
West Toronto Railpath Environmental Stewardship Plan



Milkweed plant at Ruskin Avenue

Date of Last Revision: August 27, 2017

1 Introduction

1.1 The Railpath and the Friends

The West Toronto Railpath (the “Railpath”) is a linear park located in the west end of Toronto, in the Junction Triangle neighbourhood. The Railpath is both a human-powered multi-use recreational path and a biologically beneficial nature corridor. Railpath supports many animal and insect species and is part of bio-diverse eco-system. Most of the Railpath is owned by the City of Toronto, and some of it is leased to the City by Canadian Pacific Railway. The West Toronto Railpath became a city park in 2009, and is maintained by the City of Toronto Parks, Forestry and Recreation.

The Friends of the West Toronto Railpath (the “Friends”) is a community-based group that was founded in 2001 when members of the Roncesvalles Macdonell Residents’ Association (RMRA), got together, formed a partnership with the Community Bicycle Network and Evergreen to advocate for the creation of WTR. The Friends are dedicated to the maintenance, expansion, and improvement of the Railpath. Our vision is for the Railpath to be a community connector, an ecological asset, a meeting place for the neighbourhood, and a resource for the whole city.

1.2 History of the Railpath Planting

The Railpath is located on land that was once a CP railway spur line serving industries in the west end of Toronto (see photo below). The land was purchased in 2003 by the City of Toronto.



Old Bruce service track, looking south from Wallace Ave. footbridge. Tank car sitting in Nacan products (National Adhesives). Other track was Solways (scrap dealer). July 1985 *Gord Billinghamurst*



Wallace Ave Looking North, October, 2009

In October of 2006, before the construction began, a group attended the site to collect a variety of native plant seeds. This effort was led by Scott Torrance Landscape Architect Inc. and Conservation Biologists Mary Gartshore and Peter Carson. Many of these seeds were then germinated and grown into plugs in Mary and Peter’s nursery, Pterophylla (now St. Williams nursery). These plugs were then replanted on the Railpath in 2009 after construction was complete.

After construction, the Railpath was replanted and reseeded with native plants, including the plants grown from collected seeds by Pterophylla. The plant/seed list for the 2009 planting is as follows (* denotes a plant grown from collected seed):¹

<p>Trees: Common Hackberry (<i>Celtis occidentalis</i>) Ironwood (<i>Ostrya virginiana</i>) Quaking Aspen (<i>Populus tremuloides</i>) American Basswood (<i>Tilia americana</i>) Burr Oak (<i>Quercus macrocarpa</i>) Autumn Blaze Maple (<i>Acer x freemanii</i> 'Jeffersred')</p> <p>Vines: American bittersweet (<i>Celastrus scandens</i>)* Virgin's Bower (<i>Clematis virginiana</i>)* Grape-woodbine (<i>Parthenocissus vitacea</i>)* Virginia Creeper (<i>Parthenocissus quinquefolia</i>)</p> <p>Grasses: Bottlebrush Grass (<i>Elymus hystrix</i>) Little Bluestem (<i>Schizachyrium scoparium</i>) Spartina pectinata (Prairie cordgrass)*</p>	<p>Shrubs: New Jersey Tea (<i>Ceanothus americanus</i>)* Hancock Coralberry (<i>Symphoricarpos x chenaulti</i> 'Hancock') Smooth rose (<i>Rosa blanda</i>)*</p> <p>Wildflowers: Brown-eyed Susan (<i>Rudbeckia hirta</i>)* Common Milkweed (<i>Asclepias syriaca</i>) Sky Blue Aster (<i>Aster oolentartgiensis</i>) Slender Mountain Mint (<i>Pycnanthemum tenuifolium</i>) Common Milkweed (<i>Asclepias syriaca</i>) Upland White Aster (<i>Solidago ptarmicoides</i>) Pearly Everlasting (<i>Anaphalis margaritacea</i>) Heath Aster (<i>Aster ericoides</i>) Canada Anemone (<i>Anemone canadense</i>)</p>
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Further details regarding the design by Scott Torrance and the 2009 planting are in Appendix A.

The cost for the project was approximately \$3.5 million, including the planning and execution of the native planting and other work. This very significant investment is worth protecting, maintaining, and improving on.

From 2009 to 2015, no stewardship work was done to promote or maintain native plants along the Railpath (that we are aware of).² We understand that some overzealous mowing occurred in the early years, which took a toll on the native plants. However, staff from the City of Toronto now mow on the Railpath as infrequently as possible and only when necessary to stop the vegetation from growing over the path. One goal of the Friends is to find alternatives to control the vegetation from growing over the path so that more circumspect (or no) mowing is necessary.

¹ Scott Torrance Landscape Architect Inc, As-Built Planting Plan and Seeding Plan.

² The City of Toronto did some mowing and pruning but nothing to help maintain the native plants.

1.3 Stewardship Activities by the Friends

In 2015, a stewardship group was started as part of the Friends. In our first year we held a Milkweed planting day and worked to assess the current condition of the vegetation. In 2015, 2016 and 2017 the stewardship group held weeding days to try to limit the spread of the highly invasive Dog Strangling Vine south of Wallace Ave. The Friends also planted native vines to cover the work shed at Wallace Avenue (these were, unfortunately, ripped up by someone). However, the Friends were unable to undertake other planting work in these initial years because the City of Toronto asked us to suspend these activities pending the outcome of a soil study (now complete, see section 3.2 below). Planting work has also been on hold in many areas due to uncertainty regarding extensive work by Metrolinx expected on the Railpath discussed below.

Every year Friends of the West Toronto Railpath hosts local ecologists to lead Railpath stewardship walks. The purpose of the walks is to educate the Railpath community about the diverse ecology of wild urban landscapes and the wide variety of plants and small creatures that bring Toronto's most unique linear park and car-free mobility corridor to life.

A major issue for the Friends has been the damage that Metrolinx caused to the Railpath during the construction of the Union Pearson Express station at Bloor Street and during the construction of the sound barriers built along the Georgetown Line. The Friends worked with Metrolinx and the City of Toronto to obtain an agreement from Metrolinx to fix this damage (see Appendix C). Unfortunately, Metrolinx has not yet completed this work and has been unresponsive to repeated requests to do so.

Metrolinx is now planning to add another track next to the Railpath as part of its rail network expansion. This will shrink the Railpath significantly and require re-alignment and re-development in some areas. The details and final plans are to be determined. This will be a major issue in the coming years. We have been working on this but have encountered large challenges in obtaining information from Metrolinx.

The Friends have been working with the City of Toronto to establish a maintenance plan and Railpath-specific criteria for Park Access Agreements. This work is ongoing.

1.4 Purpose and Structure of this Environmental Stewardship Plan

This Environmental Stewardship Plan relates primarily to the vegetation on the Railpath. It is not intended to address the hardscape (e.g. paved areas) of the Railpath or other design elements (e.g. murals, art, etc.). This plan is intended to encourage environmental stewardship of the Railpath that is consistent, responsible, and holistic.

This plan contains the following elements:

- Section 2: Overriding goals and principles
- Section 3: A description of the site status and conditions

- Section 4: A plan for the improvement and restoration of the Railpath vegetation
- Section 5: A plan and guidelines for work by volunteer stewards
- Section 6: A protocol for maintenance of the Railpath by City of Toronto staff
- Section 7: A protocol for development and construction work on and near the Railpath

2 Goals and Principles

The goal of this Environmental Stewardship Plan is to restore and maintain the vegetation on and near the Railpath.

All landscaping and landscape design on and near the Railpath should be guided by the following principles:

- **Environmental Benefit:** The paramount consideration should always be the improvement of the natural environment. This includes expanding habitat (e.g. encouraging plants favoured by birds, bees, and butterflies), strengthening biodiversity (e.g. encouraging native species), and reducing greenhouse gases (e.g. planting trees).
- **Harmonious Design:** All landscaping and landscape design on and near the Railpath should be consistent with the original award-winning design of the Railpath, which reclaimed an industrial landscape, and focussed on native plants to provide an *ecologically beneficial* landscape.
- **Appropriateness:** Landscaping should be appropriate for local environmental conditions (e.g. soil, light, water) and consistent with the various uses of the Railpath (e.g. not encroach on the path).
- **Maintainable:** Planting should be accompanied by a realistic maintenance plan. Planting should be appropriate for a realistic assessment of maintenance resources.

3 Site Status and Condition

3.1 Site Conditions

The soil along the Railpath is generally very sandy and nutrient-poor. It was an intentional design decision not to augment or attempt to change the existing site soil.. A number of native species (e.g. Little Bluestem, *Schizachyrium scoparium*) have a competitive advantage in nutrient-poor soils. However, it is possible that human activity, pets, and runoff from the path and surrounding areas is adding a significant amount of nutrients to the soil and thus changing the conditions somewhat.³

The Junction Triangle neighbourhood which surrounds the West Toronto Railpath has had 150 years of industrial use, so much of the area including Railpath bares the legacy. As reclaimed industrial/rail land, Railpath soil is contaminated in some locations. The contamination levels determined where trees were planted in the original planting plan. Trees were only planted in areas where soil conditions were safe. The City of Toronto recently completed a soil analysis to

³ The information in the paragraph is from discussions with Mary Gartshore in 2015.

determine the level of contamination in regards to public safety.

Most areas of the Railpath get full sun most of the day. However, this is changing as the trees planted in 2009 mature. This is also changing as a result of growth and spread of various non-native trees and shrubs, such as Tree of Heaven (*Ailanthus altissima*) and Manitoba Maple (*Acer negundo*).

The Railpath is fairly dry in the north but gets progressively wetter moving south. The portion just north of Dundas is fairly wet and has a fairly high water table and is therefore able to support species such as Prairie Cordgrass (*Spartina pectinata*), which require a wetter environment. There are also certain areas along the Railpath that receive more water from building downspouts.

3.2 Soil Conditions

In 2017 the City of Toronto completed a soil study. One of the topics it considered was potential stewardship work by the Friends, including hand-pulling and cutting weeds, pruning, perennial native planting and mulching / spreading growing medium such as topsoil. It concluded as follows:

Environmental contaminants are known to be present within soil at the West Toronto Railpath (WTR). These contaminants generally comprise fill materials historically imported to and placed at the WTR lands and can be found across the entirety of the WTR. Following an evaluation of potential risk to human health associated with the contaminated soils at the WTR by CH2M Hill (May, 2007), a barrier to the contaminated soils was constructed at the WTR comprising either hard surfacing underlain by granular materials and uncontaminated soil, or planting media (e.g., topsoil) underlain by uncontaminated soils has been established at the WTR. The thickness of the barrier is such that stewardship volunteers, engaging in basic maintenance / landscaping activities involving no more than shallow excavation of soils, would not come into contact with contaminated soils.

It was recommended that any stewardship volunteer activities cannot include activities involving excavation to depths greater than 50 cm below ground surface. No other restrictions or requirements are required.

3.3 Species Inventory

The following species have been found on the Railpath as of 2015.

