# **Choosing the Right Tree**

## in Peterborough, Ontario

Are you thinking about planting a new tree in your yard? Whether you wish to beautify your property, provide shade or food, purify the air or attract birds, the first step is selecting the right kind of tree to suit your needs and site conditions.



Like people, trees are particular about the living conditions around them. Some can withstand a fair amount of stress, while others are more delicate and need good

soil, adequate water and lots of sun. City life can be especially difficult for trees due to compacted soils, limited growing space and pollutants such as road salt and smog. Wise tree selection means finding a variety that will thrive in the conditions in your yard while fitting in comfortably with the natural ecology of the region.

Consider trees that are native to our region. They have evolved complex links with other living things, and have adapted to local soils and climate. Some non-native (exotic) trees can be good options for high-stress sites, but be sure to avoid any invasive exotic species, which can damage natural areas and destroy biodiversity. See our fact sheet "Invasive Exotic Plants" for more details.



The more you know about your yard, the easier it is to select a tree that will thrive there. Is your soil heavy clay that gets soggy in spring and then dries rock-hard later in summer? Do you have sandy soil that dries out very quickly? Are you in a new subdivision with only a few inches of topsoil over compacted hardpan? Is your yard mostly sunny or shady? Is it windy or sheltered?

Soil, moisture, sun and exposure are all factors that affect how a tree will grow. In addition, built features such as overhead wires, pavement, underground services, buildings and fences can reduce



the growing space, and lead to future problems. Consider these general guidelines:

- Avoid planting trees under overhead wires. If unavoidable, select species that will not grow tall, or choose shrubs instead of trees.
- Plant as far as possible from roadways, sidewalks and buildings. Allow at least 10 ft. from paved surfaces or buildings.
- Avoid planting in boulevards (the space between roads and sidewalks).
- Consider planting broadleaf trees on the south or west side of buildings to provide cooling summer shade, and warming winter sun.
- Allow at least 20 ft. from existing tree trunks.
- Don't plant near underground services. Call these numbers to request locates for underground services and allow 30 days prior to planting:

Telephone and Natural Gas 1-800-400-2255 Cable 1-800-267-9000

Peterborough Utilities 705-748-9300

City of Peterborough Public Works 705-745-1386

Once you have selected a promising location, use the information on the following pages to find which trees are best suited to your yard.



### **Planting and Aftercare**

Proper planting and care are critically important to the establishment and long-term health of any tree. See our factsheet "Planting and Caring for Trees" for detailed information.

### **Visit Our Tree Nursery**

To see many of these recommended trees and for personalized advice on tree selection and care, visit Peterborough's Ecology Park on Ashburnham Drive. Trees, compost and mulches are also available for sale from May through October.

### TREES FOR DIFFICULT SITES

If you wish to plant a tree near a roadway, or if you live in a new subdivision, you will need to choose a variety that can tolerate stressful conditions. Along roadways, trees are exposed to road salt, air pollution, compacted soil and pavement in the rooting zone. Most modern subdivisions have shallow topsoil and very compacted subsoil. Only the toughest trees can survive on these sites.

These trees are most likely to grow on difficult sites. They include hardy native species as well as non-invasive exotics.

SHORT TREES (3 – 8 m)





| Common Name    | Serviceberry                  | Flowering Crabapple      |
|----------------|-------------------------------|--------------------------|
| Latin Name     | Amelanchier sp                | Malus sp.                |
| Height x Width | 8 x 3 m                       | 7 x 7 m                  |
| Soil           | Sand, Loam                    | Loam, Clay               |
| Moisture       | Dry, Medium, Wet              | Dry, Medium              |
| Sun            | Sun, Part Shade, Shade        | Sun, Part Shade          |
| Comments       | First tree to bloom in spring | Non-invasive exotic tree |

MEDIUM TREES (9 - 16 m)









| Common Name    | Ginkgo                   | Honeylocust           | Ironwood          | Hackberry               |
|----------------|--------------------------|-----------------------|-------------------|-------------------------|
| Latin Name     | Ginkgo biloba            | Gleditsia triacanthos | Ostrya virginiana | Celtis occidentalis     |
| Height x Width | 16 x 11 m                | 16 x 10 m             | 12 x 8 m          | 16 x 15 m               |
| Soil           | Sand, Loam, Clay         | Sand, Loam, Clay      | Sand, Loam        | Sand, Loam, Clay        |
| Moisture       | Dry, Medium              | Dry, Medium, Wet      | Dry, Medium       | Dry. Medium. Wet        |
| Sun            | Sun                      | Sun                   | Part Shade, Shade | Sun, Part Shade         |
| Comments       | Non-invasive exotic tree | Casts light shade     | Sensitive to salt | Small berries for birds |

