

Plant the right trees! Best choices

Trees are the biggest investment decision for the long-term enjoyment of our outdoor spaces. These selections would be great for any regions rated as Canadian zones 5b-7a (US zones 5a-6b).

Top 10 Considerations to Planting the Right Trees * denotes Climate-change factors

1.Know your Zone – plant only what's hardy for your area.

2.*Choose healthy species – Consider trees that are not struggling with widespread disease or pests, often made worse by the changing climate. Tip – Avoid ash and elm. Be cautious due to the threat of oak wilt, beech bark disease and needle cast in spruce.

3.*Choose species more likely to survive our changing weather including local native varieties and those that are doing well despite changeable weather. If Southern Ontario choices don't appeal to you, select a species thriving 'One-Zone South' in the northeastern United States.

4.*Beware of large trees on urban lots – Trees are susceptible to lightning, wind, hail, ice, and snow. Avoid planting trees on small urban lots that will become taller than 30 ft at maturity. Choose from varieties with a mature spread of no more than 6 m (20 ft) and a height of 6-9 m (20-30 ft).

5.*Choose Diversity vs Monoculture – avoid planting too much of any single variety. A monoculture is not eco-friendly and your investment will be highly susceptible to the next pest or disease.

6. Keep canopy in mind – some smaller trees will not do well if exposed to full sun and wind as they are adapted to growing within a forest canopy. Plant a layered canopy if possible.

7.*Location matters – plant evergreens (needle-bearing trees) on the north and westside of your home to block increasingly strong winter winds and deciduous varieties on the south side to offer shade as our summers get hotter and more humid. Don't forget water management.

8. Plant properly – once you've invested in the right choice, ensure it goes in the ground with the best possible chance to thrive.

9. Pollution and Salt issues – have you seen rows of brown shrubs along the front of properties? Or rows of burlapcovered shrubs that take a lot of work to wrap each fall and spring? If your site is near a street or highway, research specific varieties that will tolerate road salt!

10. Choose what suits your site.

- site exposure to sun and winter wind
- soil clay, loam, sand?
- lot size, amount of canopy room you actually have
- nearby buildings, paths, ponds, or other existing features
- overhead wires
- amount of moisture available a wet area or bone dry? Access for watering?
- how your tree's branches, seeds, and leaves will impact neighbours

And what suits YOU - Always start with your goals ... BEFORE you go shopping.

- Shade?
- Flowers? and if so, at what time of year?
- Fall foliage?
- Screening?
- Fruit?
- Wildlife habitat?



Native Trees are a great place to start

Why not start by looking at native tree choices? The Ontario Tree Atlas is an excellent resource to find what's native to your region of Ontario. Native trees are generally recommended as some of the best trees to plant. They've evolved in our region along with the birds, bees, butterflies, etc that rely on them as food, shelter, or habitat. They tend to be wise investments that are lower maintenance and hardier for our region.

Spotlight on Carolinian Tree Species – Carolinian Canada is a region in Ontario found south of an imaginary line that runs approximately from Grand Bend to Toronto. The Carolinian deciduous forests include many common species such as sugar maple, beech, oak, basswood, and ash. I've highlighted several rare and uncommon Carolinian species below.



Plant the right trees – My top suggestions for small to medium trees

These trees are typically available in the region and are adaptable enough to be 'climate-smart'. Use your personal goals and your site considerations to choose from these top-rated, reliable choices for zones 5-7. Note – Urban lots are best suited to small to medium trees with a mature height of 4 to 10m (12 to 30 ft).

