

ACKNOWLEDGEMENTS

The City of Toronto and LEAF, with financial support from their partners, have developed this manual to help Torontonians coordinate and implement Adopt-a-Street-Tree projects along commercial streets in their neighbourhoods. 'Adoption' of a street tree requires volunteers to provide basic care for trees in their communities, especially during hot, dry summer months.



Toronto's Urban Forestry branch is responsible for **IRANTA** maintaining, protecting, planting and planning to ensure strategic management of the City's urban forest. This

includes planting and maintaining all the City's street trees. Residents are encouraged to provide extra care to these trees to help them thrive. This manual has been developed in collaboration with City of Toronto to guide the care and maintenance of street trees.



LEAF (Local Enhancement and Appreciation of Forests) is a non-profit organization that engages communities to protect and care for of urban forests. In partnership with the

City of Toronto and other groups, LEAF undertook pilot projects along Danforth Avenue and Bloor Street which contributed substantially to this manual.



Tree Canada provides communities, governments, corporations, and individuals with education, technical expertise, and resources to plant and care for urban and rural trees.

Tree Canada has provided funding for the development of this manual.



TD Friends of the TD Friends of the Environment supports a wide range of projects across Canada that focus on environmental education, energy conservation, urban greening and

biodiversity. TD Friends of the Environment has provided funding for the development of this manual.





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What is the **ADOPT-A-**STREET-TREE PROGRAM?

TORONTO'S ADOPT-A-STREET-

TREE program is a volunteer tree care program, whose goal is to develop a collaborative approach to the protection and care of Toronto's street trees. Street trees are located along commercial streets and are some of the most vulnerable trees in our city. The program is supported by the City of Toronto and LEAF (Local Enhancement and Appreciation of Forests).

Volunteer "Tree Teams" consist of local residents, community groups and/or Business Improvement Areas (BIAs) who wish to improve the health of local trees and enhance the beauty of their neighbourhoods by becoming caregivers for local street trees. These teams commit to basic stewardship activities such as watering, mulching and weeding. The core group usually recruits and trains additional tree adopters from the community.

This manual is intended to provide background, technical and logistical information for volunteers and tree adopters, in order to help some of Toronto's most vulnerable trees.

Top, Liz Fosberg; Bottom, Lillian Natalizio





EVERY TREE COUNTS

In 2009 the City of Toronto conducted a tree canopy study that was documented in a report titled Every Tree Counts: A Portrait of Toronto's Urban Forest.

The study found that Toronto's urban forest:

- · provides the equivalent of at least \$28.2 million in ecological services each year in reduced energy use (i.e., heating and cooling of residential buildings) and air quality improvements through the interception of pollutants
- stores 1.1 million metric tonnes of carbon, or the yearly equivalent of 733.000 car emissions
- provides benefits that exceed the annual cost of maintenance

The report recognized that limited growth and/or loss of street trees can negatively impact neighbourhoods. Despite representing only six per cent of the overall tree population (approximately 610,000 trees), the number and size of trees along a street can change its character and affect the number of tree-related benefits available to the people who live, work and visit in that community.

The report also documents that less than one half of Toronto's street trees





are in excellent or good condition, compared to 81 per cent in the overall tree population. This in part, reflects the fact that these trees grow under some of the most challenging conditions in the urban environment.

The Adopt-a-Street-Tree program will assist communities in sustaining and expanding Toronto's urban tree canopy, currently estimated to be between 26.6 and 28 per cent. The City of Toronto is committed to increasing the urban canopy to 40 per cent.

To read the full report visit www.toronto.ca/trees

WHY CARE FOR COMMERCIAL STREET TREES?

Healthy trees offer many environmental, economic and health benefits while also bringing beauty and nature into our neighbourhoods. Trees that are planted in sidewalk beds and along busy commercial streets face challenging growing conditions which can limit their long-term health and survival.

