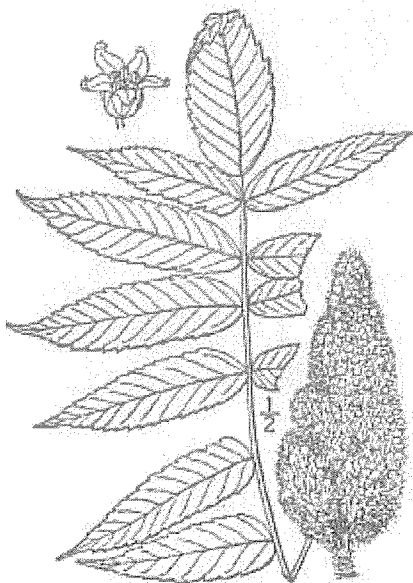
When forests are destroyed, everyone bears the consequences. Workers who depend on the lumber industry can lose their livelihoods. Animals and birds can lose their habitat. And our environment can lose the cleaning power forests provide for the air we all breathe.

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!



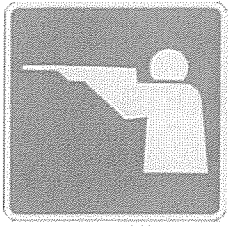
Staghorn Sumac



The Sumac is a large shrub that commonly grows along roadsides, in abandoned pastures, and on the edges of forests. Sumac belongs to the *Rhus* family which also includes poison ivy, poisonoak, and about 100 species of other trees and shrubs. Three species of sumac are common throughout the south. These are Winged Sumac (*Rhus copaliina*); Staghorn Sumac (*Rhus typhina*) and Poison Sumac (*Rhus vernix*). The leaves of the Winged and Staghorn Sumac are similar. The leaves are alternate, deciduous, and odd-pinnately compound, with 9 to 31 leaflets. The berries are small, nearly round, about 1/8 inch in diameter, with a hard pit and a thin layer of dry flesh clothed in a dense coat of crimson colored, sour hairs. The fruit clusters are often persistent throughout the winter and are a key characteristic of the species.

Only the red berries from the Winged and the Staghorn Sumac can be used. The white berries of Poison Sumac and Poison Ivy are very poisonous and should be avoided at all costs. Be absolutely certain that you are using the red berries on the non-toxic species.

Several Native American tribes used berries from Sumac for various uses. Some common names were: Kiowa name: maw-kho-la (tobacco mixture); Dakota name: chan-zi (yellow wood); Winnebago name: haz-ni-hu (water-fruit bush). Several parts of the shrub were used medicinally; roots for dye; stems for basketry; leaves as tannin for tanning leather and dried leaves for smoking mixtures; berries as tea; roots, shoots, berries as food. Sumac berries found in human remains from a bluff shelter in the Ozarks dated back to a least 3,000 years ago.



CAUTION HUNTING SEASON IS NOW OPEN

Sharing the landscape

The Responsible Hunter

Hunters' responsibilities surpass the demands of the law.

Responsible hunters learn as much as possible about the game pursued, its habitat and lifecycle. They are familiar with the reasons for hunting seasons, restrictions and bag limits. Hunters believe strongly in the sustainable use of resources.

Responsible hunters are skilled in the use of the tools of hunting. Whether they use guns or bows, traditional or more advanced firearms, they must be well-practiced and know the firearm's capabilities and limitations. When they shoot, they do so accurately and safely.

Responsible hunters' interest in wildlife extends beyond the field and table. They have concern for the environment, non-game and endangered species and they support wildlife research, conservation efforts and law enforcement.

Respect for the Law

Virtually every aspect of hunting is regulated by federal and provincial law. Laws determine who can hunt, where and under what conditions. Laws exist to maintain public safety and to ensure that wildlife is conserved. Responsible hunters insist that other hunters obey all laws and they report lawbreakers.

Respect for Others

Hunters, be aware that some aspects of hunting may bother other people. Respectful hunters avoid offensive behaviour and situations.

