

Chautauqua Community Tree Plan

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Prepared by Leslie Frankish
September 2017

Updates are noted in green italics
Final update October 2023



Chautauqua Community Tree Plan

The layers of our history are evident in our landscape. Let our era be the one that ensures the future of the Great Chautauqua Tree Canopy.

The following is based on the findings made in the 2016-2017 Chautauqua Tree Inventory.

Community Tree Plan Intent

To provide guidelines for future municipal street tree and park plantings.

To provide recommendations for private property plantings.

To be used in conjunction with any tree protection bylaws or polices by providing area specific guidelines for discretionary decisions regarding trees.

Mandate

To maintain the distinctive landscape of Chautauqua:

- Respect the unique beauty & harmony of the Chautauqua tree canopy.

- Respect the historical layers while accommodating contemporary conditions.

- Retain distinctive streetscapes, vistas, focal points & landscape gestures.

- Identify and protect the Iconic landmark heritage trees.

- Recognize that, in addition to healthy habitat & public safety, the aesthetic & experiential aspects of the landscape are essential considerations.

Distinctive Qualities

Atmosphere: Throughout Chautauqua there is a relaxed ambience. Although year round residences predominate the area, it still maintains a cottage resort atmosphere. The architecture is eclectic and the curb free roads feel more like large sidewalks. The epic tree canopy, however, is responsible for the strong 'sense of place'. It has been nicknamed the Cathedral of the Everyday. The feelings it evokes are paradoxicalmajestic & cozy....uplifting & grounded. Dichotomy is the key to the distinct quality of Chautauqua.

The majestic, uplifting aspect is achieved by the signature 'regal' form of the native Oaks,.... the predominant trees of Chautauqua. The high limbed, soaring trunks culminate in a canopy of large, artfully meandering branches that draw the eye upward.

The cozy, grounded aspect is created by the understory of 'cottagey' flowering shrubs and small trees. The multi-stemmed mounding forms create a comforting nest from which to view the majestic Oaks.

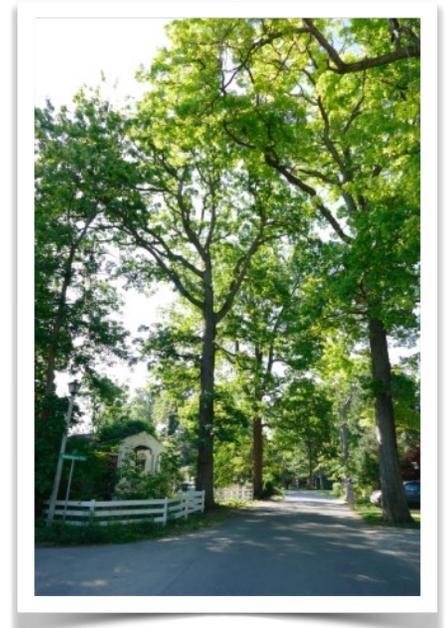
It is the strong contrast between the cozy and the uplifting that makes the big impact. Key to this, is the minimal presence of low branches or mid sized trees that would undermine the effect. This remarkable relationship needs to be preserved.

Arrangement: The elegant, noble trees are in a random arrangement scattered across many properties. It implies a natural forest setting rather than developers' regimentation. Formal silhouettes, layouts, and arrangements recall urban formality and are at odds with the relaxed informal atmosphere of Chautauqua.

Harmony: A very limited range of species creates this very harmonious canopy. Widespread planting of other species will dilute the tranquil unity of this arboreal wonder.

Specific species in a specific relationship defines the The Great Chautauqua Tree Canopy.

Please refer to the Design Guidelines & Recommended Planting lists for information on how to retain the distinctive Chautauqua landscape. For more information on the history and distinctive beauty of Chautauqua please refer to the Chautauqua Tree Inventory Report and ChautauquaOaksProject.ca



Chautauqua Community Tree Plan

The Distinctive & Iconic Tree Species of Chautauqua

The following are tree species that meet the criteria for distinctive status in Chautauqua...those species that contribute to the character of the neighbourhood and the beauty of the canopy. The rationale for this list is explained in the Chautauqua Tree Inventory Report.

