



Trees in the Glebe

Selecting the Right Tree

Resource Document – Work in Progress

September 2016

Cover: This is a Shagbark Hickory (*Carya ovata*). Its mature size is 18-24 m (60-80 ft) tall, with the trunk 30-60 cm (1-2 ft) in diameter – a stately tree. Its distinctive shaggy bark separates into long plates as it gets older; they loosen from the trunk and give the tree a shaggy look – which is how it gets its name. Its wood is valuable, it bears edible nuts and has (no currently identified) pest vulnerability. It grows best in rich, moist soil, but can tolerate different moisture levels. It prefers sun, but can tolerate some shade. It can live for 200 years. Shagbark Hickory is a good candidate for street planting in the Glebe as global warming continues. You can obtain a young one from local nurseries.

Trees in the Glebe: Tips

The best times to plant trees is in the spring and fall.

This resource document contains some suggestions on trees we might want to plant in our neighbourhood. Many factors enter into this choice.

Physical conditions: moisture, light, soil of the planting site. We have also made a special list of trees that are salt-tolerant – if your spot is exposed to the street and winter street-clearing operations, this should be a consideration.

Native species: in general, planting native trees, adapted to our local environment, particularly those that are resistant to pests, drought and pollution is preferred to introduced species which often contribute less to our ecology. If you spot ‘volunteers’, tree seedlings that are sprouting up on their own – consider asking the property owner if you can transplant the youngster before the landscapers and lawnmowers move in.

Diversity is key: We would want to steer clear of some trees that are overabundant. Further, genetic diversity is an issue -- a few of the trees that are (over) planted by the City are rumoured to be clones – honey locusts for example.

Climate change: We are expecting more heat waves & droughts, more extreme wind events, and according to some more freezing rain. Adaptation would speak to looking to the south of us for robust species. Assisted migration? Maybe not too farfetched – the climate in the next 100 years may be changing as much as it changed over thousands of years before.

Commercial availability: We did a scan of nurseries and local tree supply available. Trees that appear to be not readily available have been noted in the “Desirable, but hard to find” box.

A good part of this decision is also a matter of heart – many of us have fond childhood memories of a beloved tree.

Environment Committee – Glebe Community Association

environment@glebeca.ca

Eastern White Cedar (*Thuja occidentalis*)



A native, small hardy slow-growing tree. It usually lives for about 200 years but can occasionally live much longer. Found both as tree and hedge row or shelter belt. Dense foliage down to ground level obstructs visibility. Needs protection from soil salt and road salt spray from vehicles.

Mature size: 9-16 m tall, trunk cm () in diameter
Moisture: Prefers moist sites
Shade: Full sun to part shade
Soil: Well-drained clay, sand, loam

Kentucky Coffee Tree (*Gymnocladus dioica*)



A native tree that is adaptable to a wide range of conditions, and tolerates city conditions. Very disease free.

Mature size: 15-25m tall,
Moisture: Adaptable
Shade: Full sun to part shade
Soil: Clay, sand, loam, humus enriched (forest floor)

Silver Maple (*Acer saccharinum*)



The Silver Maple is a large, fast-growing tree and, although naturally a swamp and floodplain specialist, it can grow well on drier sites and tolerate soil compaction. Should not be planted close to foundations. The Silver Maple is very similar to the Red Maple. It's a large tree, so make sure it will have plenty of room to grow.

Mature size: 24-27 m (80-90 ft) but up to 38 m (125 ft) tall, trunk 90-150 cm (3-5 ft) in diameter
Moisture: Prefers moist soil
Shade: Slightly shade tolerant but prefers full sun
Soil: Prefers rich soil

Striped Maple (*Acer pensylvanicum*)



The Striped Maple has large, beautiful, distinctive duck-foot-like leaves and striped green-white bark. The leaves turn yellow in the fall. This is a small understory maple, a bit fussy about soil conditions and growing environment, and well adapted to a cool understory.

Mature size: 10-13 m (30-40 ft) tall, trunk 25 cm (10 in) in diameter

Moisture: Prefers evenly moist soils

Shade: Prefers full to partial shade, dislikes hot summer sun

Soil: Prefers well-drained, slightly acidic soils

Bitternut Hickory (*Carya cordiformis*)



Bitternut Hickory resembles an ash tree from a distance and could be a good “ash-substitute” now that ashes are disappearing. The nuts, as the name applies, are inedible.

