Welcome to

Garden Club Gossip & Glee

Your online version of the

MILLBROOK & AREA GARDEN CLUB

“People who will not sustain trees will soon live in a world that will not sustain people.“- *Bryce Nelson*

“To exist as a nation, to prosper as a state, to live as a people, we must have trees.” - Theodore Roosevelt

“Richard Branson has offered a large prize to anyone who invents a device that will pull greenhouse gases out of the atmosphere. God already invented this device, and we call it a tree. Trees pull greenhouse gases out of the atmosphere through photosynthesis and ‘sequester’ it as carbon in the leaves, stalks and wood,” writes Christopher Shore in the November-December 2007, issue  of Marketplace.

“In a single season, a large tree can take over 40,000 liters of water from the ground and discharge it as fresh oxygen and water vapor.” – Peterborough Ecology Garden

**On this day of Thanksgiving, besides being thankful there has not been a killing frost yet, hopefully trees will be recipients of much gratitude.**

**The Benefits of Trees** “

**Public Health and Social Benefits**

**Clean air:** Trees produce oxygen, intercept airborne particulates, and reduce smog, enhancing a community’s respiratory health. The urban canopy directly contributes to meeting a city’s regulatory clean air requirements.

Access to trees, green spaces, and parks promotes greater physical activity, and reduces stress, while improving the quality of life in our cities and towns.

         Urban landscaping, including trees, helps lower crime rates.

         Studies show that urban vegetation slows heartbeats, lowers blood pressure, and relaxes brain wave patterns.

         Girls with a view of nature and trees at home score higher on tests of self-discipline.

**Environmental Benefits**

**Climate change:** Trees sequester carbon (CO2), reducing the overall concentration of greenhouse gases in the atmosphere.

**Energy conservation:**

         A tree is a natural air conditioner. The evaporation from a single tree can produce the cooling effect of ten room-size, residential air conditioners operating 20 hours a day.

         Acting as a natural air-conditioner, Palo Alto’s lush canopy ensures that summer temperatures are at least 6 to 8 degrees lower than in comparable neighborhoods without trees.

         Tree windbreaks can reduce residential heating costs 10-15%; while shading and evaporative cooling from trees can cut residential air-conditioning costs 20-50%.

**Water filtration and retention:** Urban forests promote beneficial water quality and reduce storm water management costs.

         Street and park trees can intercept millions of gallons of rainwater. Trees capture and slow rainfall and their roots filter water and recharge the aquifer. Trees reduce storm water runoff, which reduces flooding, saves city storm water management costs, decreases the flow of polluted water.

**Wildlife habitat:** Trees provide important habitats for numerous bird, insect and animal species.

**Economic Benefits**

Communities and business districts with healthy tree-cover attract new residents, industry, and commercial activity.

         Homes landscaped with trees sell more quickly and are worth 5% to 15% more than homes without trees.

         Where the entire street is tree-lined, homes may be worth 25% more.

         Trees enhance economic stability by attracting businesses; people linger and shop longer when trees are present.

         Where a canopy of trees exists, apartments and offices rent more quickly and have a higher occupancy rate; workers report more productivity and less absenteeism.

**Tree Benefit “Fun Facts”:**

         Trees provide inviting and cool areas for recreation and relaxation such as playgrounds and parks.

         Trees create a tapestry of color and interesting form that changes throughout the year.

         The color green is calming and relieves eye strain.

         Trees screen unattractive views and soften the harsh outline of masonry, metal, asphalt, steel and glass.

         People walk and jog more on shaded streets, which encourages interaction with neighbors and improves the sense of community.

         Trees absorb and block sound, reducing noise pollution by as much as 40 percent.

[The Benefits of Trees - Canopy : Canopy](https://canopy.org/tree-info/benefits-of-trees/)

         Now, new [research](https://www.nature.com/articles/doi%3A10.1038/nature14967) published in the journal *Nature* suggests the world is home to more than 3 trillion trees. Humans throughout history have played a key role in determining the number of living trees, researchers note. People cut down **15.3** billion trees each year and the global tree count has fallen by 46% since the beginning of human civilization.

         Where each day we chopped down almost **29** million **8000** trees.

         It takes **27,000** trees a day to keep up with the world’s toilet paper demands.