Not all, however, are recommended for replanting. Please refer to the list of Recommended Species for Planting.

Major Deciduous Trees:

White Oak	<i>Quercus alba</i>
Red Oak	<i>Quercus rubra</i>
Pin Oak	<i>Quercus palustris</i>
Sugar Maple	<i>Acer saccharum</i>
Silver Maple	<i>Acer saccharinum</i>
Red Maple	<i>Acer rubrum</i> and <i>Acer x fremanii</i>
Shagbark Hickory	<i>Carya ovata</i>
Shellbark Hickory	<i>Carya laciniosa</i>
Northern Catalpa	<i>Catalpa speciosa</i>
Black Walnut	<i>Juglans nigra</i>
White Ash	<i>Fraxinus americana</i>

Major Coniferous Trees:

White Pine	<i>Pinus strobus</i>
White Spruce	<i>Picea glauca</i>

Understory Trees:

Flowering Dogwood	<i>Cornus florida</i>
Redbud	<i>Cercis canadensis</i>
Sumac	<i>Rhus typhina</i>

To prevent the destruction of the historic tree canopy of Chautauqua these species require protection. Every possible measure should be taken to prevent the removal of mature versions of these trees and to prevent unqualified pruning and damage to root systems. Additionally, the wide spreading root systems of the White Oaks need extra protection from interference of any sort especially root compaction.

Chautauqua Community Tree Plan

The Distinctive Landmarks of Chautauqua

The following are single trees, groves & other landscape gestures recommended for Heritage Tree status.

They are identified as significant landmarks in the Chautauqua landscape for the following reasons:

- Members of the original Oak Savannah
- Rare Carolinian species
- Emblematic of a Historical, Cultural or Streetscape role
- Remarkable Age, Size or Beauty

As the “most famous residents” of our neighbourhood they should be actively protected. The rationale for this list is explained in the Chautauqua Tree Inventory Report.

The Famous Residents of Chautauqua:

White Oak at 10 Circle...possibly old growth

White Oak pair in Ryerson Park

White Oak at 491 Niagara Boulevard

White Oak Groves on Shakespeare

Red Oak Groves on Wesley

Silver Maple Promenade Trees planted by the 1880s Chautauqua along Wilberforce

Wesley Wisteria

The Hedges of Vincent

Sugar Maple Allee on Oak Street

Sugar Maples planted by the 1880s Chautauqua encircling the Amphitheatre (now known as Circle St)

The Scarlet Oak Ring around Circle Street

The Cottonwood at 522 Niagara Boulevard....at 122' the tallest tree in Chautauqua!

White Pine at the crest of Ryerson Park

The Memorial Oak on Ryerson Park

UPDATE 2019 Please visit ChautauquaOaksProject.ca for more information on these Landmark Trees and other notable Celebration Trees in Chautauqua.

Chautauqua Community Tree Plan

Recommended Species for Street Tree Planting

It is recognized that the 'Street Trees' contribute significantly to the landscape of Chautauqua, especially its distinctive harmony. The high canopy coverage they provide creates the impressive vaulted corridors that have earned them the nickname 'The Cathedrals of the Everyday'. To retain this feature, a very edited list of species is recommended. It will maintain a unifying theme for the whole canopy, while providing slight variations for the unique quality of individual streets or areas.

Please refer to the Recommended Design Guidelines for the relationships within which they should be planted & the manner in which they should be pruned.

UPDATE 2019 In association with Niagara College, The Chautauqua Oaks Project will be growing the progeny of the Chautauqua heritage oaks, the predominant species of the tree canopy. These 'ChautauquaOaks' will be ready to plant as street trees as of 2022. For more details please see ChautauquaOaksProject.ca.