Mature size: 15-20 m (50-66 ft) tall, trunk 30-80 cm (1-2.7 ft) in diameter

Moisture: Prefers moisture

Shade: Prefers sun but can tolerate partial shade

Soil: Prefers rich soil

White Oak (*Quercus alba*)



The White Oak is a large shade tree with valuable wood, very pale mature bark and edible acorns. It can live for several hundred years. The White Oak is somewhat cold-sensitive yet hardy at Ottawa and, with global warming, this tree makes a good candidate for more extensive planting.

Mature size: 20-30 m (66-100 ft) tall, trunk 50-120 cm (1.7-4 feet) in diameter

Moisture: Tolerates a variety of moisture levels

Shade: Prefers full sun

Soil: Tolerates a variety of soils

Note: With its deep rooting system, it should not be planted close to septic tanks or drainage tiles.

Red Oak (*Quercus rubra*)



Red Oak is a large shade tree which can grow well on good soils, while naturally growing in drier upland conditions. The Red Oak needs room to grow – it can tolerate shade when it's younger, but needs full sun as it gets older. It doesn't grow very well if it's close to other trees.

Mature size: 20-30 m (66-100 ft) tall, trunk 30-90 cm (9-27 in) in diameter

Moisture: Can tolerate a variety of moisture levels

Shade: Prefers full sun, but can tolerate some shade

Soil: Grows in a variety of soils

Bur Oak (*Quercus macrocarpa*)



Bur Oak has been commonly planted in Ottawa where it achieves massive dimensions due to tolerance of urban conditions and inherent longevity. Mature specimens look rugged from a distance, like “haunted house” trees. It is little affected by air pollution. Bur Oak should be planted more due to its combination of strong wood, urban tolerance and freedom from pests.

Mature size: 15-30 m (50-100 ft) tall, trunk 60-120 cm (2-4 ft) in diameter

Moisture: Tolerates a wide variety of moisture conditions, tolerates

drought because its roots grow deep into the ground

Shade: Prefers full sun, but can tolerate moderate shade

Soil: Can grow in a variety of soils

Note: The bur oak's roots grow deep into the soil, so plant it where there aren't underground pipes.

Basswood (*Tilia americana*)



Basswood is a handsome and large shade tree, which should be planted more extensively than it is. Bees love basswood flowers because they bloom in midsummer, when few other trees are in bloom.

Mature size: 18-21 m (60-70 ft) but up to 35 m (115 ft) tall, trunk 60-75 cm (2-2.5 ft) but up to 120 cm (4 ft) in diameter

Moisture: Prefers moist soils

Shade: Can grow in full shade or full sun

Soil: Prefers rich, well-drained soils

White Birch (*Betula papyrifera*)



White Birch is also known as Paper Birch and Canoe Birch. It is the white-barked native birch of forests near Ottawa. White birch trees are often used in landscaping because they will grow almost anywhere as long as they get enough sunlight. (Not European silver birch which is vulnerable to the bronze birch borer).

Mature size: 25 m (80 ft) tall, trunk is 60 cm (2 ft) in diameter

Moisture: Can tolerate a variety of moisture levels

Shade: Needs full sun, intolerant to shade

Soil: Can tolerate a variety of soils

Note: The non-native European White Birch (*Betula pendula*) is frequently planted but is very susceptible to the native Bronze Birch Borer.

Yellow Birch (*Betula alleghaniensis*)



Yellow Birch is an attractive deep-forest species, often growing in association with Beech, Sugar Maple and Eastern Hemlock. It grows slowly and lives about 150 years.

Mature size: 18-22 m (60-75 ft) but occasionally up to 30 m (100 ft) tall, trunk 60 cm (2 ft) but up to 120 cm (4 ft)

Moisture: Prefers moist soil

Shade: Moderately shade-tolerant

Soil: Prefers rich soil

Hornbeam (*Carpinus caroliniana*)



The Hornbeam, also known as Blue-Beech, is a relative of the birches and is an attractive understory tree. Blue beech is also called musclewood for its muscle-like ridges on the smooth-gray trunks. Good candidate for planting in shady places.