Common Name	Latin Name	Native	Notes

Grasses			
Smooth Brome	<i>Bromus inermis</i>	Non-native	Highly invasive. This is the most common grass on the Railpath.
Little Bluestem	<i>Schizachyrium scoparium</i>	Native	Planted in 2009 as part of WTR planting plan. Can be found throughout the Railpath but the strongest areas are near Ruskin Ave (zone 15).
Prairie Cordgrass	<i>Spartina pectinata</i>	Native	Planted in 2009 as part of WTR planting plan. Planted from seeds collection prior to the Railpath construction. It dominates a large area north of Dundas (zone 2).
Big Bluestem	<i>Andropogon gerardi</i>	Native	Scattered in a few isolated places but relatively uncommon.
Switchgrass	<i>Panicum virgatum</i>	Native	
Indian Grass	<i>Sorghastrum nutans</i>	Native	
Misc cool season grasses	Misc	Non-native	There are many non-native cool season grasses throughout the Railpath.
Herbaceous Plants and Shrubs			
Green Coneflower	<i>Rudbeckia laciniata</i>	Native	One small cluster is located about 50m south of Bloor near a downspout providing it the water it needs.
Smooth rose	<i>Rosa blanda</i>	Native	Planted in 2009 as part of WTR planting plan. From collected seed. Only located north of Dundas (zone 3).
Brown-eyed Susan	<i>Rudbeckia hirta</i>	Native	Planted in 2009 as part of WTR planting plan. Some from collected seed. Relatively uncommon now.
Sky Blue Aster	<i>Aster oolentartgiensis</i>	Native	Planted in 2009 as part of WTR planting plan.
Slender Mountain Mint	<i>Pycnanthemum tenuifolium</i>	Native	Planted in 2009 as part of WTR planting plan.
Common Milkweed	<i>Asclepias syriaca</i>	Native	Planted in 2009 as part of WTR planting plan. Doing well throughout the Railpath.
Upland White Aster	<i>Solidago</i>	Native	Planted in 2009 as part of

	<i>ptarmicoides</i>		WTR planting plan.
Heath Aster	<i>Aster ericoides</i>	Native	Planted in 2009 as part of WTR planting plan.
Bergamot	<i>Monarda fistulosa</i>	Native	Only one, located just south of Wallace Ave.
Alfalfa	<i>Medicago sativa</i>	Non-native	
Bittersweet Nightshade	<i>Solanum dulcamara</i>	Non-native	
Bladder Campion	<i>Silene vulgaris</i>	Non-native	
Broadleaf Plantain	<i>Plantago major</i>	Non-native	
Broad Leaved Dock	<i>Rumex obtusifolius</i>	Non-native	
Burdock	<i>Arctium</i>	Non-native	
Butter and Eggs	<i>Linaria vulgaris</i>	Non-native	
Canada Thistle	<i>Cirsium arvense</i>	Non-native	A noxious weed under the <i>Weed Control Act</i> .
Choke Cherry	<i>Prunus virginia</i>	Native	
Sandbar Willow	<i>Salix exigua</i>	Native	
Common Evening Primrose	<i>Oenothera biennis</i>	Native	
Common Ragweed	<i>Ambrosia artemisifolia</i>	Native	A noxious weed under the <i>Weed Control Act</i> .
Cow Vetch	<i>Viciacracca</i>	Non-native	
Curled Dock	<i>Rumex crispus</i>	Non-native	
Door Weed	<i>Polygonum aviculare</i>	Non-native	
Dog-strangling vine	<i>Vincetoxicum rossicum</i>	Non-native	Invasive. A noxious weed under the <i>Weed Control Act</i> .
Evening Lychnis	<i>Lychnis alba</i>	Non-native	
Field Bindweed	<i>Convolvulus arvensis</i>	Non-native	
Goat's Beard	<i>Tragopogon pratensis</i>	Non-native	
Canada Goldenrod	<i>Solidago canadensis</i>	Non-native	
Horsetail	<i>Equisetum (arvense?)</i>		Very common between Dundas and Bloor. Further identification needed ⁴
Lady's Thumb	<i>Polygonum persicaria</i>	Non-native	
Lambsquarters	<i>Chenopodium</i>	Non-native	
Motherwort	<i>Leonurus cardiac</i>	Non-native	
Garlic Mustard	<i>Alliaria petiolata</i>	Non-native	Invasive
Pineapple Weed	<i>Matricaria discoidea</i>	Non-native	
Poison Ivy	<i>Toxicodendron</i>	Non-native	A noxious weed under the

⁴ <http://www.rook.org/earl/bwca/nature/ferns/equisetum-wip.html>

	<i>radicans</i>		<i>Weed Control Act.</i>
Queen Anne's Lace	<i>Daucus carota</i>	Non-native	
Red Clover	<i>Trifolium pretense</i>	Non-native	
Sow Thistle	<i>Sonchus</i>	Non-native	A noxious weed under the <i>Weed Control Act.</i>
Tansy	<i>Tanacetum vulgare</i>	Non-native	
White Sweet Clover	<i>Clover melilotus</i>	Non-native	
Vines			
American bittersweet	<i>Celastrus scandens</i>	Native	Planted in 2009 as part of WTR planting plan. Planted from collected seed.
Virgin's Bower	<i>Clematis virginiana</i>	Native	Planted in 2009 as part of WTR planting plan. Planted from collected seed.
Grape-woodbine	<i>Parthenocissus vitacea</i>	Native	Planted in 2009 as part of WTR planting plan. Planted from collected seed.
Virginia Creeper	<i>Parthenocissus quinquefolia</i>	Native	Planted in 2009 as part of WTR planting plan. Planted from collected seed.
Trees (Section incomplete – to be reviewed in 2016)			
Siberian Elm	<i>Ulmus pumila</i>	Non-native	Invasive ⁵
Tree of Heaven	<i>Ailanthus altissima</i>	Non-native	Invasive ⁶
Manitoba Maple	<i>Acer negundo</i>	Non-native	Invasive ⁷
Common Hackberry	<i>Celtis occidentalis</i>	Native	Planted in 2009 as part of WTR planting plan
Ironwood	<i>Ostrya virginiana</i>	Native	Planted in 2009 as part of WTR planting plan
Quaking Aspen	<i>Populus tremuloides</i>	Native	Planted in 2009 as part of WTR planting plan
American Basswood	<i>Tilia americana</i>	Native	Planted in 2009 as part of WTR planting plan
Burr Oak	<i>Quercus macrocarpa</i>	Native	Planted in 2009 as part of WTR planting plan
Autumn Blaze Maple	<i>Acer x freemanii</i> 'Jeffersred'	Native	Planted in 2009 as part of WTR planting plan

⁵ http://www1.toronto.ca/city_of_toronto/parks_forestry__recreation/urban_forestry/files/pdf/sustain.pdf, ; <http://ufora.ca/index.php/resources/invasive-species/>

⁶ Ibid

⁷ Ibid; see also <http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=ec1d4594e1ccb410VgnVCM10000071d60f89RCRD&vgnnextchannel=17f4cacb759e0410VgnVCM10000071d60f89RCRD>.

3.4 Site Status

Throughout the Railpath you can find species of native plants that were part of the original Railpath planting. For example, the *Spartina pectinata* in the south end is doing extremely well and dominates a significant area. However, overall, the Railpath has not reached the original aspirations that were held for it. There was hope in the beginning that it would receive more maintenance and attention, but that has not occurred.

Most of the Railpath has a varying mix of natives and non-natives. Natives such as Virginia Creeper, Milkweed, Asters, Canada Wild Rye, and Goldenrod are present throughout most of the Railpath. In many places they are the minority when compared to non-natives. The Railpath is threatened in the northern half by the highly-invasive Dog Strangling Vine. Soil disturbance from the building of sound barriers and the replacement of fencing by Metrolinx in 2015-2016 significantly exasperated the situation. The urban plant ecology of the railpath is also affected by migratory seed transported by trains travelling along the adjacent rail corridor. A variety of native and non native seed spontaneously colonize the railpath.

A map showing the current status of the Railpath can be found here:

<https://drive.google.com/open?id=15TK66OYPQqsHpVAJWm8jcpah5o&usp=sharing>.

The following table describes the status of the various portions of the Railpath.

Zone	Status as of 2015 (2017 Updates in Parentheses)
1 - North of Dundas, East Side	Mostly non-natives
2 - North of Dundas, West Side	<i>Spartina pectinata</i> established very well. Little maintenance needed.
3 - North of Dundas, East Side	<i>Rosa blanda</i> from collected seed doing very well here. Potential area for volunteer-based maintenance. Work needed to avoid the need for mowing at the edges. Non-natives could be gradually replaced with natives.
4 - Thin strip adjacent to Nestle	This strip of land may be too thin to be planted. Steps may be necessary to avoid the need for mowing. It may be possible to transplant some <i>Spartina pectinata</i> here. (will it be wet enough/sunny enough?)
5 - Nestle Factory Land	Currently has very low straggly-looking grass. Ground appears to be very rocky. Potential to approach Nestle to ask for permission to seed the area. Little bluestem may be a good candidate if Nestle wants something fairly low.
6 - Adjacent to planned Castlepoint	Mix of natives and non-natives. Heavy impact of

Numa Development (Lower JCT)	invasive Smooth Brome in southern portion. Friends of WTR to suggest that Castlepoint Numa or Metrolinx design and execute a native restoration suitable to the area and use. (2017 - area currently under construction)
7 - South of Bloor, West Side	Mix of natives and non-natives. Lots of Equisetum here (likely non-native per Mary Gartshore, but hard to tell). Much of this area is a strip too thin to be planted. A plan should be developed to address this thin areas so that mowing is not needed. Friends of WTR to suggest that Potential to ask or require that Castlepoint Numa or Metrolinx design pay for and execute a native restoration suitable to the area and use.
8 - South of Bloor, East Side	Mix of natives and non-natives. Heavy impact of invasive Smooth Brome in southern portion. Potential area for steward-based restoration.
9 - North of Bloor, East Side	Area in very bad shape. Almost entirely non-natives except for a few of the trees and some Goldenrod and Milkweed. Friends of WTR to ask Metrolinx to restore as part of UP Express restoration work.
10 - North of Bloor, West Side	This includes the Metrolinx station property and the Railpath lands adjacent to it. Complete replanting required in accordance with original Railpath plans. Advocacy needed to ensure that Metrolinx lands are planted with native species.
11 - Adjacent to planned 26 Ernest Ave. development (Heritage Towns)	Area in extremely bad shape. Requires a fresh start. Very high impact from Metrolinx work. The City of Toronto will develop a park adjacent to the Railpath in this area.
12 - South of Wallace Entrance, East Side	Mix of natives and non-natives, mostly non-natives. (2017 -the invasive Tree of Heavens are taking over the site). Potential area for volunteer-based restoration. One option is to kill the non-native grasses and vegetation with newspaper and wood chips and plant natives plants into that. Many Tree of Heavens need removal.
13 - South of Wallace, West Side	Mix of natives and non-natives. Potential area for volunteer-based restoration.

14 - North of Wallace, East Side	Area to be completely redone as part of the Wallace Walks development
15 - North of Wallace, West Side	The two wider parts of this area have the best stands of native grasses on the Railpath, mainly Little Bluestem. Dog Strangling Vine is present. Potential area for volunteer-based maintenance through removal of Dog Strangling Vine and steady replacement of non-natives with natives. (2017 update - Dog Strangling Vine spreading very quickly and taking over).
16 - North of Ruskin, East Side	Mix of natives and non-natives. (2017 update - Dog Strangling Vine from the west side is spreading here now too).
17 - North of Ruskin, West Side	Mix of natives and non-natives. Dog Strangling Vine is a problem here. (2017 update - Dog Strangling Vine spreading very quickly and taking over).
18 - South of Dupont, East Side	Completely non-natives grasses due to mowing by Planet Storage. A fresh start is required.
19 - South of Dupont, West and East Side, Under Tree	Sparse non-native vegetation in poor soil in the shade of a tree.
20 - North of Dupont, East Side	Mix of natives and non-natives in area just north of Dupont. Mostly non-natives in area outside Osler Fish Market due to mowing.
21 - North of Dupont, West Side	Completely non-natives due to Metrolinx construction followed by the dispersal of grass seed by Metrolinx. Possible area for Metrolinx-funded restoration.
22 - South of Cariboo, East Side	Mostly non-natives. Area may not have been included in original planting plan. Ownership and status of land unknown.
23 - South of Cariboo, West Side	Mix of natives and non-natives, mostly the latter.
24 - South of Cariboo, Rectangular Cutouts in Pavement	Non-native grasses. Currently mowed by the City. Potential area for volunteer-based restoration.

Further work is needed to assess the tree species on the Railpath. This should be a priority in the coming year.