Key stressors affecting street tree growth include:

· drought due to the limited availability of soil and water



Torie Gervais

- compacted soils from garbage bins and foot traffic
- physical damage from things like bicycle locks, heavy garbage bins, snow clearing and lawn mowers
- dog urine
- damage from road and sidewalk de-icing salt

Regular care, such as watering and mulching, can significantly improve a street tree's capacity to thrive.

The urban forest is a shared resource, and therefore a shared responsibility. When City of Toronto staff, local residents and business owners combine their efforts, street trees have a better chance for successful growth and survival, and communities prosper socially, economically and aesthetically.

WHO CAN START AN ADOPT-A-STREET-TREE PROJECT?

Anyone who lives or works in Toronto and has an interest in providing extra care to trees planted along commercial streets in their neighbourhood can start an Adopt-a-Street-Tree project. Depending on how many trees are being targeted for extra care, a project can be started by one or several individuals. Typically

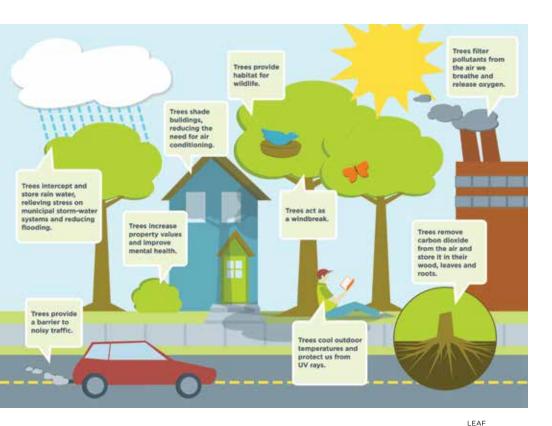




between three and five core volunteers are involved in a given area. Those core volunteers work to set-up the program by recruiting, training and coordinating tree adopters in the community.

WHERE CAN ADOPT-A-STREET-TREE PROJECTS BE STARTED?

An Adopt-a-Street-Tree project can be started in any neighbourhood within the City of Toronto. The program targets trees located on Cityowned and maintained sidewalks or boulevards, often called "street trees." Although locations can include trees planted in turf or landscaped boulevards, this program focuses on trees planted in sidewalk tree beds in commercial areas, where trees are often subject to severe stress and poor growing conditions.



WHO TO CONTACT

The first step in starting your project is to contact Urban Forestry at the City of Toronto and LEAF and let them know you'd like to start an Adopta-Street-Tree project in your neighbourhood.

The City's Urban Forestry Branch can:

- provide advice and information about the process
- provide equipment and supplies (quantities will vary depending on availability and demand)
- advise of a pre-existing Adopt-a-Street-Tree group within your neighbourhood
- advise on best practices for tree care

I FAF can:

- provide tree care training through the Tree Tenders Volunteer Training program
- provide tree tours, presentations and workshops which are a great way to get people excited about the trees in your community and recruit volunteers for your project
- provide templates for outreach and educational materials
- assist with troubleshooting any challenges that may arise

ENLIST THE HELP OF YOUR COUNCILLOR

It is important to consult with the local City councillor about your Adopt-a-Street-Tree project. She or he may be interested in promoting the project and sharing its success!

HOW TO CONTACT

City of Toronto, Urban Forestry: www.toronto.ca/trees or 311

LEAF: www.yourleaf.org or 416-413-9244

Councillor's office: www.toronto.ca or 311

Create a TREE TEAM

Success is more easily achieved when you recruit others in your neighbourhood that share your interest in a greener, healthier tree canopy. Having a Tree Team, a core team of volunteers who help coordinate and implement the project over the long-term, will help ensure success.

Implementing an Adopt-a-Street-Tree project can be as much or as little work as you are prepared to invest. Each group sets its own level of organization and effort, although the level of effort is generally tied to the number of trees being adopted. Count on spending more time at the start getting the group going. Once established, time demands usually lessen.

If you have one, the local BIA is an important partner to engage since local business owners will be ideal volunteer tree adopters. In addition, you can reach out to other groups such as resident/neighbourhood associations, gardening clubs, local "friends of" parks groups, environmental groups and faith groups.