- Don't display your harvest on your vehicle or in your yard;
- Strictly obey firearm storage and transport laws and observe the rules of safe firearm handling;
- Leave your hunting ground pristine;
- Do not behave coarsely during or after the hunt, appear unkempt, or use alcohol in public;
- Take the time to share your hunting skill and experience with novices and others.

Respect for Hunters

Licensed hunters have a legal right to harvest wildlife, subject to regulations. It is illegal to interfere with a person who is legally hunting, fishing or trapping.

In today's society it is critical that all hunters behave in a manner that is not offensive to non-hunters. They must demonstrate their respect for both the written law and the unwritten moral code that dictates a deep respect for the wilderness and the game they seek. Those who act disrespectfully, either by acting illegally or without proper regard, should be corrected.

Landowner Permission: Landowners have every right to expect lawful and responsible behavior from the hunters who enjoy their property. Landowner-O.F.A.H. member agreement forms, available free from the O.F.A.H. (www.ofah.org) provide a level of comfort and protection for hunters and landowners alike. SOURCE: Ontario Federation of Anglers and Hunters ~ Responsible Hunting Brochure

INVASIVE SPECIES

Definitions

Alien species (*also known as exotic or introduced species*)

Species of plants, animals, and microorganisms introduced by human action outside their natural past or present distribution.

Invasive species

Harmful alien organisms whose introduction or spread threatens the environment, the economy, or society.

Definitions taken from "An Invasive Alien Species Strategy for Canada"¹

An invasive plant is one that has been moved from its native habitat to a new area (possibly for garden/domestic use), and reproduces so aggressively that it displaces species within native plant communities, the result being economic, ecological or social disruption. In a forest ecosystem, an invasive plant can be a tree, shrub, or herbaceous plant. Some particularly persistent invasive plants found in Ontario woodlots include **common and glossy buckthorn** (*Rhamnus cathartica*, *R. frangula*), **dog-strangling vine/swallowwort** (*Cynanchum ouiseae* [*Vincetoxicum nigrum*], *C. rossicum*), **garlic mustard** (*Alliaria petiolata*), and **Norway maple** (*Acer platanoides*). This guide deals with these four established species and some others which landowners should be aware.

Invasive plants are a major issue emerging over the last decade, and a significant threat to Ontario's biodiversity and forest health.

Collaborative efforts to prevent introductions and manage invasive plants are now being organized by the Ontario Ministry of Natural Resources, conservation authorities, stewardship councils, and organizations such as the Ontario Federation of Anglers and Hunters, and the Ontario Invasive Plant Council.

¹ Government of Canada, 2004. Invasive Alien Species Strategy for Canada. Environment Canada.

Landowner Strategies ~ Controlling Invasives

Controlling invasive species is a daunting task; however, with a strategy in place, a landowner can, over time, control invasive species on their property. Landowners must keep in mind that with seed sources on neighboring properties, large infestations, or with a large seed bank already established, a longer community strategy would be required, so discuss these species with your neighbors, and ask about what has worked for them on their properties. Control strategies are continuing to be developed for these species – if you do research (the web is a good place) and experiment, you will find out what works best on your property. Unfortunately, the list of species that continue to escape from our gardens and become invasive needs to be updated regularly.

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

Answers to questions from members....



Q1. I am thinking of planting a *red maple* on my yard – I have been told this may not be a good idea - why?

Before we answer this question we must clarify what is meant by red maple. A native red maple does not have red leaves – any many people refer to a red maple when they truly mean a **Crimson King Norway Maple** – a non-native maple – used extensively in the past as a street tree or on peoples front yards.