         Approximately **80000-160000** trees are cut down daily world-wide only for various papers.

         The estimate based on the “Global forest resource assessment” most recent conducted in 2015 which estimates the earth lost around **60000** square km of trees globally in one year only for papers.

         The average person in the USA uses approximately seven trees per year in various paper products.Totaling-**2000000000/year.**

         Unbelievably more than **200000** acres of rain forest are burned every day. what is more than **150** acres lost in every minute of every day.

         **46-58** square miles of forest are lost every year what is equivalent to **36** football stadium/min.

         **80000** acres of forests has been disappear from earth every day.

         **28000** species are expected to become extinct by the next **25** years due to deforestation.

[why O2 factory? – Oxygen Factory](https://oxygenfactory.org/why/)

**More Trees Please!!!!!**

**Aside from the fact that prime farmland is now lost forever, the saddest sight in the massive new Millbrook subdivision (Highlands) is the absence of trees and there seems to be no directive for the developer to plant any. Furthermore, the massive 713 residential Phase Two subdivision to be constructed just north of the Highlands has just been approved with NO mention of any tree planting or directives that lots must be of a size to accommodate at least one tree. If approved, there is also a subdivision application (Bousfield) for 696 residential units to be constructed on prime farmland just west of the Highlands subdivision. There is also a 85 residential unit application for forested lands in the heart of Millbrook (north of Turner Street) that, if approved, will result in  the cutting down of hundreds of trees.  And there is also a 244 residential unit application on the farm lands (referred to locally as Conrad’s) including a shopping mall along County Road 10. … 1738 residential units in total – NO mention of any trees. .. but much tree loss.**

**Other municipalities have created environmental sustainable policies and by-laws that developers must follow. They often include specific Tree Preservation guidelines during construction and specific tree reimbursements for any trees that are cut down. Whitby for example, has created a Green Standard for developers and a developer of any new subdivision must ensure enough trees are planted in order to obtain a minimum 30% tree canopy in 10 years.**

**In addition, Millbrook has faced much tree loss in the old village. The large old maple trees that once lined Tupper Street and County Road 10 have been cut down as well as the many trees that once shaded the village downtown core.   Mature trees were recently cut down at the Millbrook wastewater treatment plant because they were casting shade on  ‘green energy’ solar panels mounted on the treatment plant. 1000s of trees are being lost due to the ravages of Emerald Ash borer including the sentinel ash trees at the Old Millbrook School (which despite pleas to be treated were not) that are dying and local beech tree populations have been devastated by beech bark disease.  Trees planted along rural roadsides as part of government tree-planting programs at the turn of the 20th century are reaching the end of their lives. The gypsy moth (LDD) ravages of this year, weakened and killed many trees in the area.  More trees are being lost than are being planted.**

**In several urban areas, citizens are banding together to obtain funding to plant trees in their communities – some may have watched the recent PBS news hour report where several community groups have come together to plant 1000s of trees in Cleveland on both private and municipally owned properties.**

**Locally, a group of citizens recently made a successful request to Cavan Monaghan Council for permission to plant 6 memorial trees at Edgewood Park.  The following links provide an example of a community tree project as well as possible funding.**

[**Community Tree Project - Credit Valley Conservation (cvc.ca)**](https://cvc.ca/project/community-tree-project/)

[**Community Tree Grants – Tree Canada**](https://treecanada.ca/greening-communities/community-tree-grants/)

**This time of year is the perfect time of year to plant most species of trees and often they are on sale now at local nurseries.**

**Tree Planting Advice from Tree Canada:**

**PLANTING STEPS**

1. Minimize stress to your trees

Protect your tree well during transport by padding the trunk and branches gently with burlap and tying loose ends with soft rope or twine.

Plant as soon as possible after delivery. If planting is not possible right away, store the tree in a cool, shaded area and water as needed to keep the roots and soil moist.

2. Prepare the planting spot

Dig a hole two to three times wider than the container or root ball. The hole should only be as deep as the root ball. When placed in the hole, the root collar (i.e. where the roots join the main stem or trunk) should be equal to or slightly above the depth of the hole.

Roughen the sides and bottom of the hole to allow root penetration.