TREE TEAM ROLES

Suggested roles for each member of the Tree Team are outlined below.

COMMUNICATIONS LEAD: Liaises with City of Toronto, Urban Forestry, LEAF and the local councillor, reports tree health concerns and submits requests for maintenance to Urban Forestry. The communications lead is also responsible for coordinating resources, meetings and events with the City of Toronto or LEAF.

VOLUNTEER COORDINATOR: Recruits additional volunteers and organizes outreach efforts to promote the group and get people involved. The volunteer coordinator also assists in finding replacement tree adopters when adopters are unable to fulfill their role.

TREE CARE ADVISOR: Provides advice and training to tree adopters to make sure trees are getting proper care. Knowledge of tree care and maintenance is valuable, as responsibilities include providing advice to fellow tree adopters, organizing occasional tree care workshops and identifying problems/issues with tree health. LEAF's Tree Tenders Volunteer Training course is recommended for this position in order to gain a thorough understanding of proper care and maintenance of young trees.

BLOCK CAPTAIN(S): Regularly monitor adopted trees (about once per month and more frequently over the summer) to ensure they are getting the care they need. Block Captains also check-in with adopters as needed and assist with issues concerning limited water access.

TREE ADOPTERS: Business owners/employees or local residents that commit to caring for individual trees. They might care for one tree, or several trees, either indefinitely or for a set period of time.

TOOLS, EQUIPMENT AND WATER

Access to water is critical for success! Churches, fire stations and businesses are sometimes willing to allow tree adopters to access their outdoor taps. Standard sinks located in business offices or stores may not readily accommodate a large watering can. Funneling devices or hoses can facilitate the filling of watering cans. The City of Toronto and LEAF may provide additional assistance and advice on accessing water, and may even loan watering cans and other equipment.

Tool and equipment costs can range from \$50 to more than \$800, depending on the scale of the project. Approach local businesses to contribute by donating tools and equipment. Local business may also assist with printing outreach materials and communications.

Tools and equipment that may be required include:

BUNDLE BUGGIES/WAGONS AND WATER JUGS: Buggies/wagons with a rain barrel or jugs can be used to transport water to trees that do not have an accessible water source

WATERING CANS: Soil around street trees is often very compacted. Watering cans with a sprinkle nozzle allow "slow" watering to minimize run off.

RUBBER HOSE WITH A SHUT-OFF LEVER: Hoses may be required to transfer water from the outlet to watering cans or containers.

GLOVES: Gloves are important, especially when removing garbage from street tree beds. Gloves with rubber or leather palms are durable and will provide protection.



PRINT MATERIALS

Speaking with business owners and residents is an excellent way to promote an Adopt-a-Street-Tree project and recruit tree adopters. Print materials will help promote the project and provide them with additional information. Having a flyer to leave with them will be helpful. Contact City of Toronto, Urban Forestry and LEAF for available flyer templates and permission to use their logos.

FLYERS/POSTERS: Half-page flyers work well and use less paper.

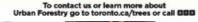
WINDOW DECALS/DISPLAYS:

a great idea if you have a lot of businesses involved in the program. Window decals are an easy way to acknowledge and identify adopters and participants in the project.

TREE TAGS: provide information to other community members about the tree adoption project. Passersby learn interesting facts about the adoption project and specific trees when they walk by such as tree species, the "benefits" of trees and whether the tree has been adopted or needs to be adopted.

Top, middle: Front and back of window decal offered to businesses that adopted trees in Danforth Pilot Project. Bottom: Tree tag.





Don't prune your tree. Contact the City to have it pruned



Janet McKay

SHARING YOUR PROJECT AND RECRUITING TREE ADOPTERS

Once you have assembled the core Tree Team and prepared your print materials, the next step involves reaching out to and informing the neighbourhood of your anticipated street tree project. This is an excellent way to recruit additional volunteers and adopters! The distribution of printed materials is also recommended. The core team should dedicate as much time as possible to recruitment and promotion!