- Acer griseum, 'Paperbark Maple' this is a reliable small (7m, 5 ft) tree that handles dry, lean soil and is usually pest free. Grow it for the exfoliating bark and autumn colour in either multi-stem or single stem form.
- Acer palmatum, Japanese Maple so many choices in shrub form or as a small tree upright or weeping, tall
 and broad or short and tiered. Leaves also vary but most are dainty delicate purple or green that will turn red,
 orange, or yellow in the fall. Do your research as not all are hardy to zone 5. Monrovia offers this guidance about
 varieties.
- Amelanchier, Serviceberry Downy Serviceberry is an excellent native choice. Easily grown in average, medium, well-drained soil in full sun to part shade. Tolerant of a somewhat wide range of soils, but prefers moist, well-drained loams. The branches are covered with white blossoms in spring producing small, showy purple-black, sweet edible fruit (much loved by me if I can get them before the robins). Good fall colour. Size: 6 m high by 4 m wide (20 feet high x 16 feet wide. Two cultivars to consider: Amelanchier laevis 'Cumulus', Allegheny Serviceberry and Amelanchier grandiflora 'Autumn Brilliance'
- Asimina triloba, Paw Paw Carolinian This relatively rare 4-6 metre (12-20 ft) native tree produces one of the tastiest fruits on the planet, with hints of mango, banana, and custard. It has a somewhat 'ugly-duckling' droopy form and you'll need two as it requires cross-pollination. A host for Zebra swallowtail butterflies!
- Carpinus caroliniana, aka Blue Beech or American hornbeam An attractively shaped, low-maintenance understory tree for shady sites. Mature size 6 -8 m (20-26 ft)
- Cercis canadensis, Eastern Redbud a medium-sized tree with lovely tiny rosy-purple flowers along all stems in the spring. Distinctive heart-shaped leaves and a broad form. One cultivar, <u>https://www.worldplants.ca/display.php?id=1769</u> Forest Pansy Eastern Redbud has purple heart-shaped leaves all season.
- Chionanthus virginicus Fringe tree The upright branches have magnificent clusters of fragrant, white, fringelike blooms in late spring. A terrific accent plant.
- Cornus alternifolia, Pagoda Dogwood is a small understory native tree with white flowers in June and a lateral branching habit. There's also a cultivar with variegated foliage Cornus alternifolia 'Argentea'



- Cornus florida, Flowering Dogwood –Carolinian The flowering dogwood can either take the form of an erect shrub around3 or 4 metres (13 ft) in height, or a small tree up to 9 metres (30 ft) in height. The tiered branches are covered with large white bracts in spring.
- Crataegus phaenopyrum, Hawthorn– This is beautiful when in bloom. Yes, there are thorns but I love its compact size and showy fruit that gives colour throughout the winter.
- Crataegus viridis 'Winter King', Hawthorn is a popular, more disease-resistant cultivar that is noted for lots of flowers, larger fruits, silvery-barked stems, and a purplish-scarlet fall colour (purple and scarlet). It has only occasional small thorns.
- Halesia monticola, Silverbell or snowdrop tree This tree has attractive white, bell-like flowers that hang down from the branches. It can be a focal point or a backdrop in the garden however it must be planted in a sheltered location with protection from winter winds. Leaves are yellow in the fall.
- Magnolia stellata 'Royal Star' a compact-sized tree that is covered with white flowers in early spring. It flowers best in full sun. Ideally site it where protected from high winds, and southern exposures that may entice buds to open too early. This variety blooms about 2 weeks later than the species and is less susceptible to frost.
- Picea abies 'Aurea Magnifica', Golden Norway Spruce –This is a stunning evergreen with different shades of yellow add impressive colour throughout the season. Great form and texture. One of the most beautiful spruce cultivars available today.
- Pinus aristata Bristlecone Pine This is an exceptionally long-living evergreen tree that is native to areas of North America. Grow it because you like its interesting appearance, slow growth, and drought tolerance. It prefers full sun and well-drained soil. Size: 15 feet high and six feet wide.
- Ptelea trifoliata Common hoptree Carolinian. This is a small tree with smooth reddish-brown bark and alternate, three-parted compound leaves. The cream-coloured, fragrant flowers bloom in early summer. Common Hoptree is found along shorelines in sandy soils, or on thin soils overlying limestone. It does best in full sun and is intolerant of shade. This threatened species is worth considering.
- Stewartia pseudocamellia Japanese Stewartia stunning bark that exfoliates in strips of gray, orange, and reddish brown. The serrated foliage emerges bronzy purple in spring, develops into a dark green by summer, and turns red or orange in the fall. In midsummer, this tree also has "glamorous" white camellia-like flowers! Grows slowly but can reach 10 – 12m (30-40 ft)
- Sassafras albidum, Sassafras –Carolinian the Sassafras is known for its unique leaf that looks like a mitten, with a thumb on one side. This species has a distinct spicy fragrance that is emitted from the leaves, branches, and bark when crushed. The sassafras prefers rich, sandy loam soil and is a shade tolerant hardwood.
- Syringa reticulata 'Ivory Silk- Tree Lilac- This is a non-suckering variety of lilac with a compact, oval shape that offers unique interest. This has beautiful creamy-white fragrant blooms on stems above dark green foliage in early July. Its yellow fall foliage and textured bark add seasonal interest. It does best in full sun. Size: 20 feet high and 16 feet wide.
- Sorbus decora –Showy Mountain Ash This is a slow-growing, compact, round tree with white bloom clusters in spring and red ornamental berries in fall great for attracting birds. It requires well-drained soil and prefers full sun. Size: 20 feet high and 16 feet wide.