4 Restoration Plan

The Railpath is a large and long site (2.1 km). A lot of work is required to enhance and maintain the proportion of native, ecologically beneficial plants. To help prioritize and organize this work,

the site can be divided into three types of areas:

1. **Volunteer Stewardship Group Areas:** These areas are to be tended by a group of volunteer stewards dedicated to that area. These will be smaller areas that will get extra attention and focus. They will be located in the most visible areas such as at the entrances to the Railpath. Each Volunteer Stewardship Area Group will consist of a head volunteer who will be responsible for recruiting the area group members, coordinating group weeding/planting days, and ensuring that the group activities are consistent with the overall stewardship plan.
2. **Developer Restoration Areas:** These areas are to be restored by developers whose projects are adjacent to the Railpath. There is a large amount of work being done adjacent to the Railpath, including the construction of condominiums and railway-related construction by Metrolinx. This work can have negative impacts on the Railpath. We will endeavor to obtain commitments with developers and Metrolinx to restore areas of the Railpath that are adjacent to the work they complete.
3. **Secondary Maintenance Areas:** These areas will receive less focus and attention. Work in the secondary areas will largely take place through a few yearly events such as Dog Strangling Vine removal days.

The delineation of the Railpath into the various area types will change over time. The current delineation is as follows:

1. **Volunteer Stewardship Groups Areas**
 - a. Areas with an existing volunteer group
 - i. Areas 12 & 13 - South of Wallace Entrance, East and West Side
 - b. Areas where volunteer group recruitment needed
 - i. Area 24 - South of Cariboo, Rectangular Cutouts in Pavement: Non-native grasses. Currently mowed by the City. Potential area for volunteer-based restoration.
 - ii. Parkette at the Dundas Entrance: Currently mowed. Could be incorporated into the Railpath-type native planting through volunteer stewardship.
2. **Developer Restoration Area**
 - a. Areas where developer remediation is committed
 - i. Area 14 - North of Wallace, East Side: To be completely redone by as part of the Wallace Walks development
 - ii. Areas to be impacted by Metrolinx's Regional Express Rail Plan. Extent of impact and plans for remediation to be determined.

- b. Areas where developer commitment has not yet been achieved
 - i. Area 6 - Adjacent to planned Castlepoint Development: Mix of natives and non-natives. Heavy impact of invasive Smooth Brome in southern portion. Potential to ask or require that Castlepoint pay for and execute a native restoration suitable to the area and use.
 - ii. Area 9 - North of Bloor, East Side: Area in very bad shape. Almost entirely non-natives except for a few of the trees and some Goldenrod and Milkweed. Potentially ask Metrolinx to pay for restoration.
 - iii. Area 10 - North of Bloor, West Side: This includes the Metrolinx station property and the Railpath lands adjacent to it. Complete replanting required in accordance with original Railpath plans. Advocacy needed to ensure that Metrolinx lands are planted with native species.
 - iv. Area 11 - Adjacent to planned 26 Ernest Ave development (Heritage Towns on the Trail): Area in extremely bad shape. Requires a fresh start. Very high impact from Metrolinx work. Potentially ask Montevello Developments to redo this area as it will likely be disturbed during development.
 - v. Area 18 - South of Dupont, East Side: Completely non-natives grasses due to mowing by Planet Storage. A fresh start is required. A fresh start is needed. Potential to seek financial support from Planet Storage for a restoration project.
 - vi. Area 5 - Nestle Factory Land: Currently has very low straggly-looking grass. Ground appears to be very rocky. Potential to approach Nestle to ask for permission to seed the area or to obtain financial assistance or a restoration project. Little bluestem may be a good candidate if Nestle wants something fairly low.

3. Secondary Maintenance Areas

- a. The remainder of the Railpath falls into this category. Some areas are more or less in need of work. See the site status in section 3.3 above for more details.

5 Volunteer Maintenance Plan and Guidelines

5.1 Volunteer Work Plan

For Volunteer Area Groups:

- Aim to work on the site at least 3 times per year.
- Become familiar with the site and learn what natives and non-natives are present.
- Begin by removing invasive shrubs and small trees (e.g. Tree of Heaven and Manitoba Maple). These threaten to overshadow and crowd out the native flowers and grasses.
- Clear areas around native plants to give them room to spread.
- Remove non-natives and plant natives as appropriate.

For Secondary Maintenance Areas

- Attempt to contain the spread of Dog Strangling Vine and gradually fight it back through annual DSV days. For any DSV south of Wallace, attempt to dig and completely remove the plants. North of Wallace, just remove the plants in July to prevent seed spread. Over the years, slowly try to push the DSV north along the Railpath.

5.2 Volunteer Stewardship Guidelines

All volunteer stewardship activities should follow these guidelines:

1. Only uproot plants if you are 100% positive that they are a non-native species. This can be very difficult to discern in relation to grasses. There are many native grasses on the Railpath that are hard to identify except when they have gone to seed in August. When in doubt, do not remove a plant. You may need to monitor a site over a season to determine whether and where any native plants exist. In the meantime, there will be many easy to identify non-natives to remove and other work to do.
2. Only plant plants that are native to Ontario. The City of Toronto Urban Forestry maintains a native plant list, attached at appendix B. Any species on this list can be planted on the Railpath. Ensure that plant choices are appropriate for the site characteristics (typically sunny and dry).
3. The Railpath is meant to have a “wild” look, not the look of a manicured garden. Stewardship work should be consistent with this original vision for the Railpath.

6 City Staff Maintenance Protocol

The City currently mows the Railpath as infrequently as possible and only when necessary to stop the vegetation from growing over the path. However, it appears that the mowers sometimes cut too far into the vegetation. This encourages the growth of non-natives in the mowed areas. The Friends are seeking agreement regarding the following protocol with City staff. As of 2017 this protocol is still under negotiations with the City.

City staff will:

1. Only mow 1 foot from the paved portion of the path (i.e. over the gravel shoulder);
2. Attempt, if possible, to use mowing equipment that bags up the cuttings for removal from the site to limit the spread of non-native plant seeds;
3. Collect garbage from the Railpath;
4. Prune the trees and shrubs to (i) ensure a clear path for pedestrians, (ii) ensure a clear path for cyclists (requiring higher pruning to account for the height of seated cyclists), and (iii) ensure clear sightlines, especially around corners;
5. Maintain vegetation around Railpath artworks on an as-needed basis;
6. Pick up plant waste (e.g. piles of Dog Strangling Vine removed by volunteers) from time to time when requested by members of the Friends;

7. Notify the Friends of any permits granted in relation to Railpath;
8. Require that any permit holders comply with the following rules:
 - a. All efforts must be taken to avoid damage to vegetation;
 - b. All damaged vegetation must be remediated;
 - c. Vehicles cannot be parked on the Railpath;
 - d. Entry onto Railpath can only occur through obtaining a key for the gates – vehicles cannot drive over vegetation to obtain access to the Railpath;
 - e. NO GRASS SEED WILL BE USED ON THE RAILPATH; and
 - f. Disturbed areas will be seeded with a plant mix of exclusively Ontario native plants.
9. Require that recipients of Park Access Agreements follow the special conditions outlined below.

**Special Conditions for Park Access Agreements
Applying to the West Toronto Railpath**

Special and Fragile Vegetation

1. The West Toronto Railpath is a unique park with **important and sensitive native plants**. Although it looks “wild,” it contains many important native species. If soil is disturbed, native species will suffer and non-native and invasive species will spread. Non-native invasive species are very well adapted to areas with disturbed soil from vehicle traffic and construction. If vegetation is damaged or soil is disturbed, proper remediation must take place.
2. **Vegetation and soil must not be damaged or disturbed** unless every possible effort is taken to avoid doing so. This includes taking all possible efforts to avoid driving over vegetation. All work must make as small of a footprint as possible.
3. **No parking** is allowed on the paved or natural sections Railpath for any length of time.
4. **No vehicle entry is allowed except by obtaining a key** for the gates. Vehicles cannot drive over vegetation to obtain access to the Railpath.
5. **NO GRASS SEED** may be used on the Railpath that includes any non-native seeds. Almost all grass seed from nurseries contains non-native grasses. Special native seed mixes must be obtained.
6. **Damage or disturbance to vegetation** must be fully remedied. A native seed mix must immediately be spread over any disturbed or damaged areas (e.g. by driving over vegetation, digging, etc.). The City of Toronto must be notified of any damage by email to _____ and railpathstewards@gmail.com, including a description of any damage. The licensee will take any steps necessary to remediate any disturbance or damage at the request of the City of Toronto.

7. **All negative impacts must be fully mitigated** in coordination with the Toronto Department of Parks and Recreation and the Friends of the West Toronto Railpath.
8. All planting or seeding on the Railpath must **exclusively use species that are native to Ontario** except where no native species exists with the required plant characteristics (e.g. if a very hardy tree species is required).
9. This appendix is a guideline on how to meet the requirements in the Park Access Agreement. **It must be read, understood, and signed off on by all contractors using this Park Access Agreement.**

7 Development and Construction Protocol

Development has often taken a negative toll on the Railpath plants. Developers are generally unaware of the special care needed on the Railpath. The Friends are seeking agreement from the City of Toronto's Planning Department on the following protocol:

1. City of Toronto Planning and Development and Parks, Forestry and Recreation will notify and consult with the Friends of the West Toronto Railpath on any permit applications for work on or near the Railpath.
2. City of Toronto Planning and Development department and Parks, Forestry and Recreation will endeavor to obtain a binding commitment from all developers to agree to the below development conditions.

Conditions for Development:

1. All development and construction work on and near the Railpath should be undertaken in a way that improves or minimally impacts the vegetation and physical landscape along the Railpath and the community uses of the Railpath. The guiding principle should be to "make as small of an impact as possible."
2. Any negative impacts should be fully mitigated in coordination with the City of Toronto Parks, Forestry and Recreation and the Friends of the West Toronto Railpath.
3. Entry onto the Railpath can only occur by obtaining a key for the gates at Randolph Ave.– vehicles cannot drive over vegetation to obtain access to the Railpath.
4. NO GRASS SEED WILL BE USED ON THE RAILPATH.
5. All planting or seeding on or immediately adjacent to the Railpath will utilize exclusively species that are native to Ontario. Planting plans for areas adjacent to the WTR to be reviewed by City of Toronto Parks, Forestry and Recreation staff.

6. Planting or seeding on adjacent property (e.g. condominiums developments, rail stations, etc.) will utilize exclusively species that are native to Ontario except where no native species exists with the required plant characteristics (e.g. if a very hardy tree species is required).