Mature size: A small tree, seldom more than 6 m (20 ft) tall, trunk up to 25 cm (10 in) in diameter

Moisture: Prefers moist and can tolerate seasonal flooding

Shade: Can tolerate full shade, and full sun with ample

moisture

Soil: Prefers rich, well-drained soils

Hop-hornbeam (also known as **Ironwood**) (*Ostrya virginiana*)



Hop-hornbeam or Ironwood is another relative of the birches. This tree is called Hop-hornbeam because the maturing clusters of fruit looks like hops. Hop-Hornbeam is a slow-growing tree adapted to many situations, except on waterlogged soils where the similarly sized Blue-Beech thrives.

Mature size: 7-12 m (25-40 ft) but up to 18 m tall, trunk 15-25 cm (6-10 in) but up to 60 cm (2 ft) in diameter

Moisture: Moist to dry

Shade: Very shade-tolerant but tolerates full sun with ample moisture

Soil: Prefers well-drained, slightly acidic soils

Note: If planted in full sun on lighter soils, will benefit from a large ring of bark mulch up to 8 cm (3 in) deep and supplemental watering to prevent leaf scorch in midsummer.

Serviceberries (*Amelanchier spp.*)



Serviceberries are a group of similar species related to apples (Rose family) and are becoming commonly planted for the tasty and edible fruit. Serviceberries are a very adaptable group of species, attract wildlife and offer beautiful fall colours. Serviceberry fruits were a staple food of the Cree tribes of the Prairies, who mixed the dried berries with buffalo meat to make pemmican.

Mature size: Up to 12 m (40 ft) tall, trunk 7-30 cm (3-12 in) in diameter

Moisture: Moist to dry sites

Shade: Partial-shade to full sun

Soil: Adaptable to all but water-logged soils

Chokecherry (*Prunus virginiana*)



Chokecherry is a small tree or tall shrub with attractive foliage and fruit. It is most noticeable in flower, with many dense, white elongated clusters of 5-petaled flowers which then become clusters of round shiny fruits, varying from yellow to red or almost black. The fruit is an important food source for birds. Chokecherry is a good candidate for more extensive planting.

Mature size: Up to 9 m (30 t) tall, trunk 15 cm (6 in) in diameter

Moisture: Moist to average soils
Shade: Prefers full sun but will tolerate light shade
Soil: Prefers rich, well-drained soils
Note: Chokecherry can be trained as a single-stemmed tree but will often sucker from the roots at the base of the stem. To reduce root suckering, carefully tear the young shoots off with your hands instead of cutting with sharp tools.

Hawthorns (*Crataegus* spp.)



Hawthorns are useful for their ability to tolerate dry, windy areas, but due to sharp thorns, are not recommended for schoolyard plantings. The loggerhead shrike, which is critically endangered in Canada, prefers Hawthorn-rich areas as its habitat because of these thorns. Like crabapples, Hawthorn fruits contain high levels of pectin and have been used to make jams and jellies. Hawthorns make good candidates for more extensive planting.

Mature size: Up to 12 m (40 ft) tall, trunk 25-30 cm (10-12 in) in diameter

Moisture: Moist to dry
Shade: Prefers full sun but tolerates partial shade
Soil: Adaptable, especially to high pH soils
Note: If planting on heavy, wet soil, plant hawthorns on a mound, and loosen the soil in a circle 6 times the width of the planting hole to a depth of 15 cm (6 in).

Alternate-Leaf Dogwood (*Cornus alternifolia*)



The Alternate-Leaf Dogwood is the tallest (almost tree-like) of many attractive native and under-utilized Dogwoods. It is also called pagoda dogwood for its attractive horizontal tiers of branches on older trees. Its berries are a favourite food of summer songbirds.

Mature size: Up to 7 m (22 ft) tall, trunk 5-15 cm (2-6 in) in diameter

Moisture: Prefers evenly moist soils
Shade: Prefers partial shade, full sun with ample moisture
Soil: Prefers well-drained, deep soils
Note: To provide understory species like alternate-leaf dogwood with even moisture all year long, mulch well with 8 cm (3 in) of bark mulch, or plant near the sloped edge of a water feature where the roots can access water in the heat of the summer.

Mountain Ashes (Two species: *Sorbus decora*, *Sorbus americana*)



Native Mountain Ash species are small northern trees, uncommon near Ottawa (although the non-native European Mountain Ash (*Sorbus aucuparia*) is common in Ottawa). The fruit is a favourite food for overwintering birds.