Other Ideas:

- Tight for space? Try a columnar or pyramidal birch, cypress, hornbeam, oak, sweetgum, etc
- Fruit trees Consider a fruit species grafted on a rootstock to constrain its height. Do your research as to whether more than one is required for pollination to occur. Google OMAFRA's guide to Buying, Choice of Cultivars, and Pollination Fruit Trees in the Home Garden



Large trees – top choices for larger lots. These mature at 20-30 m(80-100 feet):

- American beech
- Butternut Carolinian indicator species
- Chestnut–Carolinian
- Black maple
- Red maple
- Bur oak
- White oak Carolinian
- Red pine
- Eastern white pine

My Favourite large deciduous trees 10 to 30 m (30 to 100 feet) – all Carolinian!

- Kentucky coffee tree (*Gymnocladus dioica*) The Kentucky Coffee-tree grows 15 to 25 metres (50-80 feet) high. The leaves are as big as 60 by 90 cms (24-35 inches), the largest leaves of any Canadian tree. They are twice compound, divided into many, small bluish-green leaflets. The fruit is a hard, dark, leathery, bean-like pod. This is a threatened tree to be planted and preserved where it can remain forever.
- Shagbark hickory (*Carya ovata*) Shagbark is named for its bark which separates into long strips and loosens from the trunk, giving the tree a 'shaggy' look. It's a large 25metre (80 foot) tree that can live for 200 years! Hickory nuts are edible and are a favourite food of squirrels.
- Tulip-tree(*Liriodendron tulipifera*) The tulip tree is one of two wild magnolia species found in Canada, and probably one of the most common `Carolinian Canada' symbols. This is eastern North America's tallest hardwood, commonly reaching 23 metres (75 feet) in height. It has a tall, straight trunk, a large crown, a distinctive four-lobed leaf, and large green and orange cup-shaped flowers.
- Sycamore Platanus occidentalis— This is a very large tree with unusual bark that's very distinctive with light-coloured smooth areas, highlighted with patches of darker, reddish, or brown papery bark. The leaves are somewhat like maple, but larger and with less noticeable indentations. The fruit is an unusual ball about one inch in diameter, easy to recognize during the winter.

Protect your investment – Plant your tree properly!

- Root wash to loosen roots spread laterally, and do any corrections **
- Plant at the root flare, not deeper
- Use native soil to backfill
- Water well until established watering deeply once a week when there's minimal rain.
- Generally do not stake, but if you feel it's necessary, do it properly with two stakes and soft ties.

** Tangled, circling roots MUST be corrected at the time of planting or they will choke the tree causing premature death. Burlap and wire baskets MUST be removed. Potted trees must be root-washed to spread the roots and allow them to develop laterally. Also check for root flare and plant at the correct depth, NOT deeper. Many nurseries pot them too deeply, encouraging superficial surface roots to develop. Google - Why and How to Wash Roots by Linda Chalker Scott