Appendix A – Overview of Plantings and Zones from the Original Railpath Plantings in October 2009

This overview is from Scott Torrance Landscape Architects.⁸

ZONE 1 - WOODLAND

Common Name	Scientific Name	Common Name	Scientific Name
Seed mix:			
Little Bluestem	<i>Schizachyrium scoparium</i>	Native Trees:	
Black-eyed Susan	<i>Rudbeckia hirta</i>	Autumn Blaze Maple	<i>Acer x freemanii</i> 'Jeffersred'
Common Milkweed	<i>Asclepias syriaca</i>	Allegheny Serviceberry	<i>Amelanchier laevis</i>
Sky Blue aster	<i>Aster oolentangensis</i>	Silver Maple	<i>Acer saccharinum</i>
Native plants grown from collected seeds:			
New Jersey Tea	<i>Ceanothus americanus</i>		
Grape-woodbine	<i>Parthenocissus vitacea</i>		
Virginia Creeper	<i>Parthenocissus quinquefolia</i>		

ZONE 2 - MIXED OPEN GRASSLAND & SAVANNAH

Common Name	Scientific Name	Common Name	Scientific Name
Seed Mix:			
Little Bluestem	<i>Schizachyrium scoparium</i>	Native Trees:	
Black-eyed Susan	<i>Rudbeckia hirta</i>	Autumn Blaze Maple	<i>Acer x freemanii</i> 'Jeffersred'
Common Milkweed	<i>Asclepias syriaca</i>	Silver Maple	<i>Acer saccharinum</i>
Sky Blue aster	<i>Aster oolentangensis</i>	Common Hackberry	<i>Celtis occidentalis</i>
		Quaking Aspen	<i>Populus tremuloides</i>
		Burr Oak	<i>Quercus macrocarpa</i>
		American Linden	<i>Tilia americana</i>
		Ironwood	<i>Ostrya virginiana</i>
Native plants grown from collected seeds:			
Grape-woodbine	<i>Parthenocissus vitacea</i>		
Virginia Creeper	<i>Parthenocissus quinquefolia</i>		
Brown Eyed Susan	<i>Rudbeckia hirta</i>		
Hancock Coralberry	<i>Symphoricarpos x chenaulti</i> 'Hancock'		

ZONE 3 - GRASSLAND MEADOW

Common Name	Scientific Name	Common Name	Scientific Name
Seed mix:			
Slender Mountain Mint	<i>Pycnanthemum tenuifolium</i>	Native plants grown from collected seeds:	
Common Milkweed	<i>Asclepias syriaca</i>	American Bittersweet	<i>Clematis scandens</i>
Upland White Aster	<i>Solidago ptarmicoides</i>	Virgin's Bower	<i>Clematis virginiana</i>
Pearly Everlasting	<i>Anaphalis margaritacea</i>	Grape-woodbine	<i>Parthenocissus vitacea</i>
Heath Aster	<i>Aster ericoides</i>	Brown Eyed Susan	<i>Rudbeckia hirta</i>
Canada Anemone	<i>Anemone canadense</i>	Hancock Coralberry	<i>Symphoricarpos x chenaulti</i> 'Hancock'
Bottlebrush Grass	<i>Elymus hystrix</i>	Prairie Cordgrass	<i>Spartina pectinata</i>
		Native trees:	
		Common Hackberry	<i>Celtis occidentalis</i>
		Burr Oak	<i>Quercus macrocarpa</i>

ZONE 4 - WET MEADOW

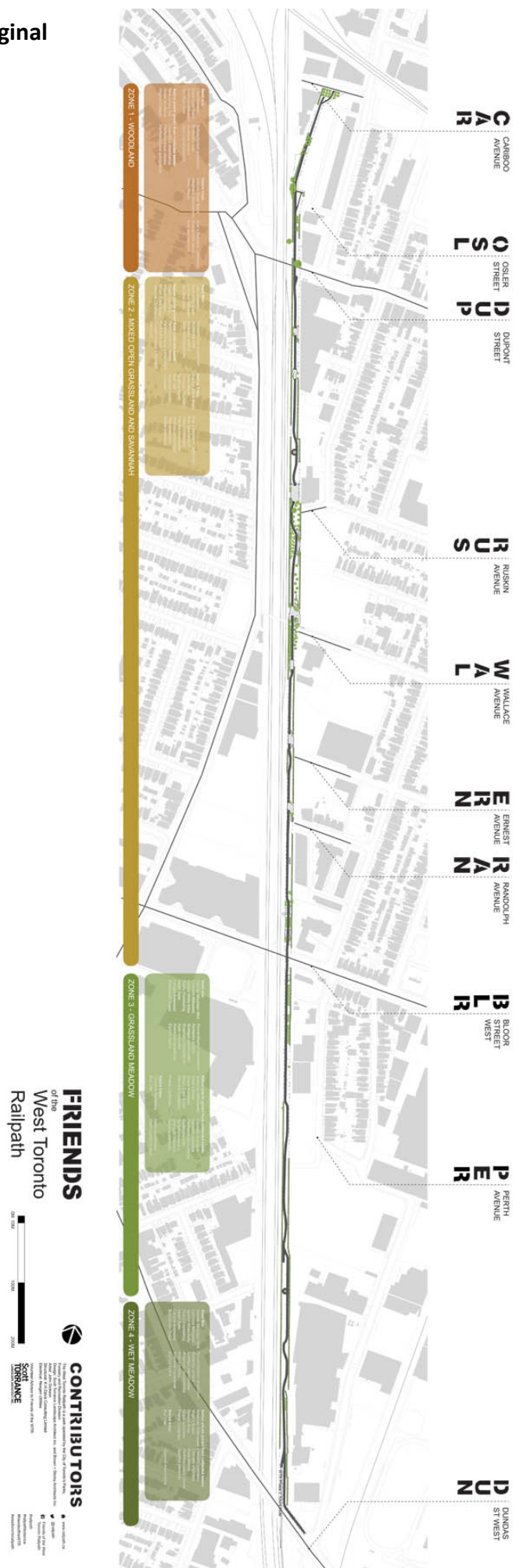
Common Name	Scientific Name	Common Name	Scientific Name
Seed Mix:			
Slender Mountain Mint	<i>Pycnanthemum tenuifolium</i>	Native plants grown from collected seeds:	
Common Milkweed	<i>Asclepias syriaca</i>	American Bittersweet	<i>Clematis scandens</i>
Upland White Aster	<i>Solidago ptarmicoides</i>	Virgin's Bower	<i>Clematis virginiana</i>
Pearly Everlasting	<i>Anaphalis margaritacea</i>	Smooth Rose	<i>Rosa Blanda</i>
Heath Aster	<i>Aster ericoides</i>	Grape-woodbine	<i>Parthenocissus vitacea</i>
Canada Anemone	<i>Anemone canadense</i>	Prairie Cordgrass	<i>Spartina pectinata</i>
Bottlebrush Grass	<i>Elymus hystrix</i>	Native trees:	
		Burr Oak	<i>Quercus macrocarpa</i>

Note: There are a few ways in which the above list differs from the as-built planting plan from STLA. According to the as-built planting plan:

- Hancock Coralberry (*Symphoricarpose x chenaulti* "Hancock") and Virginia Creeper (*Parthenocissus quinquefolia*) were not from collected seed.
- In Zone 1, the Allegheny Serviceberry (*Amelanchier laevis*) and New Jersey Tea (*Ceanothus americanus*) were part of a separate price plant list that may not have been planted.

Note: It is unclear if the Hancock Coralberry (*Symphoricarpose x chenaulti* "Hancock") was every plante

⁸ <http://scotttorrance.ca/news/celebrating-biodiversity-along-the-west-toronto-railpath/>





Common Name	Scientific Name	Favoured Moisture	Favoured Light Regime	Flower Times	Flower Colour	Other Species Attributes
White Baneberry	<i>Actaea pachypoda</i>	Moist	shade	April/May	white	white doll's-eyes berries
Red Baneberry	<i>Actaea rubra</i>	Moist	partial shade to shade	April/May	white	attractive red berries
Common Agrimony	<i>Agrimonia gryposepala</i>	Moist	partial shade	Aug/Sept	yellow	woods, thickets
Big Bluestem	<i>Andropogon gerardii</i>	Dry	Full sun	July/August		turkey foot seed head, very tall
Canada Anemone	<i>Anemone canadensis</i>	Moist	partial shade to shade	June	white/yellow	spreads from rhizomes
Common Thimbleweed	<i>Anemone virginiana</i>	Moist	sun to partial shade	June	green	white fluffy seedheads
Groundnut	<i>Apios americana</i>	Moist-Wet	sun to partial shade	August	tan/purple	spreads rapidly from tubers
Spreading Dogbane	<i>Apocynum androsaemifolium</i>	Dry-Moist	sun to light shade	July/August	pink	attracts bees and butterflies
Wild Columbine	<i>Aquilegia canadensis</i>	Dry-Moist	sun to shade	May/June	red	attracts hummingbirds, self-seeds
Wild Sarsaparilla	<i>Aralia nudicaulis</i>	Moist	partial shade to shade	May/June	green/white	woods, purplish black berried
Jack-in-the-Pulpit	<i>Arisaema triphyllum</i>	Moist	partial shade to shade	April/May	purple/green/brown	red berries
Wild Ginger	<i>Asarum canadense</i>	Moist	partial shade to shade	May	purple/brown	spreads by creeping rhizomes
White Wood Aster (RT)	<i>Aster divaricatus</i>	Dry-Moist	shade to partial shade	July/August	white/yellow	heart-shaped leaves, spreads
Smooth Aster (RT)	<i>Aster laevis</i>	Dry	sun to partial shade	Sept./Oct.	violet	attracts butterflies, open woods
Large-leaved Aster	<i>Aster macrophyllus</i>	Dry	partial shade to shade	August	lavender	attracts butterflies
New England Aster	<i>Aster novae-angliae</i>	Dry-Moist	full sun	Aug. - Oct.	deep purple	attracts butterflies
Sky-blue Aster	<i>Aster oolentangiensis</i>	Dry	sun to partial shade	Sept./Oct.	blue	attracts butterflies
Arrow-leaved Aster	<i>Aster urophyllus</i>	Dry	sun to partial shade	Sept./Oct.	blue/pink	dry woods
Northeastern Lady Fern	<i>Athyrium felix-femina</i>	Moist	partial shade to shade			vigorous, grows well in groups
Fringed Brome	<i>Bromus ciliatus</i>	Moist-Wet	sun to partial shade	June-Aug.		attracts butterflies
Eared Brome	<i>Bromus latiglumis</i>	Moist	partial shade to shade	June-Aug.		good for valley sites
Canada Bluejoint	<i>Calamagrostis canadensis</i>	Moist-Wet	sun to partial shade	July-Sept.		wildlife shelter and erosion control
Harebell	<i>Campanula rotundifolia</i>	Dry	full sun	June-Sept.	violet-blue	delicate stems and flowers
Drooping Wood Sedge	<i>Carex arctata</i>	Dry	partial shade to shade			attracts butterflies
Bebb's Sedge	<i>Carex bebbii</i>	Moist-Wet	sun to partial shade			attracts butterflies, tussock forming
Common Wood Sedge	<i>Carex blanda</i>	Dry-Moist	partial shade to shade			tolerates compaction
Fringed Sedge (RT)	<i>Carex crinita</i>	Moist-Wet	partial shade			attracts butterflies
Black-fruited Sedge	<i>Carex eburnea</i>	Moist	partial shade to shade			attracts butterflies
Smooth-sheated Sedge	<i>Carex laevivaginata</i>	Moist-Wet	sun to partial shade			attracts butterflies
Early-flowering Sedge	<i>Carex pedunculata</i>	Moist	shade			attracts butterflies
Pennsylvania Sedge	<i>Carex pennsylvanica</i>	Dry	partial shade to shade			attracts butterflies
Sandbank Sedge	<i>Carex siccata</i>	Dry	sun to partial shade			attracts butterflies