UPDATE 2023. The Chautauqua Oaks Project completed their planting program: 160 trees were added to the Great Chautauqua Tree Canopy, 100 of which were street trees. Planting with the progeny of the heritage white & red oaks, they were able to plant on every street adhering to the recommendations below.

Street Specific Species:

Circle Street

Predominantly: Scarlet Oak
Accents: Pin Oaks & White Pine

Wilberforce

Predominantly: White Oak
Accents: Pin Oak, White Pine

Vincent, Luther, Addison & Wykcliffe

Predominantly: Red Oaks
Accents: Northern Catalpa

Shakespeare

Predominantly: White Oak
Accents: Red Oak & at the south end Shagbark Hickory

Oak Street

Predominantly: Red & Swamp White Oak
Accents: Sugar Maple Allee at north end & Shagbark Hickory at south end

Dixie Street

Predominantly: Red & Swamp White Oak
Accents: White Oak & at south end Shagbark Hickory

Froebel & Palatine

Predominantly: Red Oak
Accents: TBD

Wesley

Predominantly: Red Oak
Accents: Beech & White Pine

Niagara Boulevard

Predominantly: White Pine
Accents: White Oak

Parks TBD

Chautauqua Community Tree Plan

Recommended Species for Private Property Plantings

The following list provides choices for homeowners to plant on their own property. It includes native species as well as species now naturalized and deemed compatible with the native species. The rationale for this list is explained in the Chautauqua Tree Inventory Report. Please refer to the Recommended Design Guidelines for the relationships within which they should be planted. Please also visit ChautauquaOaksProject.ca for more information on planting in Chautauqua. **** Denotes those species particularly iconic of the distinctive Chautauqua landscape.

Major Deciduous Trees:

Native to Chautauqua Oak Savannah:

Sugar Maple	Acer saccharum 'Green Mountain'
Shagbark Hickory	Carya ovata
Shellbark Hickory	Carya lacinoisa
American Beech	Fagus grandifolia
Black Walnut	Juglans nigra
Sycamore/Buttonwood	Platanus occidentalis
Black Cherry	Prunus serotina
White Oak	Quercus alba ****
Swamp White Oak	Quercus bicolor
Pin Oak	Quercus palustris ****
Red Oak	Quercus rubra ****

Naturalized & Compatible:

Silver Maples	Acer saccharinum
Northern Catalpa	Catalpa speciosa ****
Purple European Beech	Fagus sylvatica
Columnar Oak	Quercus alba fastigiata
Scarlet Oak	Quercus coccinea

Major Evergreen Trees:

Native to Chautauqua Oak Savannah:

Balsam Fir	Abies balsamea
White Pine	Pinus strobus ****
White Spruce	Picea glauca ****

Small Deciduous Trees:

Note.....Multi-stem versions are recommended

Native to Chautauqua Oak Savannah:

Service Berry	Amelanchier ****
Pawpaw	Asimina triloba
Paperbark Birch	Betula papyrifia
Blue Beech	Carpinus caroliniana
Flowering Redbud	Cercis canadensisincluding purple cultivar 'Forest Pansy' ****
Flowering Dogwood	Cornus florida ****
Pagoda Dogwood	Cornus alternifolia
Witch Hazel	Hamamelis virginiana
Ironwood or Hop Hornbeam	Ostrya virginiana
Sumac	Rhus typhina

Naturalized & Compatible:

Japanese Maples	Acer palmatum
Magnolia	Magnolia soulangiana and
Mock Orange	Philadelphus coronarius ****
Ornamental Purple Plum	Prunus cerasifera 'Atropurpurea' Pissard Plum
Ornamental Cherry	Prunus subhirtella 'Autumnalis' or serrulata 'Kwanzan'
Lilac	Syringa ****

Small Evergreen Trees:

Naturalized & Compatible: Note.....good for hedges & walls

Yew	Taxus cuspidata
Emerald Cedar	Thuja occidentalis 'smaragd'

Chautauqua Community Tree Plan

Recommended Design Guidelines

It is recognized that specific species in a specific relationship are the key to the unique harmony of the Great Chautauqua Tree Canopy. It is also recognized that within this harmony, individual streetscapes provide variations on the theme. The following outlines the general framework.