The best adopters are often people that live or work in the area and see the trees on a regular basis. Business owners and area residents have a vested interest in making their neighbourhood more welcoming and joining the Adopt-a-Street-Tree program is great way to become involved in that initiative. Outreach should begin in early April for warm summer months.



OUTREACH IDEAS

- Set up an information table at community centres, markets and other neighbourhood events
- Reach out to local businesses and the BIA and inquire if information about the Adopta-Street-Tree program can be displayed in their storefronts, on community information boards and shared with their members
- Develop a webpage and/or Facebook page to provide more information. Tree Teams may also be able to post information on existing websites for the neighbourhood (BIA, Residents' Associations)
- Young trees always need water
- Invite the city councillor to share project information with constituents via social media, mailings, e-bulletins or blogs
- Invite local media to project activities and special events
- Send regular project updates to interested community members

PUBLIC EVENTS

Hosting public events, especially in the Spring and Fall, is a great way to promote the Adopt-a-Street-Tree project, recruit new volunteers and adopters and bring existing ones together.

- Contact City of Toronto, Urban Forestry or LEAF for more information on hosting a public event. LEAF offers guided Tree Tours that may assist with promotion and recruitment
- Invite the local councillor. He or she may provide advertising opportunities and may also participate in the event
- Local media may also be interested in covering your event, which can help educate local neighbours and businesses and attract more tree adopters!
- Use available outreach materials to promote the benefits of trees to the community, including the economic, environmental and social benefits of a healthy urban forest

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TRACKING ADOPTED TREES

To help you keep track of the trees and their adopters, it is useful to create a map of the street trees adopted by your group and a list of who is responsible for which trees. City of Toronto, Urban Forestry can provide information (e.g. species, diameter, location) about the street trees in your area.

Mapping and tracking can be accomplished using digital mapping tools or hand drawn maps with tables. The selected method will depend on the skills and preferences of the Tree Team. Contact LEAF for advice and options.

Google "My Maps" offers a free and simple method for tracking. Visit google.com/mymaps and click "create a new map". Each tree can be individually plotted and notes for each tree can be recorded (species, adoption status, health, etc.). It is recommended that adopted trees are differentiated from non-adopted trees using different colours or icons. The map can be made public, but it is recommended that editing permissions are kept to one or two individuals. Please note that a Google account is required.





Top, Google Maps: Bottom, Torie Gervais

TREE CARE

MULCHING

Woodchip mulch is beneficial for trees. It captures and retains water (allowing less water to run off the soil surface), retains soil moisture by reducing evaporation, insulates tree roots during winter, prevents weeds from establishing, reduces soil compaction over time and adds organic matter to the soil.

Ensure a fresh layer of mulch (at least 8 cm thick) is always present around the tree. When adding mulch, it is best to create a doughnut shape around the tree to prevent rotting of the stem (rotting of the stem may occur from the increased moisture content in mulch.).

WEEDING

Keeping the soil around your adopted trees free of weeds and litter will improve the aesthetics of the streetscape and create a sense of ownership and respect for the trees. Use a trowel to gently remove weed roots if needed, but take care to minimize digging as fine tree roots can be damaged in the process. Removing weeds before they go to seed reduces their spread. Do not use string trimmers (e.g., weed whackers) near the base of trees as



they damage the bark and compromise tree health. Always wear leather gloves and inspect the area for sharp objects such as needles or glass before commencing work.

PLANTING PERENNIALS

Adding plants to the open soil area of a tree bed adds a personal touch. beautifies the street and discourages pedestrians and pets from walking on the soil. It also encourages regular watering! Perennials (plants which grow back every year) are a better choice than annuals (which have to be replanted every year) as they only have to be planted once, reducing soil disturbance. If kept alive and healthy, perennials can also be less expensive over time. Avoid planting within 30 cm from the tree trunk to minimize root damage. Choose hardy native species. Small perennials in 4-inch pots are ideal as they do not require a lot of digging. Please contact Urban Forestry at the City of Toronto to obtain appropriate permissions to plant perennials around street trees. Contact LEAF for more information about appropriate native species.