Common Name	Scientific Name	Favoured Moisture	Favoured Light Regime	Flower Times	Flower Colour	Other Species Attributes
Turtlehead	<i>Chelone glabra</i>	Moist-Wet	sun to partial shade	Sept./Oct.	white/pink	attracts butterflies
Virginia Spring Beauty	<i>Claytonia virginica</i>	Moist	partial shade	April/May	pink	mottled leaf, dormant in summer
Bulbet Fern	<i>Cystopteris bulbifera</i>	Moist	partial shade			graceful, tufted
Fragile Fern	<i>Cystopteris tenuis</i>	Moist	partial shade			small fern, found on stumps
Poverty Oat Grass	<i>Danthonia spicata</i>	Dry	sun to partial shade			attracts butterflies
Cut-leaved toothwort	<i>Dentaria laciniata</i>	Moist	partial shade to shade	April/May	white	deeply lobed & sharply toothed leaves
Showy Tick-trefoil	<i>Desmodium canadense</i>	Dry	sun to partial shade	July	purple	attracts butterflies, fast cover
Dutchman's Breeches	<i>Dicentra cucullaria</i>	Moist	partial shade to shade	April/May	pink	grow under Sugar Maples
Flat-topped White Aster	<i>Doellingeria umbellata</i>	Moist-Wet	sun to partial shade	Sept./Oct.	white	attracts butterflies
Spinulose Wood Fern	<i>Dryopteris cathusiana</i>	Moist	partial shade			rich moist woods, evergreen
Glandular Wood Fern	<i>Dryopteris intermedia</i>	Dry-Moist	partial shade			dry woods, evergreen
Marginal Wood Fern	<i>Dryopteris marginalis</i>	Moist	partial shade			hardy, evergreen, rich woods
Canada Wild Rye	<i>Elymus canadensis</i>	Dry-Moist	sun to partial shade	July/August		quick cover, showy flowers
Bottlebrush Grass	<i>Elymus hystrix</i>	Dry-Moist	partial shade to shade	July/August		bristly seedheads, spreads
Riverbank Wild Rye (RT)	<i>Elymus riparius</i>	Moist	partial shade	July/August		stabilizes soil
Yellow Trout Lily	<i>Erythronium americanum</i>	Dry-Moist	shade to partial shade	May-June	yellow	mottled leaf, grows from bulbs, hardy
Woodland Strawberry	<i>Fragaria vesca</i>	Dry	partial shade to shade	April/May	white	good groundcover, spreads by stolons
Wild Strawberry	<i>Fragaria virginiana</i>	Dry	Full sun	April/May	white	very urban tolerant
Bottle Gentian (RT)	<i>Gentiana andrewsii</i>	Moist	sun to partial shade	Sept./Oct.	blue/purple	spreads from root crowns
Wild Geranium	<i>Geranium maculatum</i>	Dry-Moist	sun to partial shade	May-June	pink	deciduous woods
Thin-leaved Sunflower (RT)	<i>Helianthus decapetalus</i>	Moist	sun to partial shade	August	yellow	attracts butterflies
Woodland Sunflower	<i>Helianthus divaricatus</i>	Dry	partial shade to shade	July	yellow	attracts butterflies
Pale-leaved Sunflower (RT)	<i>Helianthus stumosus</i>	Dry	sun to partial shade	July	yellow	forms colonies, attracts butterflies
Sweet Grass (RT)	<i>Hierchloe odorata</i>	Moist	sun to partial shade			fragrant, spreads by rhizomes
Virginia Waterleaf	<i>Hydrophyllum virginianum</i>	Moist	partial shade to shade	May	lavender	aggressive in moist woodland soils
Hairy Bush-clover (RT)	<i>Lespedeza hirta</i>	Dry	sun to partial shade	Sept./Oct.		bristly clover heads, open woods
Cylindric Blazing-star (RT)	<i>Liatris cylindracea</i>	Dry	sun to partial shade	August	purple	attracts butterflies, open woods
Dense Blazing-star	<i>Liatris spicata</i>	Dry-Moist	sun to partial shade	August	purple	moist prairie/meadow
Michigan Lily	<i>Lilium michiganense</i>	Moist	sun to partial shade	July	orange	grows from a bulb
Wood Lily (RT)	<i>Lilium philadelphicum</i>	Dry	partial shade to shade	June	red/orange	grows from a bulb
Great Blue Lobelia	<i>Lobelia siphilitica</i>	Moist-Wet	sun to partial shade	August	blue	attracts hummingbirds
Wild Lupine	<i>Lupinus perennis</i>	Dry	sun to partial shade	May/June	blue	difficult to transplant



Common Name	Scientific Name	Favoured Moisture	Favoured Light Regime	Flower Times	Flower Colour	Other Species Attributes
Canada Mayflower	<i>Maianthemum canadense</i>	Moist	sun to shade	June/July	white/yellow	white berries, spreads by rhizomes
American Ostrich Fern	<i>Matteucia struthiopteris</i>	Moist	sun to partial shade			large fern, moist slopes
Partridgeberry	<i>Mitchella repens</i>	Dry-Moist	shade	August	white	red berries, evergreen
Mitrewort (Bishop's Cap)	<i>Mitella diphylla</i>	Moist	partial shade to shade	April/May	white	rich woods
Wild Bergamot	<i>Monarda fistulosa</i>	Dry-Moist	Full sun	July	lavender	smells like Earl Gray tea
Evening Primrose	<i>Oenothera biennis</i>	Dry-Moist	Full sun	July/August	yellow	tall, tolerates disturbed sites
Sensitive Fern	<i>Onoclea sensibilis</i>	Moist	sun to partial shade			wet woods, rapid spreader
Interrupted Fern	<i>Osmunda claytonia</i>	Dry	partial shade to shade			large, coarse fern, woodlands
Virginia Creeper	<i>Parthenocissus vitacea</i>	Dry-Moist	sun to shade	July/August	green	woods, bright blue berries
Foxglove Beardtongue	<i>Penstemon digitalis</i>	Dry	sun to partial shade	June	white	open woods, best in groupings
Hairy Beardtongue (RT)	<i>Penstemon hirsutus</i>	Dry	sun to partial shade	May	lilac	open woods
May-apple	<i>Podophyllum peltatum</i>	Moist	sun to shade	May	white	attractive leaf, edible fruit
Solomon's Seal (RT)	<i>Polygonatum biflorum</i>	Dry-Moist	sun to shade	May	white	blue/black berries, rhizomatous
Christmas Fern	<i>Polystichum arostichoides</i>	Dry-Moist	partial shade to shade			compact, woods/streams, evergreen
Wood Lettuce	<i>Prenanthes alba</i>	Moist	partial shade	August/Sept	white/pink	tall, distinctive leaf
Green-headed Coneflower	<i>Rudbeckia laciniata</i>	Moist	partial shade	August	yellow	moist meadows, very hardy
Bloodroot	<i>Sanguinaria canadensis</i>	Moist	shade to partial shade	April/May	white	attractive leaf, spreads, hardy
Purple Melic Grass	<i>Schizachne purpurascens</i>	Dry	partial shade to shade			attracts butterflies
False Solomon's Seal	<i>Smilacina racemosa</i>	Dry-Moist	partial shade to shade	May/June	white	red berries, woodlands, spreads
Starry False Solomon's Seal	<i>Smilacina stellatum</i>	Dry-Moist	partial shade to shade	June	white	black berries
Silverrod (RT)	<i>Solidago bicolor</i>	Dry	partial shade	Sept./Oct.	white	savannah woodlands
Zigzag Goldenrod	<i>Solidago flexicaulis</i>	Dry-Moist	partial shade to shade	Aug/Sept	yellow	zig-zag angled stem, hardy
Early Goldenrod	<i>Solidago juncea</i>	Dry	sun to partial shade	Aug/Sept	yellow	forest edges
Gray Goldenrod	<i>Solidago nemoralis</i>	Dry	sun to partial shade	Aug/Sept	yellow	open woods
Rough-leaved Goldenrod	<i>Solidago patula</i>	Moist	sun to partial shade	Sept./Oct.	yellow	swamps, wet meadows
Stout Goldenrod (RT)	<i>Solidago squarrosa</i>	Dry	partial shade	Sept./Oct.	yellow	savannah woodlands
Indian Grass	<i>Sorghastrum nutans</i>	Dry	sun to partial shade	Sept./Oct.	gold/purple	large seed head, prairie/savannah
Skunk Cabbage	<i>Symplocarpus foetidus</i>	Moist-Wet	sun to shade	April/May	yellow	swamps, streams
Early Meadow-rue	<i>Thalictrum dioicum</i>	Moist	partial shade	April/May	green	rocky woods
Foamflower	<i>Tiarella cordifolia</i>	Moist	partial shade to shade	May-June	white	spreads by stolons, groundcover
White Trillium	<i>Trillium grandiflorum</i>	Moist	partial shade to shade	April/May	white	provincial flower
Large-flowered Bellwort	<i>Uvularia grandifolia</i>	Dry-Moist	partial shade to shade	April/May	yellow	woods, thickets



Common Name	Scientific Name	Favoured Moisture	Favoured Light Regime	Flower Times	Flower Colour	Other Species Attributes
Blue Vervain	<i>Verbena hastata</i>	Moist-Wet	Full sun	August	blue	moist meadows, attracts butterflies
Hoary Vervain	<i>Verbena stricta</i>	Dry-Moist	Full sun	July-Aug	magenta	drought tolerant, attracts butterflies
Sweet White Violet	<i>Viola blanda</i>	Moist	partial shade to shade	April/May	white/yellow	rich woods
Barren Strawberry	<i>Waldesteinia fragarioides</i>	Dry-Moist	partial shade	May	yellow	acidic soil, glossy leaves
Golden Alexanders (RT)	<i>Zizia aurea</i>	Moist	partial shade	June	yellow	flowers in domed umbels

- All listed species are native to Toronto except for the ones marked **(RT)** which are rare in Toronto. Rare species are normally found in specific habitat types and not necessarily competitive in lower quality areas. They may also be difficult to source at plant nurseries and in larger quantities.
- The species marked with an asterisk (*) are often substituted with non-native varieties at nurseries.
- Please use the scientific (Latin) names and avoid cultivated varieties when purchasing plants at a commercial nursery. See 'How to Buy & Select Native Plants' fact sheet for more information



Common Name	Scientific Name	Favoured Moisture	Favoured Soil Type	Favoured Light Regime	Maximum Height/Length	Species Attributes
Ground nut	<i>Apios americana</i>	Dry-Moist	sand-silt-loam	Partial shade	3 m	purple flowers
American Bittersweet*	<i>Celastrus scandens</i>	Dry-Moist	sand-silt-clay	full sun	7 m	females have attractive red fruit
Virgin's Bower	<i>Clematis virginiana</i>	Moist-Wet	sand-silt-clay	sun to partial shade	6 m	white flowers
Glaucous honeysuckle (RT)	<i>Lonicera dioica</i>	Dry-Moist	sand	sun to partial shade	3 m	orange berries
Common Moonseed (RT)	<i>Menispermum canadense</i>	Moist-Wet	sand-silt-clay	partial shade to shade	2 m	white flowers, dark blue berries
Virginia Creeper	<i>Parthenocissus quinquefolia</i> and <i>P. inserta</i>	Moist	sand-silt-loam	sun to partial shade	10 m	bright red fall colour
Prickly Gooseberry	<i>Ribes cynosbati</i>	Dry-Moist	sand-silt-clay	partial shade to shade	1 m	reddish-purple to black berries
Canada Gooseberry	<i>Ribes hirtellum</i>	Dry-Moist	sand-silt-clay	partial shade to shade	1 m	bluish-black berries
Common Blackberry	<i>Rubus allegheniensis</i>	Dry-Moist	sand-silt-loam	sun to partial shade	2 m	thimble-shaped black berries
Northern Dewberry (RT)	<i>Rubus flagellaris</i>	Dry	sand	full sun	4 m	red edible fruit
Wild Red Raspberry	<i>Rubus idaeus</i>	Dry-Moist-Wet	sand-silt-clay	sun to partial shade	2 m	red edible fruit
Black Raspberry	<i>Rubus occidentalis</i>	Dry-Moist	sand-silt-clay	full sun	2 m	black edible fruit
Bristly Greenbrier	<i>Smilax hispida</i>	Moist	sand-silt-clay	sun to shade	6 m	blue/black berries
Wild Grape	<i>Vitis riparia</i>	Dry-Moist	sand-silt-loam	sun to partial shade	10 m	can become invasive

- All listed species are native to Toronto except for the ones marked **(RT)** which are rare in Toronto. Rare species are normally found in specific habitat types and not necessarily competitive in lower quality areas. They may also be difficult to source at plant nurseries and in larger quantities.
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- Please use the scientific (Latin) names and avoid cultivated varieties when purchasing plants at a commercial nursery. See 'How to Buy & Select Native Plants' fact sheet for more information