3. Plant your tree with care

For trees in containers, gently slide the root ball out of the pot and into the hole. For burlapped trees, place the root ball in the hole and gently cut away the wire basket and burlap.

Plant the tree so that the top of the root ball is flush with the top of the hole and the tree is vertical. Fill the hole in and around the root ball with the soil removed from the hole or good quality soil. Do not return any grass or sod to the hole.

Gently pack the soil around the root ball until the hole is two-thirds full to remove air pockets. Fill the remaining space with water to settle the soil and allow the hole to drain. Finish filling the hole with soil and make a ridge of soil around the root ball to direct water towards the roots.

For those who have a long-term tree- planting goal in mind, companies such as **The Incredible Seed Company** offers a variety of tree seeds:

[**Shop for Tree Seeds at The Incredible Seed Company Ltd.: Heirloom Untreated NON-GMO From Canada (incredibleseeds.ca)**](https://www.incredibleseeds.ca/collections/trees-shrubs?mc_cid=6486a64190&mc_eid=26bfdc52d3)

**Note… as recorded in this short video, sometimes one has to be careful where a tree is planted and a vehicle is parked:**

[**The Weather Network - Squirrel loads up parked truck with 158 kg of walnuts**](https://www.theweathernetwork.com/ca/news/article/squirrel-loads-up-parked-truck-with-158-kg-of-walnuts)

Beautiful Birches



Paper Birch planted as a sapling 12 years ago in the Moraine garden (photo by author)

One beautiful tree to consider for the garden is any of our native birch tree species which supply food and habitat for a wide variety of wildlife. Birches attract birds such as chickadees, nuthatches, swallows and woodpeckers. Hummingbirds feed upon the sap wells created by yellow bellied sapsuckers. Grouse like to nibble on the catkins and buds.  Aside from its attractive peeling bark which, depending on the species, ranges from white to deep copper red, the leaves turn a stunning yellow in the fall. And ….birch trees prefer to grow in cold climates.

 There are several  birch tree species hardy to our area:

         **Cherry Birch (Betula lenta) – native - has dark almost black peeling bark**

         **Dwarf Birch (Betula pumila)  - native - small shrub-like plant in found in boggy areas**

         **Gray Birch (Betula populifolia) – native – found naturally growing only in some parts of eastern Ontario – small tree with bark similar to the non-native European birch**

**River Birch (Betula nigra) – native – loves acid soil and wetter conditions-  white, brown and tan peeling bark**

         **White Birch (Betula papyrifera) – native - white peeling bark**

**Yellow Birch (Betula alleghaniensis) – native - largest birch tree for wetter areas – bark is an amber-yellow to silvery yellow-gray bark that peels off in thin curls - twigs and leaves give off the smell of wintergreen when rubbed**

         **European White Birch (Betula pendula) – non-native - white peeling bark with slightly weeping branches**

The most well-known example for many is Paper Birch, which also goes by the name of Canoe Birch, White Birch, Silver Birch and Spoolwood. The official botanical name is *Betula Papyrifera.* Paper birch is found everywhere in Ontario except for along the shore of Hudson Bay.

**Did you know?**

Peeling off too much of the paper (white) birch’s bark can kill the tree.

Birch trees can be found worldwide and are revered as symbols of renewal and protection in many cultures. The Germanic rune, *Berkana* –  birch –  stands for motherhood, bosom and protection. Cradles were made from birch wood to protect babies from evil forces.

The sweet sap was important to  North American indigenous communities and tannin from the bark was used in leather making in Russia. Birch sap, which flows abundantly in early spring, is sweet like maple sap but with a lower concentration of sugar. It takes about 364 litres (80 gallons) of birch sap to make 4.5 litres (1 gallon) of birch syrup, twice as much as is required to make a 4.5 litres (1 gallon) of maple syrup.  Birch sap has long been used to make wine in parts of Europe. Queen Victoria mentions Silver Birch wine in her diaries as a favourite of Prince Albert. Birch  tea made from the leaf buds or young leaves apparently is a powerful diuretic and touted to  alleviate arthritic pain.

As with many plants, horticulturists have concocted several birch varieties with unique characteristics such as  ‘Crimson Frost’ with purple leaves and ‘Shilo Splash’ with variegated white/green leaves. Most species, except the dwarf birch, can reach a height of about 25 metres  (80 feet). They tend to be short-lived trees and the popular paper birch sometimes only lives for 30  to 50 years.  Other species rarely live beyond 100 years.