NORWAY MAPLE

(*Acer platanoides*)

Description and Life History

Norway maple (which has many cultivars) is a small to medium sized deciduous tree with a broad, rounded crown. It can readily be distinguished from other maples because the leaves and twigs ooze milky sap when cut or torn. Norway maple can be 15-18m (50- 60ft) in height, with a branch spread often equal to its height when growing in the open. Young bark is smooth and gray-brown in color, with mature bark having firm, tight, intersecting ridges. Twigs are stout, brown, with green buds and overlapping bud scales. Norway maple has dark green leaves with five to seven lobes, with the leaves being wider than they are long. Sugar maple leaves have three to five lobes and are generally until early November when they will turn a bright yellow; although some cultivars, such as Crimson King, are a rich maroon color all summer. In mid to late-April as the leaves are expanding, the yellowish green flowers of Norway maple appear in stalked clusters. The fruit of the Norway maple is a double samara; wings are at a conspicuously wider angle (diverging at nearly 180 degrees) than sugar maple. The seeds mature in September and are dispersed by wind. They germinate readily, even in dense shade, and seedlings grow quickly.

Distribution and Habitat

Norway maple was first introduced to North America from Europe in the mid- 1700's for cultivation as an ornamental tree, and has become one of the most popular trees for city plantings. It was used widely across North America as a replacement for the thousands of street trees lost to Dutch elm disease in the 1930's and 40's. It is a fast-growing species that is adaptable to a wide variety of urban sites and more tolerant to urban stresses than many native trees. Many cultivars have been developed, including purple-leaved and columnar forms.

Ecological Impacts

The ability of Norway maple to grow in deep shade makes it particularly threatening to native forest habitats. It commonly invades natural areas in cities (some Toronto ravines are now infested), because of its general landscaping use by homeowners and municipalities. In fact, Norway maples have become so good at establishing themselves, the outskirts of many New England cities and large towns have stands of this species and little else. Seedlings from Norway maple can form a thick mat and will choke out the natural regeneration of other native tree species. The tree is very efficient in using water and nutrients. Since few species of herbaceous plants can exist underneath the solid canopy of a mature Norway maple stand, the soil beneath the trees tends to be bare and subject to erosion. There are indications that this tree also has allelopathic properties that inhibit the growth of other species in its proximity.

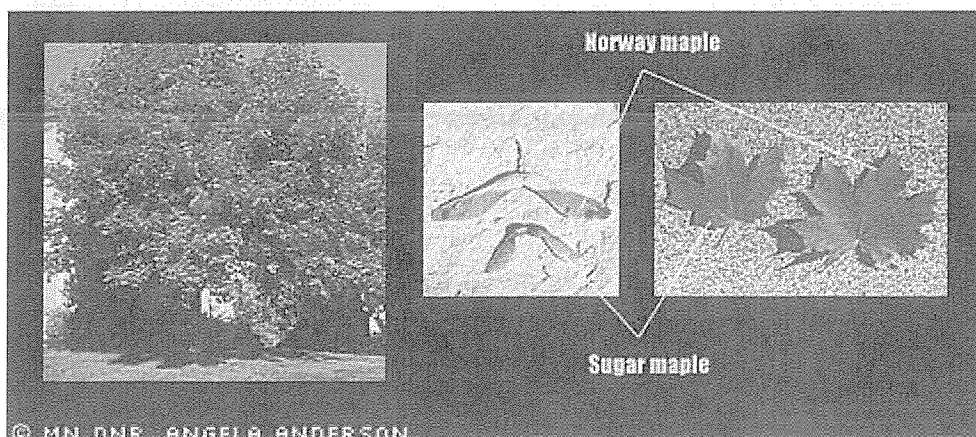
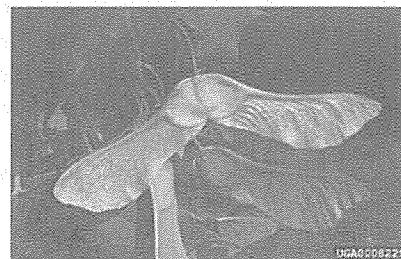
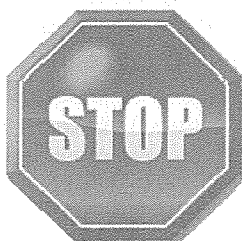
Control Recommendations

Mechanical: The use of a weed wrench to pull young trees out of the ground is effective, or small saplings may be pulled by hand. Larger saplings can be dug out, ensuring that all root systems are removed as well. Cutting may be effective, provided resprouts are also controlled.