Common Name	Scientific Name	Favoured Moisture	Favoured Soil Type	Favoured Light Regime	Maximum Height	Species Attributes
Mountain Maple	<i>Acer spicatum</i>	Dry-Moist-Wet	sand-silt-loam	partial shade to shade	5 m	yellow/green flowers
Downy Serviceberry	<i>Amelanchier arborea</i>	Dry-Moist	sand-silt-clay	sun to partial shade	10 m	white flowers, berries attract birds
Smooth Serviceberry	<i>Amelanchier laevis</i>	Dry-Moist	sand-silt-clay	sun to partial shade	10 m	white flowers, berries attract birds
New Jersey Tea (RT)	<i>Ceanothus americanus</i>	Dry	sand-silt	sun to partial shade	1 m	attracts butterflies
Buttonbush (RT)	<i>Cephalanthus occidentalis</i>	Moist-Wet	sand-silt-clay	sun	3m	fragrant flowers attract bees
Alternate-leaved Dogwood	<i>Cornus alternifolia</i>	Dry-Moist	silt-loam	partial shade to shade	6 m	graceful branching pattern
Silky Dogwood	<i>Cornus amomum</i> <i>ssp. obliqua</i>	Wet-Moist	sand-silt-clay	sun	3 m	white flowers & blue berries
Grey Dogwood	<i>Cornus racemosa</i>	Dry-Moist	sand-silt-clay	sun to partial shade	3 m	white flowers & white berries
Round-leaved Dogwood	<i>Cornus rugosa</i>	Dry-Moist	sand-silt-loam	partial shade to shade	3 m	white flowers & pale-blue berries
Red-osier Dogwood	<i>Cornus stolonifera</i>	Moist-Wet	sand-silt-clay	sun	3 m	white flowers & white/bluish berries
American Hazel	<i>Corylus americana</i>	Dry-Moist	sand-silt-loam	sun to partial shade	3 m	Edible nuts
Beaked Hazel	<i>Corylus cornuta</i>	Dry-Moist-Wet	sand-silt-loam	sun to shade	4 m	large edible nuts in a beaked husk
Bush Honeysuckle	<i>Diervilla lonicera</i>	Dry	sand-silt-loam	sun to partial shade	1 m	small yellow flowers, fast growing
Leatherwood (RT)	<i>Dirca palustris</i>	Moist	sand-silt-loam	partial shade to shade	2 m	pale yellow flowers, red berries
Witch-hazel	<i>Hamamelis virginiana</i>	Moist	sand-silt-loam	partial shade to shade	6 m	yellow star-shaped flowers in fall
Winterberry (RT)	<i>Illex verticillata</i>	Moist-Wet	peat-muck-silt	sun to partial shade	4 m	attractive red fruit in winter
Spicebush (RT)	<i>Lindera benzoin</i>	Moist-Wet	silt-loam	partial shade to shade	3 m	scented leaves, beautiful fall colour
Fly-honeysuckle*	<i>Lonicera canadensis</i>	Moist-Wet	sand-silt-clay	sun to shade	2 m	pale yellow flowers, red berries
Glaucous Honeysuckle*	<i>Lonicera dioica</i>	Dry-Moist	sand-silt-clay	sun to shade	3 m	orange-red berries
Sweet Gale (RT)	<i>Myrica gale</i>	Moist-Wet	sand-silt-loam	sun	1 m	conelike flower clusters, scented leaves
Ninebark (RT)	<i>Physocarpus opulifolius</i>	Dry-Moist	sand	sun	3 m	showy white flowers
Canada Plum (RT)	<i>Prunus nigra</i>	Dry-Moist	Sand-silt	sun to partial shade	10 m	cherries attract birds
Chokecherry	<i>Prunus virginiana</i>	Dry-Moist	sand-silt-clay	sun to shade	10 m	cherries attract birds
Fragrant Sumac (RT)	<i>Rhus aromatica</i>	Dry	sand	sun	2 m	scented leaves
Staghorn Sumac	<i>Rhus typhina</i>	Dry-Moist	sand-silt-clay	sun	6 m	attractive crimson fruit, brilliant fall colour
Wild Black Currant	<i>Ribes americanum</i>	Moist	Sand-silt-loam	Sun to partial shade	2 m	edible dark berries
Smooth Rose	<i>Rosa blanda</i>	Dry-Moist	sand-silt-clay	sun	1 m	attractive pink flowers
Pasture Rose (RT)	<i>Rosa carolina</i>	Dry	sand-silt-loam	sun to partial shade	1 m	rose hips persist into winter
Swamp Rose (RT)	<i>Rosa palustris</i>	Moist-Wet	sand-silt-clay	sun	2 m	attractive pink flowers



Common Name	Scientific Name	Favoured Moisture	Favoured Soil Type	Favoured Light Regime	Maximum Height	Species Attributes
Purple-flowering Raspberry	<i>Rubus odoratus</i>	Dry-Moist	silt-loam	sun to shade	2 m	showy purple flowers
Bebb's Willow	<i>Salix bebbiana</i>	Moist-Wet	sand-silt-loam	sun to partial shade	6 m	yellow-green fruit attract birds
Pussy Willow	<i>Salix discolor</i>	Moist-Wet	sand-silt-clay	sun	3 m	fast growing, tolerant of compaction
Heart-leaved Willow	<i>Salix eriocephala</i>	Moist-Wet	sand-silt-clay	sun	4 m	early pollen source for insects
Upland Willow (RT)	<i>Salix humilus</i>	Dry-Moist	sand-silt-clay	partial shade to shade	3 m	low, small shrubs
Shining Willow	<i>Salix lucida</i>	Moist-Wet	sand-silt-clay	sun	6 m	yellowish stems
Slender Willow	<i>Salix petiolaris</i>	Moist-Wet	sand-silt-clay	sun	3 m	slender red branches
Common Elderberry	<i>Sambucus canadensis</i>	Moist-Wet	sand-silt-clay	sun to partial shade	3 m	black berries attract birds
Red-berried Elder	<i>Sambucus pubens</i>	Moist-Wet	sand-silt-loam	partial shade to shade	4 m	red berries attract birds
Buffalo-berry (RT)	<i>Shepherdia canadensis</i>	Dry	sand	sun	2 m	bright orange/red berries, red-brown twigs
Meadowsweet	<i>Spiraea alba</i>	Moist-Wet	sand-silt-clay	sun	2 m	white flowers
Bladdernut (RT)	<i>Staphylea trifolia</i>	Dry-Moist	sand-silt-clay	partial shade to shade	5 m	drooping flower and seed clusters
Snowberry*	<i>Symphoricarpos albus</i> var. <i>albus</i>	Dry-Moist	sand-silt-loam	sun	1 m	forms low spreading colonies, white berries
Maple-leaf Viburnum	<i>Viburnum acerifolium</i>	Dry-Moist	sand-silt-clay	partial shade to shade	2 m	black berries, slow growing
Hobblebush	<i>Viburnum alnifolium</i>	Moist	sand-silt-loam	partial shade to shade	2 m	large leaves, showy white flowers
Nannyberry	<i>Viburnum lentago</i>	Moist-Wet	sand-silt-clay	sun	6 m	white flowers, brilliant fall colour
Highbush Cranberry *	<i>Viburnum trilobum</i>	Moist-Wet	sand-silt-clay	sun to partial shade	4 m	red berries attract birds

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- The species marked with an asterisk (*) are often substituted with non-native varieties at nurseries.
- Please use the scientific (Latin) names and avoid cultivated varieties when purchasing plants at a commercial nursery. See 'How to Buy & Select Native Plants' fact sheet for more information,



Common Name	Scientific Name	Favoured Moisture	Favoured Soil Type	Favoured Light Regime	Maximum Height	Species Attributes
Black Maple	<i>Acer nigrum</i>	Moist	loam, silt-loam	partial shade to full shade	35 m	tolerant of urban conditions
Red Maple	<i>Acer rubrum</i>	Moist-Wet	sand, loam	full sun to partial shade	25 m	orange to bright red fall colour
Silver Maple	<i>Acer saccharinum</i>	Moist-Wet	sand, loam, clay	full sun to partial shade	35 m	fast growing and tolerant
Sugar Maple	<i>Acer saccharum</i>	Dry-Moist	loam, clay	partial shade to full shade	35 m	yellow to orange-red fall colour
Speckled Alder *	<i>Alnus rugosa</i>	Moist-Wet	sand, loam, clay	full sun	8 m	provides wildlife habitat
Yellow Birch	<i>Betula alleghaniensis</i>	Moist	loam, sandy-loam	full sun to partial shade	25 m	attracts wildlife
White Birch *	<i>Betula papyrifera</i>	Dry-Moist-Wet	sand, loam, gravel-loam	full sun	25 m	fast growing and attractive bark
Blue Beech	<i>Carpinus caroliniana</i>	Moist	loam, sandy-loam	full shade to partial sun	8 m	interesting bark - looks like muscle
Bitternut Hickory	<i>Carya cordiformis</i>	Moist	sand, loam	full sun to partial shade	25 m	fast growing
Shagbark Hickory (RT)	<i>Carya ovata</i>	Dry-Moist	loam, clay	full sun to partial shade	25 m	interesting bark, attracts squirrels
Hackberry (RT)	<i>Celtis occidentalis</i>	Dry-Wet	loam, clay	full sun to partial shade	15 m	fast growing, tolerant
Hawthorn	<i>Crataegus spp.</i>	Moist	loam, clay	full sun to partial shade	12 m	provides wildlife habitat
American Beech	<i>Fagus grandifolia</i>	Moist	loam	partial shade to full shade	25 m	flowers eaten by birds
Butternut	<i>Juglans cinerea</i>	Moist	loams	full sun	25 m	seeds provide food for wildlife
Black Walnut	<i>Juglans nigra</i>	Moist	loam, clay	full sun	30 m	seeds provide food for wildlife
Red Cedar	<i>Juniperus virginiana</i>	Dry-Moist	sand, loam	full sun	4 m	provides food & shelter for wildlife
Tamarack*	<i>Larix laricina</i>	Moist	peat, wet sandy-loam	full sun	25 m	interesting shape
Tulip Tree (RT)	<i>Liriodendron tulipifera</i>	Moist	sand, loam	full sun to partial shade	35 m	pyramidal shape, interesting leaves
Ironwood	<i>Ostrya virginiana</i>	Dry-Moist	loam, clay	full sun to full shade	12 m	interesting bark
White Spruce (RT)	<i>Picea glauca</i>	Moist	sand, loam, clay	full sun partial shade	25 m	provides wildlife habitat
Red Pine (RT)	<i>Pinus resinosa</i>	Dry-Moist	sand, sandy-loam	full sun	25 m	stabilizes soil
White Pine	<i>Pinus strobus</i>	Dry-Moist	sand, loam	full sun to partial shade	30 m	provides wildlife habitat
Sycamore (RT)	<i>Platanoides occidentalis</i>	Moist-Wet	sand, loam, clay	full sun to partial shade	30 m	interesting, peeling bark
Balsam Poplar	<i>Populus balsamifera</i>	Moist-Wet	sand, silt	Full sun	25 m	floodplain, fast growing
Eastern Cottonwood*	<i>Populus deltoides</i>	Moist-Wet	sand, loam, clay	full sun to partial shade	30 m	fast growing
Large-toothed Aspen	<i>Populus grandidentata</i>	Dry-Moist	sand, loam	full sun	20 m	fast growing
Trembling Aspen	<i>Populus tremuloides</i>	Moist	sand, loam, clay	full sun	25 m	fast growing, tolerant
Pin Cherry	<i>Prunus pensylvanica</i>	Dry	sand, loam	full sun	12 m	seeds provide food for wildlife
Black Cherry	<i>Prunus serotina</i>	Dry-Moist	sand, loam	full sun to partial shade	22 m	interesting bark, provides habitat
White Oak (RT)	<i>Quercus alba</i>	Dry-Moist	sand, sandy-loam	full sun to partial shade	35 m	provides food & shelter for wildlife
Bur Oak	<i>Quercus macrocarpa</i>	Dry-Wet	loam, clay	full sun to partial shade	15 m	provides food & shelter for wildlife



Common Name	Scientific Name	Favoured	Favoured	Favoured Light	Maximum	Species Attributes
Red Oak	<i>Quercus rubra</i>	Dry-Moist	sand to loamy-clay	full sun to partial shade	25 m	fast growing, wildlife value
Black Oak (RT)	<i>Quercus velutina</i>	Dry-Moist	sand	full sun to partial shade	20 m	seeds provide food for wildlife
Peach-leaved willow	<i>Salix amygdaloides</i>	Moist-Wet	sand, silt	full sun to partial shade	20 m	floodplain species
Black willow	<i>Salix nigra</i>	Moist-Wet	sand, silt	Full sun to partial shade	20 m	Floodplain species
White Cedar	<i>Thuja occidentalis</i>	Dry-Wet	sand, loam, clay	full sun to partial shade	15 m	provides wildlife habitat
Basswood	<i>Tilia americana</i>	Dry-Wet	sand, loam, clay	full sun to partial shade	35 m	tall stately tree
Eastern Hemlock	<i>Tsuga canadensis</i>	Moist-Wet	sand, loam	partial shade to full shade	30 m	provides food & shelter for wildlife

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- The species marked with an asterisk (*) are often substituted with non-native varieties at nurseries.
- Please use the scientific (Latin) names and avoid cultivated varieties when purchasing plants at a commercial nursery. See 'How to Buy & Select Native Plants' fact sheet for more information.