Design Guidelines.....General Arrangements:

Canopy Trees:

Maintain 'remnants of the forest' quality with non formal, scattered arrangements that create the effect of a grove of trees spanning many properties.

Achieved best with staggered groups...clusters of 'a pair and a friend nearby'.

Street Trees: Placed off centre and not rigidly aligned along the street.

Private Property: Placed at the edges & corners of the property will preclude interference with the house, and safeguard against future removal for renovations and rebuilds.

Mid story Trees:

Street Trees: None should be planted on the road allowances.

Private Property: Best placed in back yards or closer to houses.

Understory Trees:

Street Trees: None should be planted on the road allowances.

Private Property: Clusters of multi-stemmed or mounding small trees & shrubs creates the comforting nest aspect of Chautauqua.

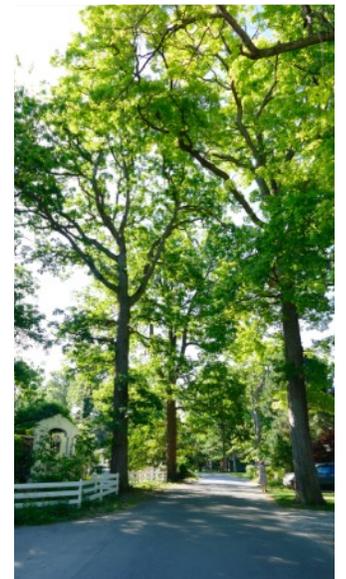
Design Guidelines.....General Trimming:

Canopy Trees:

Street Trees: Prune as high limbed to maintain the iconic Cathedrals of the Everyday, and to prevent interference with large municipal vehicles such as garbage trucks and ploughs.

Private Property: There are some exceptions but generally prune to high limbed as well. This is more compatible with small lots by allowing large trees to 'live above' the houses. It also allows air movement and prevents claustrophobia.

All pruning should be done by a certified arborist.



Chautauqua Community Tree Plan

Recommended Tree Sources

It is important to maintain the canopy with trees of the proper provenance.....actual progeny of the existing trees or stock locally grown in Southern Ontario.

Recommended Planting Programs

The majority of the major trees we enjoy today are the result of self seeding on abandoned farmland in the mid 1800s. A minimal number of major trees were planted in subsequent years. This has resulted in the unique landscape of Chautauqua.....a very high canopy with very few mid size trees obscuring the effect. To replicate this spatial arrangement it is recommended to replant with waves of 'group growth' plantings.....mass plantings of similar sized trees that 'rise' together.

UPDATE 2018 As discovered in the 2016-17 Inventory a significant replanting is long overdue. Please see the proposal for the Chautauqua Oaks Replanting Project.

Ideally repopulating the canopy with a group growth of oaks should be with the progeny of our existing heritage oaks. Chautauqua, now a residential neighbourhood, no longer provides conditions in which acorns can naturally repopulate themselves. Residents Holmes Hooke & Leslie Frankish began a seedling rescue program in 2016. The intention: to create a consistent and continuous crop of Heritage ChautauquaOaks in perpetuity.

UPDATE 2018 72 seedlings, found in a compost heap, were rescued and are slated to assist in the Chautauqua Oak Replanting Project.

UPDATE 2019 The majority of the above seedlings were planted along the Heritage Trail and some in Chautauqua. The seedling rescue program was replaced when the The Chautauqua Oaks Replanting Project partnered with the Niagara College School of Horticulture Seed Germination Program to harvest acorns and thereby grow the progeny of our historic oaks. All future plantings of The Project will be done with these trees. Also in process at the time of this update.... establishing a Gifting Program to share crops of 'ChautauquaOaks' to the greater Niagara on the Lake urban forest.