TALL TREES (17+ m)











| Common Name    | Freeman Maple                          | Silver Maple      | Bur Oak            | Basswood 'Redmond'        |
|----------------|--|-------------------|--------------------|---------------------------|
| Latin Name     | Acer x freemanii                       | Acer saccharinum  | Quercus macrocarpa | Tilia americana 'Redmond' |
| Height x Width | 17 x 12 m                              | 25 x 16 m         | 20 x 20 m          | 17 x 20 m                 |
| Soil           | Sand, Loam, Clay                       | Loam, Clay        | Sand, Loam, Clay   | Loam, Clay                |
| Moisture       | Dry, Medium, Wet                       | Dry, Medium, Wet  | Dry, Medium        | Medium, Wet               |
| Sun            | Sun                                    | Sun               | Sun                | Sun, Part Shade           |
| Comments       | Hybrid of native red and silver maples | Fast-growing tree | Long-lived tree    | Pyramidal shape           |

Note: Species of ash (Fraxinus sp.), notably white and green ash, have been excellent choices for roadside planting in the Peterborough area for many years. They are not included in this list due to uncertain impacts of the Emerald Ash Borer, a devastating exotic insect that feeds on ash trees.

### TREES FOR TREE-FRIENDLY SITES

Backyards are often more tree-friendly, with fewer pollutants and underground services, and deeper and richer soil. These are beautiful, but more sensitive trees that will thrive in the Peterborough region on sites with good growing conditions.

SHORT TREES (3 – 8 m)















| Common Name    | Nannyberry       | Grey Dogwood     | Pagoda Dogwood      | Hazelnut          | Common Elderberry   |
|----------------|------------------|------------------|---------------------|-------------------|---------------------|
| Latin Name     | Viburnum lentago | Cornus racemosa  | Cornus alternifolia | Corylus americana | Sambucus canadensis |
| Height x Width | 6 x 3 m          | 3 x 2.5 m        | 5 x 7 m             | 3 x 3 m           | 4 x 4 m             |
| Soil           | Sand, Loam, Clay | Sand, Loam, Clay | Loam, Clay          | Loam              | Loam, Clay          |
| Moisture       | Dry, Medium, Wet | Dry, Medium, Wet | Medium              | Medium            | Dry, Medium, Wet    |
| Sun            | Sun, Part Shade  | Sun, Part Shade  | Part Shade, Shade   | Sun, Part Shade   | Sun, Part Shade     |
| Comments       | Edible fruit     | White berries    | Blue berries        | Edible nuts       | Edible fruit        |

MEDIUM TREES (9 – 16 m)













| Common Name    | Striped Maple       | Ohio Buckeye    | Pin Cherry           | Blue Beech           | White Cedar        | Domestic Apple |
|----------------|---------------------|-----------------|----------------------|----------------------|--------------------|----------------|
| Latin Name     | Acer pennsylvanicum | Aesculus glabra | Prunus pennsylvanica | Carpinus caroliniana | Thuja occidentalis | Malus sp.      |
| Height x Width | 10 x 7 m            | 15 x 10 m       | 12 x 7 m             | 9 x 8 m              | 12 x 3 m           | 9 x 9 m        |
| Soil           | Loam                | Loam, Clay      | Sand, Loam           | Loam, Clay           | Loam, Clay         | Loam           |
| Moisture       | Medium              | Medium          | Medium               | Medium, Wet          | Dry, Medium, Wet   | Medium         |
| Sun            | Part Shade, Shade   | Sun             | Shade, Part Shade    | Part Shade, Shade    | Sun, Part Shade    | Sun            |
| Comments       | Striped bark        |                 | Red berries          | Bark like muscles    | Sacred to Ojibwa   | Edible fruit   |