What are Native Plants?

Plants are considered native, indigenous, or endemic to a region if they originated and are naturally occurring in that region. Many “wild” plants that we think of as native species were actually introduced during European settlement to North America. Plants that are native to Southern Ontario evolved here and have adapted to the regional climate, soils and wildlife.

Most native plants that are native to Southern Ontario are appropriate for planting in the Toronto area. However, Southern Ontario is a large geographic area that varies in environmental conditions. If possible, give preference to plant materials produced from seed collected closest to your planting site. This will ensure that the plants you are using will be best adapted to local environmental conditions. For example, planting a maple tree that came from a seed indigenous to the Toronto area will do better in Toronto than a similar maple that evolved and adapted to conditions in Ottawa or Windsor or Owen Sound.

Using local genetic stock is particularly important if your property is close to one of Toronto’s parks or ravines. This is because there will be exchanges of genetic material from your yard into these natural areas. By using native species from local stock you will ensure that Toronto’s native plants will remain genetically adapted to local conditions.



Examples of species found in an Oak Woodland plant community including Wood Anemone (white flowers), False Solomon’s Seal (bottom right) and Early Meadowrue (top left). City of Toronto.

Contributing to Local Ecosystems

The loss of habitat as a result of rapid urbanization in Southern Ontario is affecting ecosystem health and reducing the diversity of native plants and wildlife in natural areas. In addition to the benefits of lower cost and maintenance, using native plants can help sustain local ecosystems. Ecosystems are communities of plants and animals including the physical environment they inhabit. Plant and animal communities are dependent on many environmental factors including sunlight, soil, water, and organic material. Examples of communities found in Toronto are forest, woodland, savannah, prairie, and marsh.

Learning From Nature

When considering the integration of native plants into your garden, you may wish to simply add some native wildflowers to your existing beds with or without a particular goal in mind such as adding colour or attracting butterflies. Alternatively, you may wish to incorporate a **native plant community** into your yard. Plant communities that have evolved together should require no maintenance, other than protection from urban pressures (i.e. trampling, digging, dumping and non-native weeds).

The different plants in these communities have adapted to local soil conditions and climate, as well as how other plants in their community may affect their environment. For example, native trees tend to leaf out late in the spring, allowing native spring wildflowers enough time to flower before they are shaded over. A non-native tree, such as a Norway Maple, leafs out early and has a very dense canopy, which shades out most plants from its understorey, this in turn often leads to problems with soil erosion. Native wildflowers are perennial or self-seeding, which means you will not have to replace them every year. Woodland species are adapted to pushing through leaf litter while benefiting from its’ insulating, moisture retaining and fertilizing properties. This means that you will save time, money and effort by not having to rake leaves, water or fertilize your naturalized garden.

Examples of native plant communities in Toronto include the globally rare Black Oak Tallgrass Savannah, found in the High Park area or Mixed Hardwood forest communities that include a variety of maples and nut trees. The best way to find out about native plant communities is to go out and see them. Contact a local naturalist or stewardship group for support and advice. A list of groups is available on the City of Toronto Web site at:

www.toronto.ca/greentoronto/greengroups.htm

Native Plants for Toronto by Preferred Habitat Type

	Full Sun	Full Sun – Partial Shade	Partial Shade - Shade
Dry Soil	Black Oak (<i>Quercus velutina</i>) White Pine (<i>Pinus strobus</i>) Smooth Rose (<i>Rosa blanda</i>) American Bittersweet (<i>Celastrus scandens</i>) Harebell (<i>Campanula rotundifolia</i>) Big Bluestem (<i>Andropogon gerardii</i>) Wild Bergamot (<i>Monarda fistulosa</i>) Hoary Vervain (<i>Verbena stricta</i>) Wild Strawberry (<i>Fragaria virginiana</i>)	Black Oak (<i>Quercus velutina</i>) White Pine (<i>Pinus strobus</i>) Choke Cherry (<i>Prunus virginiana</i>) Snowberry (<i>Symphoricarpos alba</i>) Smooth Aster (<i>Aster laevis</i>) Common Wood Sedge (<i>Carex blanda</i>) Foxglove Beardtongue (<i>Penstemon digitalis</i>) Cylindric Blazing Star (<i>Liatris cylindracea</i>) Hairy Bush-clover (<i>Lespedeza hirta</i>)	Sugar Maple (<i>Acer saccharum</i>) Maple-leaf Viburnum (<i>Viburnum acerifolium</i>) Round-leaved Dogwood (<i>Cornus rugosa</i>) Big-leaved Aster (<i>Aster macrophyllus</i>) Bottlebrush Grass (<i>Elymus hystrix</i>) Woodland Strawberry (<i>Fragaria vesca</i>) Woodland Sunflower (<i>Helianthus divaricatus</i>) Zig-zag Goldenrod (<i>Solidago flexicaulus</i>)
Average Soil	Trembling Aspen (<i>Populus tremuloides</i>) Black Cherry (<i>Prunus serotina</i>) Grey Dogwood (<i>Cornus racemosa</i>) Virgin's Bower (<i>Clematis virginiana</i>) New England Aster (<i>Aster novae-angliae</i>) Evening Primrose (<i>Oenothera biennis</i>) Showy Tick Trefoil (<i>Desmodium canadense</i>) Pale-leaved Sunflower (<i>Helianthus strumosus</i>) Spreading Dogbane (<i>Apocynum androsaemifolium</i>)	White Ash (<i>Fraxinus americana</i>) Red Oak (<i>Quercus rubra</i>) Virginiana Creeper (<i>Parthenocissus vitacea</i>) Smooth Serviceberry (<i>Amelanchier laevis</i>) Wild Columbine (<i>Aquilegia canadensis</i>) Common Wood Sedge (<i>Carex blanda</i>) Michigan Lily (<i>Lilium michiganense</i>) Wild Geranium (<i>Geranium maculatum</i>) Starry False Solomon's Seal (<i>Maianthemum stellatum</i>)	Sugar Maple (<i>Acer saccharum</i>) Witch Hazel (<i>Hamamelis virginiana</i>) Alternate Dogwood (<i>Cornus alternifolia</i>) Solomon's Seal (<i>Polygonatum biflorum</i>) Zig-zag Goldenrod (<i>Solidago flexicaulus</i>) Mayapple (<i>Podophyllum peltatum</i>) Red Baneberry (<i>Actaea rubra</i>) Virgin's Bower (<i>Clematis virginiana</i>)
Moist Soil	White Cedar (<i>Thuja occidentalis</i>) Silver Maple (<i>Acer saccharinum</i>) Buttonbush (<i>Cephalanthus occidentalis</i>) Red-osier Dogwood (<i>Cornus stolonifera</i>) Thimbleweed (<i>Anemone virginiana</i>) Canada Wild Rye (<i>Elymus canadensis</i>) Dense Blazing-star (<i>Liatris spicata</i>) Blue Vervain (<i>Verbena hastata</i>) Green-headed Coneflower (<i>Rudbeckia lacinata</i>)	Yellow Birch (<i>Betula alleghaniensis</i>) Green Ash (<i>Fraxinus pennsylvanica</i>) Common Elderberry (<i>Sambucus canadensis</i>) Nannyberry (<i>Viburnum lentago</i>) Wood Rush (<i>Luzula multiflora</i>) Thin-leaved Sunflower (<i>Helianthus decapetalus</i>) Great Blue Lobelia (<i>Lobelia siphilitica</i>) Turtlehead (<i>Chelone glabra</i>) Bebb's Sedge (<i>Carex bebbii</i>)	Hemlock (<i>Tsuga canadensis</i>) Black Maple (<i>Acer nigrum</i>) Spicebush (<i>Lindera benzoin</i>) Black Currant (<i>Ribes americanum</i>) White Baneberry (<i>Actaea pachypoda</i>) Red Baneberry (<i>Actaea rubra</i>) Canada Anemone (<i>Anemone canadensis</i>) Wild Sarsaparilla (<i>Aralia nudicaulis</i>) Wild Ginger (<i>Asarum canadense</i>)

Native Plant List for Toronto

The preceding list of suggested native plants is provided for the Toronto Region. Because ecosystems are dependent on environmental conditions such as moisture and light, the species listed in each square of the table represents a plant community. Choosing plants from the same community will help them to thrive. Most of these species are available at local nurseries, however you may need to contact several outlets to find a specific plant. Asking for less common native species may help to increase their availability in the horticultural trade.

Recommendations are given for a mix of trees, shrubs and herbaceous plants according to their preference for soil and sunlight conditions. Dry soils include sandy and gravelly soils that drain readily. Average soils are well-drained silts or clays that may have standing water for short periods after a hard rain. Moist soils include those with high clay content, they will be moist through the growing season and may experience extended periods of standing water. Sun exposure can be estimated by the number of hours your property receives direct sunlight ranging from a minimum of 6 hours for full sun, 2 to 6 hours for part-sun and less than 2 hours for full shade.



Witch Hazel (*Hamamelis virginiana*) is a native shrub to Toronto woodlands. Photo: Paul Wray, www.invasive.org

Match your backyard conditions to the species' preferences to obtain the best planting results. You should be able to increase the list of species that are appropriate by reviewing gardening books and nursery catalogues. There is some overlap for the species given since some species are adapted to a range of conditions.

Sources of Native Plants

The origin of native plants is important since plants are adapted to specific site conditions. It is also important that the method of seed collection used maintains a high genetic diversity and prevents wild populations from being depleted. A plant's genetic diversity is important to its ability to adapt to environmental change.

Obtaining native plants from environmental organizations is the best way to ensure that you are obtaining plants from a reliable source. Some volunteer groups and other associations in Toronto sell native plants to the public at designated plant sales. Some nurseries specialize in native plants. However, most commercial nurseries now include some native species in their inventory. To find a reputable nursery, see some of our recommendations or consult the Native Plant Resource Guide for Ontario (see reference section).

Buying Native Plants from Commercial Nurseries

Finding appropriate native plants can be challenging since most commercial nurseries carry cultivated varieties of native species. Since they are often reproduced from cuttings in large quantities from one individual plant, cultivated varieties have low genetic diversity. Ask staff about the source of plant material and use Scientific (Latin) names to make sure you receive true native varieties. Give preference to plants that have been propagated from seed that was collected closest to your planting site. Be cautious about species labelled as Red Maple, White Birch, Snowberry, Highbush Cranberry and Pussy Willow since they are often substituted with non-native invasive varieties. See Forestry Facts #3 for more information on invasive plants. Some woodland plants including ferns and trilliums are very difficult to grow in large quantities, therefore the source should be questioned to ensure they were not dug from the wild.

Additional Resources:

'Native Plant Resource Guide for Ontario'
Society for Ecological Restoration, Ontario Chapter
<http://www.serontario.org/pdfs/SERO%206th%20Ed.%200Grower's%20List%20Only.pdf>
Minimal Charge.