UPDATE 2023. The Chautauqua Oaks Project completed their 'group growth' planting program: 160 trees were added to the Great Chautauqua Tree Canopy, 102 of which were ChautauquaOaks, not only an 'iconic species' but the 'actual progeny' of the heritage oaks'.

The trees were also planted as per the Chautauqua Community Tree Plan's guidelines on tree arrangements in the landscape. To replicate the 'naturally self seeded formations' of the heritage oaks, the ChautauquaOaks were planted as groves of 'sociable clusters', 'randomly scattered across multiple properties' and, distinctive of Chautauqua streetscapes, as 'traffic calming sentinels' alongside the roads. All resulting in a faithful replication of the existing heritage forest.

There is one outstanding feature to be achieved over the next few decade: Formative pruning to maintain the high limbed form that is essential to the safety and distinct experiential aspect of the 'vaulted streetscapes' of Chautauqua. (Side Note: 346 ChautauquaOaks were also gifted to other areas. Over the next hundred years groves of ChautauquaOaks will also rise throughout greater Niagara on the Lake).

Please visit ChautauquaOaksProject.ca for more information on all of these programs.

Recommended Codes of Conduct Regarding Decisions for Removal

All efforts should be made to find solutions that preclude the removal or destruction of mature or distinctive species. This includes but not limited to the placement of:

- Houses and other structures such as garages, sheds, etc
- Swimming pools
- Driveways...especially the request for secondary driveways
- Fire hydrants
- Utility poles, transformers, etc.
- Power lines

Subcontractors should be held to the same high standards as the town staff.

Chautauqua Community Tree Plan

Appendix 1 Excerpts from ChautauquaOaksProject.ca

Additional information on the Distinctive nature of the Chautauqua landscape, recommended Design Guidelines and Care Tips.....

a sense of place

Distinctive Atmosphere

Throughout Chautauqua there is a relaxed ambience.

Although year round residences predominate there is still a cottage resort atmosphere. The architecture is eclectic and the curb free roads feel more like large sidewalks.

The epic tree canopy, however, is largely responsible for the strong 'sense of place'.

Distinctive Harmony

The Great Chautauqua Tree Canopy is a unique version of the greater Niagara on the Lake urban forest. *Our* heritage trees are of a very limited range of species. A beautiful harmony results.

This signature aspect of the Chautauqua landscape needs to be preserved.



a collective beauty

Distinctive Paradox: Majestic

It is a restorative experience walking under our vaulted streetscapes.

It is the result of a unique relationship between the prevalent species.....a result far greater than the sum of its parts. The feelings evoked are paradoxicalmajestic & COZY....uplifting & grounded.

The majestic, uplifting aspect is achieved by the signature 'regal' form of the predominant tree of Chautauqua.....the native Oaks.

The soaring trunks culminate in high, artfully meandering branches effortlessly holding aloft the epic leafy canopy. The eye rushes upwards and the soul is stirred.



Distinctive Paradox: Cozy

In concert with the high canopy of mature trees is a low understory of small trees and shrubs which creates a cozy 'nestled in' feeling.

The paradox between cozy and uplifting makes the big impact. Key to this is the minimal presence of low branches or mid sized trees that would undermine the effect.

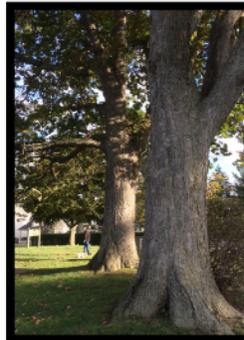
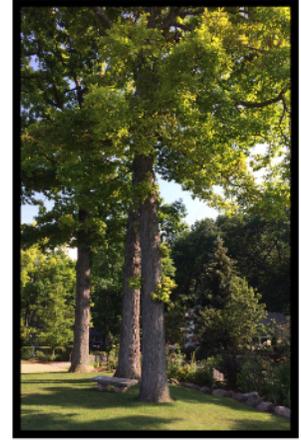
This comforting elegance needs to be preserved.