Mature size: 3-9 m (10-30 ft) tall, trunk 10-25 cm (4-10 in) in diameter

Moisture: Prefers moist ground, but can survive in dry conditions

Shade: Can tolerate some shade

Soil: Grows in a variety of soils

Witch-Hazel (*Hamamelis virginiana*)



Witch-Hazel is an attractive small tree, which is notable for flowering in late-autumn. It is a good candidate for planting more extensively in Ottawa. Witch-Hazel is somewhat pollution tolerant and relatively trouble-free.

Mature size: 6-7 m (20-25 ft) tall, trunk up to 15 cm (6 in) in diameter

Moisture: Best growth in moist, shaded sites

Shade: Full sun to partial shade

Soil: Prefers moist, cool, acidic soil

Hard to Find in Local Nurseries but Desirable:

Pitch Pine (*Pinus rigida*)

Red Spruce (*Picea rubens*)

Black Maple (*Acer nigrum*)

Chinquapin Oak (*Quercus muehlenbergii*)

Pin Cherry (*Prunus pensylvanica*)

Black Cherry (*Prunus serotina*)

Salt Tolerant Trees:

Black Cherry

Black Oak

Bur Oak

Common Hackberry

Eastern Cottonwood

Eastern Red Cedar

Honey Locust

Kentucky Coffee Tree

Red Oak

Silver maple

Swamp White Oak

White Oak

White Spruce

Sources: This list of suggestions draws heavily on the Tree Ottawa initiative of Ecology Ottawa (see <http://ecologyottawa.ca/tree-ottawa/>) and is compiled by Angela Keller-Herzog. All errors are hers but she benefitted from advice from a tree-loving motley crew that includes Owen Clarkin, Ann Coffey, Bettina Henkelman, Carol McLeod, Carla Hogan Rufelds and Peter Teitelbaum. Research regarding availability at local nurseries was contributed by Ecology Ottawa volunteers Nathan Bowler and Monica Wu.

If you are on your journey of tree learning and tree selection, another great local resource is the Plant Database of Richie's Feed and Seed:

<http://plants.ritchifeed.com/11090003/>

If you would like to get involved with planting protecting & promoting more trees in the Glebe please contact us at environment@glebe.ca .

List of Local Nurseries

Peter Knippel Nursery
4590 Bank St., Ottawa ON, K1T 3W6
613-822-0383
http://knippelgardencentre.com/
info@knippelgardencentre.com
Greenlife Ottawa Wholesale Nursery
1776 Manotick Station Rd., Ottawa ON, K4P 1K4
613-692-3047
http://www.greenlifenursery.ca/index.php
sales@greenlifenursery.ca
Ferguson Forest Centre
275 County Rd. 44, RR#4, Kemptville ON, K0G 1J0
613-258-0110
http://www.seedlingnursery.com/
ed@seedlingnursery.com
Carleton Place Nursery Ltd
County Rd. 29, Mississippi Mills ON, K7C 3P1
613-257-8175
http://www.carletonplacenursery.com/index.html
no email
Pioneer Nursery Limited
632 Van Buren St., Kemptville ON, K0G 1J0
613-258-5555
http://www.pioneernursery.ca/en/
No email
Richmond Nursery Inc
3440 Eagleson Rd., Ottawa ON, K0A 2Z0
613-838-2282
http://www.richmondnursery.com/
No email

Manotick Tree Movers

1966 Carsonby Rd. West, North Gower ON, K0A 2T0

613-489-1116

<http://www.manoticktreetree.com/>

info@manoticktreetree.com

Legault Garden Center

1810 Highway 34, Hawkesbury ON, K6A 2R2

613-632-1177

<http://lesserreslegault.ca/en/company/company>

no email

Creekside Garden Center

5901 Ottawa St., Richmond ON, K0A 2Z0

613-838-5959

<http://creeksidegardensottawa.com/>

<http://creeksidegardensottawa.com/contact-us/>

Make it Green Nursery

5200 Flewellyn Rd, Stittsville, ON K2S 1B6

613-599-3419

<http://www.makeitgreen.ca>

info@makeitgreen.ca

Artistic Landscape Design

2079 Bank Pl, Ottawa, ON K1V 8A8

613-733-8220

<http://www.artisticlandscape.on.ca/>

<http://www.artisticlandscape.on.ca/contact/contactform.aspx>

Richies Feed and Seed

1390 Windmill Ln, Gloucester, ON K1B 4V5

613-741-4430

<http://www.ritchiefeed.com>

Contact@Ritchiefeed.com