North American Native Plant Society (NANPS)
PO Box 84, Station D, Toronto, Ontario M9A 4X1
Phone: (416) 631-4438
E-mail: nanps@nanps.org
Web site: www.nanps.org

Forest Gene Conservation Association
Suite 233, 266 Charlotte Street, Peterborough, ON
K9J 2V4 Phone: (705) 755-3284 Fax: (705) 755-3292
Email: barb.boysen@mnr.gov.on.ca

Evergreen Native Plant Database
<http://nativeplants.evergreen.ca/>
Evergreen
550 Bayview Avenue, Suite 300
Toronto, M4W 3X8
Phone: info@evergreen.ca
Web site: www.evergreen.ca

Canadian Wildlife Federation
350 Michael Cowpland Drive
Kanata, Ontario K2M 2W1
Phone: 1-800-563-WILD Fax: (613) 599-4428
E-mail: info@cwf-fcf.org
Web site: www.cwf-fcf.org

Sources of Native Plants in the Toronto Area

Local Native Plant Sales:

High Park Volunteer Stewardship Program
Plant Sale Date: Early May
Location of Sale: High Park, in front of the Greenhouse
Type of Material: mostly herbaceous plants, appropriate for High Park area; most for sunny habitat/sandy soils but some for shade/clay

Further Information:
Contact Volunteer Stewardship Program
stewards@highparknature.org
Web site: www.highparknature.org

North American Native Plant Society
Plant Sale Dates: spring; typically early May
Location of Sale: Markham Civic Centre, 101 Town Centre Boulevard, Toronto
Type of Material: large variety of herbaceous plants; some vines, shrubs & trees
Further Information:
Contact NANPS
PO Box 84, Station D
Etobicoke, Ontario M9A 4X1
Phone: (416) 631-4438
E-mail: nanps@nanps.org
Web Site: www.nanps.org

Tree Planting Programs:

LEAF Backyard Tree Planting Program
Supply some native perennials, trees & shrubs
Phone: (416) 413-9244
Web site: <http://www.yourleaf.org>

City of Toronto Urban Forestry
Provide free front yard street tree,
Choose species native to Southern Ontario
Web site: www.toronto.ca/trees
Phone: 3-1-1

Private Land Tree Planting Program
Toronto and Region Conservation Authority
Applicable to landowners with a minimum of 2 acres of land within the GTA.
Phone: (905) 851-2809
Web site: www.trca.on.ca

Selected List of Native Plant Nurseries

Baker Forestry Tree Farm

RR #5, Georgetown, ON L7G 4S8
Phone: (905) 877-9390 Fax: (905) 877-6536
E-mail: info@bakerforestryservices.com
Web site: www.bakerforestryservices.com
Type of Material: trees & shrubs

Evergreen Brickworks Garden Market & Native Plant Nursery

550 Bayview Avenue, Toronto, ON M4W 3X8
Phone: (416) 596-0404
Web site: <http://ebw.evergreen.ca/whats-here/evergreen-garden-market>
(please note not all plants are native, some may have other benefits, ask for native species)

Grand Moraine Growers

7369 12th Line, RR#2 Alma, ON N0B 1A0
Phone: (519) 638-1101 Fax: (519) 638-1124
E-mail: pems@sentex.net
Web site: www.sentex.net/~pems/
Type of Material: mostly herbaceous plants, some woody species

Grow Wild!

3784 Highway 7, Omeemee, ON K0L 2W0
Phone: (705) 799-2619
E-mail: info@grow-wild.com
Web site: www.grow-wild.com
Type of Material: trees, shrubs & herbaceous

Native Plants in Claremont

4965 Westney Road
Pickering (Claremont), ON L1Y 1A2
Phone: (905)-649-8176
E-mail: info@nativeplants.ca
Web site: www.nativeplants.ca
Type of material: shrubs & herbaceous

Native Plant Nurseries

12965 Regional Road 39, PO Box 169
Zephyr, ON, L0E 1T0
Phone: (905)-473-2743
E-mail: nativeplantnurseries@hotmail.com
Web site: www.nativeplantnurseries.ca
Type of Material: herbaceous plants & shrubs

St. Williams Nursery

885 Hwy 24 W, PO Box 150 St. Williams, ON N0E 1P0
Web site: www.stwilliamsnursery.com
Phone: (519) 586-9116
E-mail: info@stwilliamsnursery.com
Type of Material: large supply of all types including native seed

Urban Forest Associates Inc.

331 Linsmore Crescent
Toronto, ON M4J 4M1
Phone/Fax: (416) 423-3387
E-mail: stephen@ufora.ca
Web site: www.ufora.ca
Type of Material: trees & shrubs

Van Den Nest Nursery

Box 20, 9594 Somer Rd., Eden, ON N0J 1H0
Phone: (519) 866-5269 Fax: (519) 866-5507
E-mail: edentree@amtelecom.net
Web site: www.amtelecom.net/~edentree
Online catalogue available.
Type of Material: trees & shrubs

Nursery contact list updated May 2013.

Railpath Deficiency List - December 18, 2015					
Item	Deficiency	Approx. Location	Description/Remediation Plan	Estimate Completion Date	City of Toronto - Response
1	Railpath Access Permits not up to date	Bloor Station	Update Access permit and proof of insurance for all future work on or adjacent to the railpath	Completed	Metrolinx to provide signage & safety measures to protect Railpath users and provide alternative routes for any work taking place on railpath. Notify City Councillor and PF&R (Lennox Morgan and Netami Stuart) 48 hours prior to commencing any work on Railpath.
2a	Damaged asphalt pavement	Near Randolph Avenue	Damaged asphalt where service trenches have been excavated, where equipment has depressed the path edge will be saw-cut and patched with new pavement	December, 2015	Metrolinx shall rectify all damage to asphalt caused by construction equipment & vehicles. Where necessary, asphalt shall be removed, existing granular base inspected, re-leveled and compacted as required, and new asphalt shall be installed as per city standard TS 310. In some locations, topcoat resurfacing may be sufficient. New asphalt shall have an HL8 base with HL3 topcoat to match existing Railpath. Repair method and location to be determined in on site meeting with paving contractor and PF&R Landscape Architect.
2b	Damaged asphalt pavement	Various locations between Ruskin and Cariboo	Damaged asphalt where equipment has depressed the path edge will be saw-cut and patched with new pavement	December, 2015	Metrolinx shall rectify all damage to asphalt caused by construction equipment & vehicles. Where necessary, asphalt shall be removed, existing granular base inspected, re-leveled and compacted as required, and new asphalt shall be installed as per city standard TS 310. In some locations, topcoat resurfacing may be sufficient. New asphalt shall have an HL8 base with HL3 topcoat to match existing Railpath. Repair method and location to be determined in on site meeting with paving contractor and PF&R Landscape Architect.

3	Cracked concrete pavement, concrete temporarily replaced with asphalt	Randolph Avenue entrance to railpath	Cracked concrete pavement at Randolph Avenue will be replaced with same, ensuring replacement addressed only whole panels	December, 2015	Metrolinx shall reinstate concrete pavement as shown in original plans for West Toronto Railpath by STLA.
4a	Damaged vegetation	Railpath along Bloor Station platforms	The area along the new rail platform and along the railpath where bare soil is exposed will be filled with top soil and seeded using the approved seed mix (See attached specification below) Opportunity to plant trees at this location to be reviewed with City prior to restoration commencing	Seed December 2015 (for germination in Spring 2016)	Seeding on City of Toronto property within the Railpath shall take place according to the original seeding and topsoil specification by STLA. This includes annual cover crop and seeding in spring with specified mix. Where soil has been left bare and invasive species have grown or where a non-specified seed mix was used, Metrolinx shall remove vegetation using best management practices (e.g. digging, glyphosate wicking, tarping, mowing, sod-cutting, etc.), prepare topsoil substrate and seed as per the original specification (including verification of the topsoil substrate by the approved seed supplier or by STLA).
4b	Damaged vegetation	Railpath between Ruskin and Cariboo	The area along the railpath where bare soil is exposed will be filled with top soil and seeded using the approved seed mix (See attached specification below)	December, 2015	Top soil is not required. Metrolinx shall prepare topsoil substrate and seed as per the original specification (including verification of the topsoil substrate by the approved seed supplier or by STLA).

4c	Damaged vegetation & Invasive Species	Railpath north of Wallace adjacent to sound barrier walls			Seeding on City of Toronto property within the Railpath shall take place according to the original seeding and topsoil specification by STLA. This includes annual cover crop and seeding in spring with specified mix. Where soil has been left bare and invasive species have grown or where a non-specified seed mix was used, Metrolinx shall remove vegetation using best management practices (e.g. digging, glyphosate wicking, tarping, mowing, sod-cutting, etc.), prepare topsoil substrate and seed as per the original specification (including verification of the topsoil substrate by the approved seed supplier or by STLA).
	5 Access barriers removed at Randolph and Ernest Avenue	Randolph and Ernest Avenue entrances to railpath	Removed barriers will be replaced includes stone and damaged collapsible bollards	December, 2015	

6	Stairs connecting the platform to the railpath encroach onto path	Railpath along Bloor Station platforms	The stair have been redesigned to have the small run allowable creating the largest landing possible ahead of entering the railpath lands. The concrete stairs will be connected to the railpath via a new asphalt walkway	November, 2015	Metrolinx shall not construct things on City of Toronto Property at West Toronto Railpath without prior review by Planning, Design and Development Section, Parks, Forestry and Recreation Division (contact Netami Stuart or Alex Shevchuk)
7	Existing fencing damaged or removed	Railpath along Bloor Station platforms	Existing fencing will be replaced with a new chain link fence with wide openings at the platform entrances	December, 2015	
8	Concrete slurry spilled on railpath	Railpath east of Randolph Avenue	Concrete slurry spilled on railpath pavement to be removed completely	November, 2015	
9	Construction materials stored adjacent to public areas	Railpath east of Randolph Avenue	Conduits and other construction materials stored adjacent to public areas will be removed	November, 2015	
10	Temporary concrete stair and wood ramp encroaches onto railpath	Railpath east of Randolph Avenue	Temporary concrete stair and wood ramp to be removed as soon as the new stair connection between the railpath and platform is completed	November, 2015	

11	Additional asphalt placed as a diversion for railpath	Near Cariboo	Municipality to advise if the diversion asphalt requires removal and restoration or if they wish to keep as it provides additional directional options for the path users	TBD	Remove asphalt. Replace asphalt with topsoil as per City of Toronto Specification for Growing Medium TS 5.10. Seed as per original specification for Railpath.
12	Metrolinx Landscaping Restoration	Between Cariboo and Dupont	Restoration completed with species not native to the railpath. Replacement with native species required	Spring 2016	Provide landscape plans for restoration to PF&R Planning Design & Development prior to restoration work (contact Netami Stuart or Alex Shevchuk).
<p>Note 1: City of Toronto recommends that Metrolinx ensure that any contractors on site have prepared a Health and Safety Plan and a soil management plan as discussed in Section 4 of the Risk Assessment and Risk Management Plan for the property (May 2007) provided by City of Toronto.</p>					
<p>Note 2: Metrolinx shall notify City Councillor and PF&R (Lennox Morgan and Netami Stuart) 48 hours prior to commencing any work on City of Toronto Property at the Railpath. Metrolinx shall provide signage & safety measures to protect Railpath users and provide alternative routes for any work taking place on the Railpath.</p>					
<p>Note 3: In general, all make-good restoration of vegetation on the railpath shall adhere to original plans by STLA. Where adjacent conditions have changed, restoration to a condition different than that shown in the original landscape plans should be reviewed by PF&R PDD (Netami Stuart/Alex Shevchuk).</p>					
<p>Note 4: the City of Toronto is contemplating a revitalization of the existing West Toronto Railpath, given current and future residential, industrial and transit development in the area and given the future expansion of the Railpath to south of Queen St. Any replanting of woody species and major restoration resulting from Metrolinx activities on the Railpath prior to 2016 will be postponed until a revitalization plan for the West Toronto Railpath is in place. Metrolinx shall indicate all the trees and woody species and locations it planned to install on the Railpath as part of compensation or restoration for its work to date. The City of Toronto will take cash compensation for the full value of planting, warranty, soil disposal and supervision of planting by a Qualified Person.</p>					