PROTECTING TREES FROM PHYSICAL INJURY

Bicycles

Locking bicycles to trees may create wounds that can develop into entry points for pests and disease. Every vear trees are removed because of irreparable damage caused by bicycles and bicycle locks.

Installing plastic or wire mesh trunk protectors will help to reduce the occurrence of bark damage and resulting wounds. Care should be taken to ensure that trunk protectors are loosely installed to avoid bark damage. Please contact City of Toronto, Urban Forestry for information about trunk protectors. To inquire about additional bicycle lock rings in your area, requests stating a specific street address can be submitted via email to streetfurniture@toronto.ca. Public Transportation will then determine whether the installation of additional bicycle lock rings is feasible.

Garbage/Recycling Bins

Garbage/recycling and/or the bins that contain them can compact soil around trees. They can also scrape tree trunks and cause damage. Educate store owners about keeping garbage and bins away from the soil/ mulch area around the trees.

Salt

Salt application in winter can have



Damage from string lights



Colleen Bain

deadly effects on young trees. Encourage store owners to use salt alternatives that are eco-friendly on sidewalks during winter.

Lights or other attachments

Attaching or tying any item to a tree will cause distress, interfere with the supply of water and nutrients that flow in the fragile tissues located underneath the bark and can ultimately be fatal to the tree. Please contact City of Toronto Urban Forestry and your local BIA if items have been attached to trees.

Pruning

Street trees should only be pruned by City of Toronto staff or their designates. If a tree requires pruning, or if a store owner is complaining that a tree is blocking their sign, please contact 311.

Trees in poor health

Contact 311 immediately for any tree that appears to be damaged or in poor health.



SUGGESTED ANNUAL TIMELINE

JANUARY-FEBRUARY

• Establish your Tree Team and set up a system to facilitate communication with one another.

MARCH-APRIL

- Identify the number of trees that require mulching in order to request materials from City of Toronto, Urban Forestry well in advance
- Contact existing adopters to confirm their continued participation
- Recruit additional replacement adopters if people have moved away or can no longer care for their adopted tree.
- Request that tree adopters remove salty snow from the soil surface in tree beds before the spring melt.
- Remove garbage or debris from street tree beds.
- Inspect trees for broken branches, stem damage, soil compaction and insect egg masses. Send information to City of Toronto, Urban Forestry for review.

MAY

- Ask adopters to start watering 3 watering cans full per tree, twice per week
- Plant perennial flowers/plants in tree beds, if this is part of your plan.
 Contact City of Toronto, Urban Forestry to obtain permission and guidance for plantings.

JUNE-SEPTEMBER

- Continue to work independently to water and weed trees
- Monitor trees and troubleshoot as needed.
- Remind all tree adopters monthly about watering, especially if there are long periods with little rain.

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OCTOBER

- Monitor trees one final time before winter.
- Inform adopters the season is over thank them for all they have done.
- Ask volunteers and tree adopters to provide feedback on their experience.
- Start planning for next spring.

CHECKLIST for Success

Create a core valuntoer Tree Team



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	Ensure that one Tree Team member has basic tree care knowledge. Training available through LEAF's Tree Tender's Volunteer Program is available
	Contact City of Toronto, Urban Forestry and LEAF.
	Select an area of trees for adoption.
	Contact the local City councillor.
	Contact local community groups, BIAs and/or businesses to encourage them to participate
	Identify water sources.
	Develop and distribute outreach materials.
	Create and maintain a map of the identified project area and adopted trees
	Ensure that the team has sufficient resources/donations/funds to start the project
	Arrange access to water sources and watering equipment (e.g. watering cans, water jugs and bundle buggies).
	Create and maintain a contact list of tree adopters.
	Create and maintain a list of all parties interested in the project
	Provide continuous updates to tree adopters, volunteers and interested parties on the Adopt-a-Street-Tree project