Distinctive Sociable Trees

Also distinctive to our streetscapes are the companionable trees.

Although the heritage trees along Wilberforce and around the Circle were formally planted by the 1880 developers..... the rest of our historic tree canopy is largely the result of natural self seeding. The Oaks', and others, tendency was to arrange themselves in pairs and small groupings. Defying all 'landscape planting rules' these companionable groupings evoke a sociable relationship.

This charming indication that our neighbourhood is a friendly place needs to be preserved.



Distinctive Calming Trees

Also due to self seeding, the heritage trees are randomly scattered across many properties. Recalling the natural forest setting rather than an urban formality adds to the relaxed ambience of our little enclave.

And because the trees were here first the roads were built in deference..... gliding in between and sometimes wandering around them.

The dense arrangement of mature trees alongside the streets creates a welcoming reception line but also plays a protective role, naturally calming the traffic for our pedestrian friendly neighbourhood. The high branches maintain clear sight lines for all.

The benign influence of these sentinel trees on the atmosphere of our neighbourhood needs to be preserved.

How you can achievenestled homes.....
.....vaulted streetscapes.....
and gatherings of sociable trees.

Tree Placement Guidelines

Understory Trees
To maintain the Cozy Nest aspect of Chautauqua:
❖ Plant clusters of shrubs & small trees.
❖ Multi-stemmed species nestle houses particularly well.

Midstory Trees
To maintain the Majestic scale of our streetscapes:
❖ The planting of mid sized trees should be avoided and none should be planted on the road allowances.

Canopy Trees
To maintain the effect of a Naturally Forested Grove spanning many properties....
❖ Place trees off-centre to the house.
❖ Flanking driveways with major trees replicates the effect of "the trees were here first".
❖ Plant staggered clusters of trees of the same species.
❖ To create the effect of Sociable Trees look at natural examples in the neighbourhood for the appropriate distance between trees...you will be surprised at just how close together they are!

Please refer to the Distinctive Beauty section for examples.

Living with Large Trees

The Street Trees will be pruned as high limbed to maintain the iconic Cathedrals of the Everyday, and to prevent interference with large municipal vehicles.

For private property trees, high limbed major trees are very compatible with small lots by allowing large trees to 'live above' the houses. It also allows air movement and prevents claustrophobia.



Correction Notice:
Should read April & November

*protect the past

Food for Thought

When considering building, renovating, or installing pools, etc.....endeavour to create plans that retain any existing mature trees.

Property values actually increase by up to 27% when mature trees are present.

Mindful Care of the Heritage Trees

Roots

- ❖ Minimize the amount of hard surface ground cover... better still, use pea gravel to allow rain to get to the roots.
- ❖ Avoid placing heavy weight on tree root systems.... too much is the equivalent of someone standing on our lungs.
- ❖ Avoid adjusting the grade of an established tree...even a little can actively suffocate it.
- ❖ Avoid cutting through roots. Boring under is less invasive.
- ❖ Reduce the need for watering: At base of tree add 4" deep mound of composted bark mulch, keeping it clear of trunk. Water only when the soil 8" down is dry.

Trunks

- ❖ Refrain from tying cables or nailing spikes into trunks.
- ❖ When planting ensure the trunk flare is above grade.
- ❖ Exercise caution when using weed whackers to prevent scarring of bark.

Branches

- ❖ Engage a trained arborist to pruned any of the distinctive species. Ensure they read the pertinent information on this website to maintain a natural healthy form compatible with the Chautauqua landscape.

Note: It is required by law to erect protective barriers around all street trees during any manner of construction.