TALL TREES (17+ m)













| Common Name    | White Birch       | Black Walnut  | White Spruce | American Beech       | Sugar Maple           | White Pine      |
|----------------|-------------------|---------------|--------------|----------------------|-----------------------|-----------------|
| Latin Name     | Betula papyrifera | Juglans nigra | Picea glauca | Fagus grandifolia    | Acer saccharum        | Pinus strobus   |
| Height x Width | 20 x 10 m         | 30 x 18 m     | 25 x 5 m     | 25 x 20 m            | 30 x 15 m             | 30 x 10 m       |
| Soil           | Loam, Clay        | Loam, Clay    | Sand, Loam   | Loam                 | Loam                  | Sand, Loam      |
| Moisture       | Medium, Wet       | Medium        | Dry, Medium  | Medium               | Medium                | Dry, Medium     |
| Sun            | Sun               | Sun           | Sun          | Sun, Pt Shade, Shade | Sun, Pt Shade, Shade  | Sun             |
| Comments       | White papery bark |               |              | Edible nuts          | Brilliant fall colour | Tree of Ontario |













| Common Name    | Red Pine        | Black Cherry    | Red Oak         | Eastern Hemlock      | Tamarack             | Bitternut Hickory |
|----------------|-----------------|-----------------|-----------------|----------------------|----------------------|-------------------|
| Latin Name     | Pinus resinosa  | Prunus serotina | Quercus rubra   | Tsuga canadensis     | Larix laricina       | Carya cordiformis |
| Height x Width | 25 x 10 m       | 22 x 10 m       | 25 x 16 m       | 30 x 8 m             | 20 x 9 m             | 25 x 20 m         |
| Soil           | Sand, Loam      | Sand, Loam      | Sand, Loam      | Loam, Clay           | Loam, Clay           | Sand, Loam, Clay  |
| Moisture       | Dry, Medium     | Dry, Medium     | Dry, Medium     | Medium               | Medium, Wet          | Dry, Medium, Wet  |
| Sun            | Sun             | Sun             | Sun             | Sun, Pt Shade, Shade | Sun                  | Sun, Part Shade   |
| Comments       | Needs acid soil |                 | Needs acid soil | Shelter from wind    | Sheds leaves in fall | Nuts not edible   |

### TREES FOR A CHANGING WORLD

While it's important to continue working to control climate change, we now face a warming climate and more frequent extremes of weather. With this in mind, a broader range of species may thrive in the Peterborough area, including those native to southwestern Ontario. These are known as Carolinian forest species.

You can improve the chance of success with these trees by selecting planting sites that are protected from bitter winter winds.

#### SHORT TREES (3 - 8 m)





| Common Name    | Redbud                  | Hoptree           |
|----------------|-------------------------|-------------------|
| Latin Name     | Cercis canadensis       | Ptelea trifoliata |
| Height x Width | 6 x 8 m                 | 6 x 8 m           |
| Soil           | Loam                    | Loam              |
| Moisture       | Medium                  | Medium            |
| Sun            | Sun, Part Shade         | Sun, Part Shade   |
| Comments       | Pink blossoms in spring |                   |

#### MEDIUM TREES (9 – 16 m)







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| Common Name    | Pin Oak           | Kentucky Coffee Tree | Chinquapin Oak        |
|----------------|-------------------|----------------------|-----------------------|
| Latin Name     | Quercus palustris | Gymnocladus dioicus  | Quercus muehlenbergii |
| Height x Width | 15 x 12 m         | 16 x 12 m            | 15 x 15 m             |
| Soil           | Loam, Clay        | Sand, Loam           | Loam                  |
| Moisture       | Medium, Wet       | Dry, Medium, Wet     | Medium                |
| Sun            | Sun               | Sun                  | Sun                   |
| Comments       | Needs acid soil   | Pollution tolerant   | Needs alkaline soil   |

#### TALL TREES (17+ m)











| Common Name    | Tulip Tree               | American Sycamore       | Shagbark Hickory | Swamp White Oak  |
|----------------|--------------------------|-------------------------|------------------|------------------|
| Latin Name     | Liriodendron tulipifera  | Platanus occidentalis   | Carya ovata      | Quercus bicolor  |
| Height x Width | 30 x 15 m                | 25 x 20 m               | 20 x 20 m        | 20 x 20 m        |
| Soil           | Loam                     | Loam                    | Loam, Clay       | Loam, Clay       |
| Moisture       | Medium                   | Medium                  | Medium           | Dry, Medium, Wet |
| Sun            | Sun                      | Sun, Part Shade         | Sun              | Sun, Part Shade  |
| Comments       | Yellow flowers in spring | Attractive peeling bark | Edible nuts      |                  |

#### Our thanks to:

- City of Peterborough
- Ontario Trillium Foundation
- Peterborough and Area Master Gardeners

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705-745-3238