At one time, birch trees were plagued with bothersome insects, namely Birch Borer and Birch Leaf Minor. These pests attacked the European White Birch with a vengeance, a tree that was imported into Canada because the tree bark turns white at an earlier age than the native birch and its slightly weeping branch habit is considered attractive and desirable.  Many of these non-native trees have died and disappeared and have not been replaced. It has been reported due to the decrease in numbers of European Birch trees, these insect pests are diminishing.  Any pruning should not be done between May 1 and Aug. 1, the flight period of the birch tree's greatest pest enemy, the bronze birch borer. The beetles are attracted to fresh pruning wounds.

Birch is a hardy, relatively fast-growing  tree that grows in most soil conditions, although its demand for water is greater than the average tree. The best time to plant a birch tree is spring and early summer. An ideal site is cool and moist. Birches thrive in well-drained sandy loam that is slightly acidic. For those who want to plant birch in sandy soils, one should down a good layer of mulch over the root zone and be prepared to water in the summer months until the tree is established.  Birch trees have difficulty surviving in heavy clay soil. If  planting in clay soil, one should aerate the soil by making deep holes in a 20-centimetre grid pattern around the tree. It is not ideal to plant birch trees near septic or sewer or water systems since the roots can find their way into any weak spots.

These trees are sun-lovers and will tolerate partial or light shade, but will not tolerate deep shade.  Birch trees need space, and while their crowns require plenty of sunlight,  birch roots and bases must be protected from heat. Mulching to shade the root system and increase moisture retention is recommended.   Since their strong roots will spread to twice the height of the tree, besides avoiding septic and well systems, one should avoid planting them where their roots  could impact foundations, roads, patios or other obstacles.  While a wonderful addition to rural gardens, birch trees often don’t adapt well to urban yards or developed suburban neighbourhoods.

Sometimes what appears to be a healthy young tree begins to steadily decline over several years and then dies for no apparent reason. According to Canadian garden expert, Ed Lawrence, the most likely reason is the cumulative impact of several years of drought that causes the tree to struggle each year until over time, it simply gives up.  Despite all the recent rainfalls, it was a very dry summer this this year and has been for the past several years.

Birch trees can be started from seed  but need a period of stratification. Seeds can be planted outdoors in pots in the fall or to stratify indoors, mix the seed with a moistened, sterile, peat based growing medium in a container, wrap in a ventilated bag, and place it in a refrigerator for 12 to 20 weeks. I takes about 4 to 6 weeks for seeds to germinate.

**For those who might like to take a fall trip to Montreal and enjoy the edible benefits of trees …(thanks to Andy for the tip… some might recall when staff from this nursery came here and gave a fruit tree grafting workshop in Mount Pleasant)**

FARM Visit and Pawpaw Tasting - OCT 16, 2021

Our Green Barn Farm visit and fruit tasting this year is on Saturday Oct 16, 2021 at 10 am.  At no other time in the year do we allow any visitors to wander our farm fields. We show you around the farm and explain what we call our "freedom farm" system of growing food crops. We have 100's of varieties of fruit trees not found on any other farm in Canada(or USA) ...from which you will be able to taste some ripe fruit still on our trees**.**

**Morning tour** (10-12) .....will focus on more known fruit like blackberries, apples, pears, grapes, plums, cherries, etc. and native edibles that are growing wild on our farm

**Afternoon tour** (1-3pm)... will focus on exotics like **pawpaw**, kiwi, persimmon, quince, medlar , shipova, yacon, banana, coffee, etc.

**PLANT AUCTION**(3-4 pm)......will hold an auction so you can take some fruit trees home after your tour. Highest bidder gets the plant so bring cash if staying for auction

COST is $50 for each tour

no dogs

yes young children but must register to come

Please reserve your spot in advance......online below or by email ken@greenbarnnursery.ca

**For more information visit:**[**https://www.greenbarnnursery.ca/**](https://www.greenbarnnursery.ca/)

**If you have any tips, photos,  garden stories, questions or information you wish to share or topics you would like covered - please contact our communications coordinator.**