Chemical: Girdling the trunk followed by the use of herbicide will also kill Norway maples. Cutting the tree at the base and applying herbicide to the stump will discourage resprouting.

Herbicide use disclaimer: Regulation 63/09 to Ontario's Pesticides Act came into effect on April 22, 2009. This regulation brings many changes to how herbicides may be used. There are exceptions for agricultural or forestry use as well as provisions for natural resource management, including invasive plant control, under certain circumstances. Contact the Ontario Ministry of the Environment or the Ministry of Natural Resources for more information.

The best long-term control method is to phase out the use of Norway maple as a street and garden tree, and substitute native trees such as sugar or red maple.





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MODIFIED MANAGEMENT RECOMMENDATIONS FOR THE ESTABLISHMENT AND MANAGEMENT OF RED PINE PLANTATIONS *Based upon the presence or future probability of red pine decline*

ESTABLISHMENT OF RED PINE PLANTATIONS

If considering planting red pine, check pH of the A, B, and C horizons. When checking the C horizon ensure that you sample deep enough (about 1.5m).

1. A and/or B horizons are alkaline:
 - Do not plant red pine.

Crop is likely to fail by 30-40 years of age due to nutrient deficiency.

2. A and B horizons are acidic but the C horizon is alkaline:
 - You are likely to achieve better growth and a longer rotation but the site will be predisposed to root disease problems.

Armillaria root disease will be the main problem but annosus root rot is going to increase in the absence of stump treatments.

Sites with compacted soil layers (>1.4 BD) will tend to be more problematic because red pine seems to get discouraged trying to put roots into dense soil – especially if it is alkaline.

Richer soils may result in more root disease and as such are not necessarily better red pine sites.

CONSIDERATIONS FOR THE MANAGEMENT OF YOUNG RED PINE PLANTATIONS (< 50 years)

check the pH of the C horizon to determine if future decline is probable (if the plantation is in reasonable health at this stage it is unlikely that the A or B horizons are alkaline)

If the C horizon is alkaline:

- If not already present in the understory, consider options to establish desirable species as soon as possible;
- Ensure that an aggressive thinning regimen is in place (ie. consider light selection thinning in addition to row removal at first thinning);

RECOMMENDATIONS FOR RED PINE PLANTATIONS WITH VARYING LEVELS OF DECLINE

Applicable where a typical prescription in the 50-70+ year age class for a healthy stand would include a 25-35% reduction of suppressed or poorly formed stems and to improve spacing (typical residual target BA of 28-30m²/ha).

Management objectives include maximizing timber values while moving toward stand conversion.

1. Stand is relatively healthy but has occasional decline pockets and/or scattered individual mortality:
 - Mark in the normal manner via selection concentrating on smaller diameter classes, poor quality, health, and spacing;
 - Mark 2 live trees surrounding decline pockets and individuals;
 - PLUS, when approaching decline pockets switch to marking from above and remove larger diameter class trees (at same % prescribed) within 50-75m surrounding decline area.
2. Stand has scattered decline pockets and/or scattered individual mortality throughout much of the stand:
 - Mark complete stand from above via selection concentrating on the removal of larger diameter classes plus unhealthy trees with declining crowns regardless of diameter;OR if there is no perceived need to mark from above:
 - Mark all Pr with thinning or declining crowns (some openings will be created and BA may be reduced substantially);
 - Where BA remains > 26-28 m²/ha reduce BA to that level using spacing as the main criteria.
3. Stand is exhibiting severe decline throughout:
 - Complete overstory removal;
 - Retain all Pw;
 - Consider retaining pockets with little commercial value to reduce damage to regeneration and for the provision of habitat.

In all scenarios monitoring should be conducted on at least a biannual basis.

Complete overstory removal is a much more desirable option where adequate advanced regeneration is present. Careful consideration should be given where this is not the case

Soil sampling should occur in younger stands (30-50 years) to determine the likelihood of future decline problems. Where the C horizon is alkaline assume a younger rotation age and consider options to ensure the early onset of desirable regeneration.

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